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MEDICAL

COMMON SENSE;

APPLIED TO THE

CAUSES, PREVENTION AND CURE

OF

CHRONIC DISEASES,

AND

UNHAPPINESS IN MARRIAGE.

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PREFACE.

"Common Sense," I am aware, is quoted at a discount; especially by the medical profession, which proverbially ignores everything that has not the mixed odor of incomprehensibility and antiquity. Medical works are generally a heterogeneous compound of vague ideas and jaw-breaking words, in which the *dead* languages are largely employed to treat of *living* subjects. Orthodoxy in medicine consists in walking in the beaten paths of Æsculapian ancestors, and looking with grave contempt on all who essay to cut out new paths for themselves. Progress is supposed to be possible in everything except medicine; but in this science, which all admit has room for improvement, the epithet of "Quack" is applied to every medical discoverer. My prayer is that I may prove worthy of Allopathic denunciation. To this end, and the amelioration of human suffering, is this work written. To uproot error and do good should be the first and paramount aspiration of every intelligent being. He who labors to promote the physical perfection of his race—he who strives to make mankind intelligent, healthful and happy, cannot fail to have reflected on his own soul the benign smiles of those whom he has been the instrument of benefiting.

My intention in getting up this work is to supply a desideratum which has long existed, i. e., a medical work, reviewing *first causes* as well as facts and ultimate effects, written in language strictly mundane and comprehensible alike to the rustic inmate of a basement and the exquisite student of an attic studio; and if successful in fulfilling the promise of the title page, I have too much confidence in the intelligence of the

masses and the erudition of the unprejudiced scholar to believe that it will be received with unappreciation and indifference. Many of the theories which these pages will advance are certainly new and antagonistic to those of "old fogyism," but it does not follow that they are incorrect or unworthy the consideration of the philosophical and physiological enquirer. They are founded upon careful observation, experiment, and extensive medical practice, and if the truth of the theories may be judged by the success of the latter, then do they unmistakably possess soundness as well as originality, for living monuments to the skill and success of the author have been and are being daily raised from beds of sickness and debility in every part of the United States. If these remarks sound boastful, be not less ready to pardon the conceit of a successful physician than that of a victorious soldier. The successful military chieftan is notoriously conceited; is it not as honorable and elevating to save life as destroy it? If a man may boast that he has slain hundreds, cannot his egotism be indulged if he has saved the lives of thousands? I shall claim the soldier's prerogative, for when medical charlatans, at every street corner, are blowing their trumpets, it does not behoove the successful physician to nurse his modesty. What I write, however, shall be written in candor and with an honest intention of enlightening and benefiting humanity.

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PART I.

DISEASES—THEIR CAUSES, PREVENTION AND CURE.

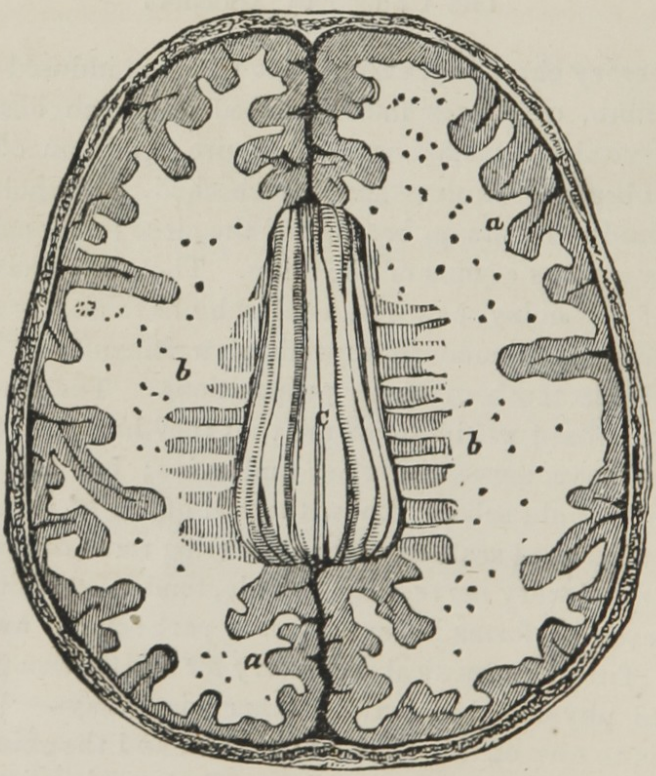
CHAPTER I.

The Causes of Disease.

Disease of every character, except that which is induced by accident to body or limb, originates in a disturbed mind, an obstructed circulation of vital electricity, or an impure condition of the blood. Wherever it begins unless speedily checked, the whole system is soon convulsed in its grasp, because of the close relationship existing between the various organs of the body. Those who have neglected the study of physiology, as well as all who have merely scanned the pages of ancient and modern superficial writings, will not readily comprehend the truth of these propositions. The most illiterate men of the civilized world are aware that they have a brain, and that their bodies have nerves, arteries and veins; but few physicians, especially of the old school, know the real offices of them. Doctors who have brandished scalpels in the dissecting room can point out the exact locality of every nerve, vein, muscle, tendon, etc., but the means by which each performs its appropriate part seldom awakens their curiosity. Turn to a medical dictionary for a definition of the brain. The learned physiological lexicographer wisely says—"The use of the brain is to give off nine pairs of nerves, and the spinal marrow, from which thirty-one pairs more proceed, through whose means the various senses are performed and muscular motion excited." This is all very well so far as it goes, but it will not satisfy the mind of a thorough inquirer, nor illustrate the truthfulness of my first remark. The sublime powers and superior beauties of the brain are undiscovered in such a superficial definition. The object of this chapter requires a better one, because that organ is the *capitol* of the nervous

system, at which the immortal principle presides. The brain is the great receiving and distributing reservoir of vital electricity, just as the heart is the receiving and distributing reservoir of the blood. The nerves are the wires over which the electricity is sent to every part of the body. This element moves through the entire system at every pulsation of the brain, the same as the blood circulates by the pulsations of the heart. Doubtless all parents have noticed the heavings of the brain in the heads of small children, before the skull bones have closed together; the effort of that function to distribute the electricity, commonly termed nervous fluid, is the cause of these. With this view of the subject, it is easy to comprehend how the muscles are moved, because it is an established fact in philosophy that electricity has the power to contract and expand any substance.

Fig. 1.



CAPITOL OF THE NERVOUS SYSTEM.

The above represents a horizontal section of the bones of the skull and brain; *a a*, outer layer of ash-colored matter; *b b*, the white medullary central part of brain; *c*, the corpus callosum.

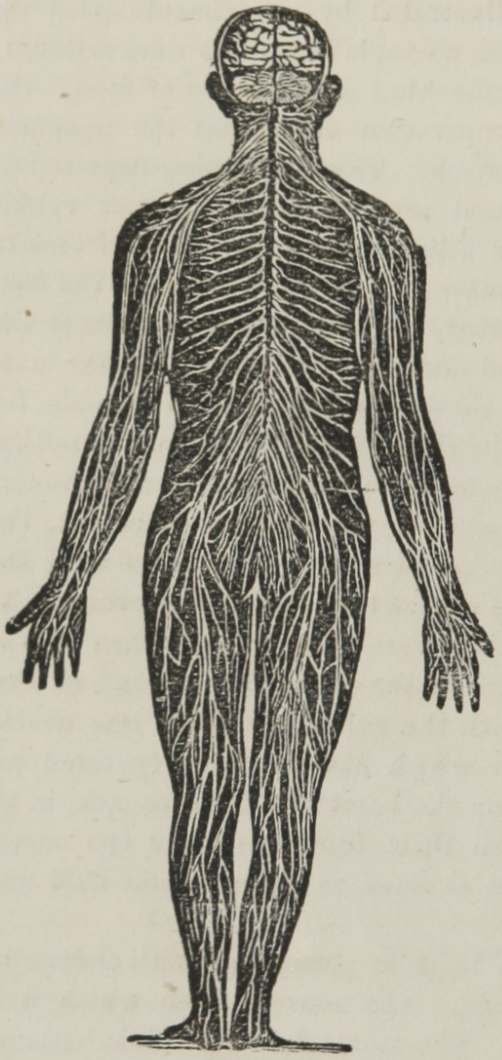
The brain, in reality, performs a more important part in the animal economy than the heart, because the contraction and expansion of the latter, known as the pulsations, are produced by the action of

that organ through its agent electricity. The digestion of food, by which process blood is manufactured, depends upon the electric currents sent by the brain through the pneumo-gastric telegraph or nerve to the stomach. The correctness of this hypothesis, as well as that of the preceding one, is illustrated by experiments tried by Dr. Phillips, of England. In these a couple of rabbits were selected, which had been fed with the same kind and quality of food. On one of them he performed the operation of cutting the pneumo-gastric nerve leading to the stomach. The latter being deprived of the nervous stimulant, the animal soon died. The other rabbit which was not operated on, was killed after an interval of almost twenty-six hours, and on examination it was proved that the food in his stomach was entirely digested, while in that of the former the food remained almost as crude and undigested as when it left the masticating organs. This experiment shows that the stomach depends, for the performance of its office, on the electric or nervous fluid. Another experiment was made upon two more rabbits in the same manner, except that after the nerves leading to the stomach were cut, the electro-galvanic battery was applied in such a way as to send the current through the disconnected nerves to the seat of digestion. At the end of twenty-four hours they were both killed, when it was found that the food in the stomach of the one whose nerves had been severed and put in connection with the galvanic battery was nearly as well digested as in the other which had not been operated on. Similar experiments were tried on the heart and other organs, in all of which they ceased to perform their functions when the nerves were cut, and commenced again as soon as the galvanic fluid was applied.

Hence we see that the whole body is permeated with electricity which is controlled by the brain. The sources from which it is derived must now be explained. The stomach is a galvanic battery, and large quantities of the vital element are generated by the dissolution or digestion of food. The oxygen of air is electricity, and consequently we receive the element in its gross state into the lungs, by which means the blood is impregnated with it. Large quantities are also generated by the alkalies and acids of the animal organism. The mucous membranes are continually excreting a semi-fluid called alkali, and the serous membranes an aqueous or watery fluid called acid, and, according to the testimony of Dr. Bird, if these fluids are so placed as to be connected by parieties of an animal membrane or

through any porous diaphragm a current of electricity is evolved. So we find that not only are our stomachs generating electricity, but the external or serous and internal or mucus surfaces, united as they are by animal parities and porous diaphragms, are producing the same in large quantities, while our lungs are inhaling it. As it enters in, or is produced by the system, a refining process commences so as to prepare it for use, and it is received by the brain for that purpose, through the numerous branches of nerves or conductors. Thus we can see how delicately the animal fabric is constructed, and how easily, by exposure to cold, damp or poisonous vapor, the harmonious action of the numerous organs may be disturbed. The reader can now no longer doubt that multitudinous diseases arise from a disturbance of the nervous system.

Fig. 2.



PROF. BRAIN'S TELEGRAPH.

From the foregoing reasoning it is equally apparent that diseases may often originate from trouble or depression of mind. So closely allied are the brain and the nervous or telegraph system, that it is impossible for one to be disturbed without exciting the sympathy of the other. The brain, beside being the receiving and distributing reservoir of animal electricity, is the residence of the mind or the spirit, and this immortal principle controls its action. When, then, any thing occurs to disturb the equanimity of the mind, the brain at once telegraphs the melancholy news over the wires or nerves to every organ of the body, and like a well regulated and affectionate family, all join in sympathy for the afflictions of the one which they regard as the head and provider. The nervous system loses its

healthy action, and through it the vascular; and when the manufacture of pure blood and its faithful distribution through the various functions dependent upon it for support are in any degree suspended, general debility if not actual prostration must ensue. Says Combe, "The influence of the brain on the digestive organs is so direct, that sickness or vomiting are among the earliest symptoms of many affections of the head, and of wounds and injuries to the brain; while violent emotions, intense grief, or sudden bad news, sometimes arrest at once the process of digestion, and produce squeamishness or loathing of food, although an instant before, the appetite was keen.

"The influence of the mind and brain over the action of the heart and lungs is familiar to every one. The sighing, palpitation and fainting, so often witnessed as consequences of emotions of the mind, are evidences which no body can resist. Death itself is not a rare result of such excitement in delicately organized persons."

The reader will now understand why the state of the mind is so influential in the production and progress of disease.

"In the army, this principle has often been exemplified in a very striking manner, and on so large a scale as to put its influence beyond a doubt. Sir George Ballingall mentions in his Lectures on Military Surgery, that the proportion of sick in garrison in a healthy country and under favorable circumstances, is almost five per cent; but that during a campaign, the usual average is never ten per cent. So marked, however, are the preservative effects of cheerfulness and the excitement of success, that, according to Vaidy, the French army cantoned in Bavaria after the battle of Austerlitz, had only one hundred sick in a division of eight thousand men, being a little more than one in the hundred. When, on the other hand, an army is subjected to privations, or is discouraged by defeat or want of confidence in its chiefs, the proportion of sick is often fearfully increased."

The awful fatality which attended the allied armies at the Crimea was, undoubtedly, more attributable to bad management on the part of the commanding officers, than to inclement weather. The soldiers having lost confidence in their commanders, became depressed in spirit. They were filled with fearful forebodings. The buoyancy of their nervous systems was disturbed, and thereby digestion impaired. Thro' these discouragements they were made susceptible to disease, however favorable the climate; and a slight change in a

foreign atmosphere, under such circumstances, would induce the most fatal results.

The English press attributed the sudden death of Lord Raglan to the censures heaped upon him at home. Many politicians in this country, ascribe the brief illness which ended the career of one of our most illustrious statesmen, to disappointment in not receiving the presidential nomination from a convention of his party. Thus we perceive the influence of the mind on the body is generally admitted, although few stop to divine the means by which it is effected. It must, therefore, be understood that every organ is notified, on the telegraphic system, if anything offends the spirit of the human being. Or, if through any accident to the limbs, or impurity of the blood, the harmonious evolutions and circulation of the electric principle in any part of the body occurs, the brain feels the loss, discovers the cause and faithfully informs every member of the family, who endeavor to conciliate the difficulty, and if they fail the whole system is thrown into discord.

Next I will speak of the blood. All diseases which do not arise from a disturbance of the nervous system or troubles of mind, I contend, have their birth in the vascular system. This is self-evident when the reader reflects that the component parts of all animal matter are found in the blood. The bones, muscles, cartilages, all the fluids, acids, alkalies, &c., pertaining to the animal structure, are developed and nourished by the blood. Combe remarks that "the quantity and quality of the blood have a most direct and material influence upon the condition of every part of the body. If the quantity sent to the arm, for example, be diminished by tying the artery through which it is conveyed, the arm, being then imperfectly nourished, wastes away, and does not regain its plumpness till the full supply of blood be restored. In like manner, when the quality of that fluid is impaired by deficiency of food, bad digestion, impure air or imperfect sanguification in the lungs, the body and all its functions become more or less disordered." The heart undergoes four thousand contractions every hour. Each ventricle is reckoned to contain about one ounce, and therefore we are brought to the astonishing realization that two hundred and fifty pounds of blood pass through it in that brief space of time. Now if the blood is impure, and nature, in addition to being deprived of its proper nourishing qualities, is obliged to counteract and throw off its corrupt particles, there is certainly a decided chance for the human

machinery to become weakened if not stopped by the accumulation of poisonous humors. And the body, instead of being strengthened by the large quantities of blood sent through it by the heart, must inevitably sink under it. If weakness in the muscles, pains in the bones, head-ache, cutaneous diseases, scrofulous swellings, etc., ensue, to what do we trace them? Why, manifestly to the blood.

It now having been shown that a free circulation of vital or nervous electricity, an unruffled mind and pure blood are essential to good health, it requires only a moderate exercise of "common sense" to perceive that all diseases originate from a disturbance of these indispensable conditions. There may exist hereditary organic weaknesses, but even those had their origin in conception or in fœtal life from the disturbed vital fountains of the parent, thus not allowing a single exception to my theory.

The attention of the reader will next be directed to the principal causes of nerve and blood derangements, or the *primary* causes of disease. But before concluding let me ask the reader if the foregoing does not lead to the irresistible conclusion that electricity, cold water, cheerfulness and good vegetable blood medicines are the remedies which nature demands for all kinds of diseases with which mankind are afflicted.

CHAPTER II.

The Causes of Nervous Derangements and Blood Impurities.

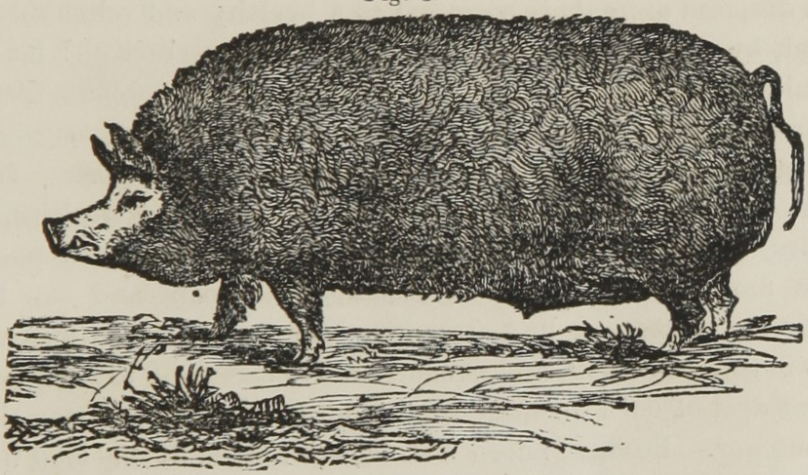
The subject of this chapter opens a boundless field for the investigation of the physiologist. Indeed, should I attempt to trace out all the influences, immediate and remote, which tend to destroy the mental and nervous equilibrium, and render the blood a fountain of death rather than life, I should fill many volumes like this, and then my task would be unfinished. I shall therefore limit myself to an explanation of the principal causes; those over which we have the easiest control. Each shall be treated under its appropriate head, with such variety of matter as may be necessary to make it entertaining as well as instructive.

1st. THE FOOD WE EAT.

One of the most common causes of blood impurities is the use of pork. It has been said that all things were created for some wise purpose. This is undoubtedly true, but hogs were never made to eat. We read that Christ used them to drown devils; they can never be appropriated to a more beneficent use. As an article of diet, pork exerts a most pernicious influence on the blood, overloading it with carbonic acid gas, and filling it with scrofula. The hog is not a healthy animal. From its birth it is an inveterate gormandizer, and to satisfy its eternal cravings for food, everything in field or gutter, however filthy, finds a lodgment in its capacious stomach. It eats filth, wallows in filth, and is itself but a living mass of filth Now, when it is remembered that all our limbs and organs have been picked up from our plates—that our bodies are made up of the things we have eaten—what pork-eater will felicitate himself with the reflection that according to physiological teachings, he is physically *part hog*. "We have been served up at table many times over. Every individual is literally a mass of vivified viands; he is an epitome of innumerable meals; he has dined upon himself, supped upon himself, and in fact—paradoxical as it may appear—has again and again leaped down his own throat."

The humorous properties and inflammatory effects, which pork imparts to the blood, actually tend to generate vermin in the system. Grub in the liver, kidneys, lungs, and other organs, not unfrequently have their origin in the use of this filthy article of food. The "Gazette Medicale," also asserts that the "tape worm only troubles those who eat pork." It further remarks, "that the Hebrews are never troubled with it; that pork butchers are particularly liable to it; and that dogs fed on pork are universally so afflicted—in fact, it turns out that a small parasite worm, called *crysticerous*—from two words signifying a small sack and a tail—which much affects pork, no sooner reaches the stomach, than, from the change of diet and position, it is metamorphosed into the well known tape-worm; and the experiments of M. Kuchenmeister, of Zittoria, made with great professional care and minuteness of detail, upon a condemned criminal, have established the fact beyond contradiction."

Fig. 3.



A FIRST CLASS PORKER.
A pretty looking thing to eat.

The foregoing remarks have been made with reference to the best class of swine; but what shall I say when I come to speak of those fattened in distilleries! I have seen droves of these inflated creatures driven to the slaughter houses in Cincinnati. A herd of diseased, bloated, besotted men, could not be more sickening to the refined spectator. The hair of these creatures is invariably thin and scattered, and the skin looks like that of a confirmed inebriate. Some have tumors varying in size from a small apple to a good sized cabbage. I have been told by Cincinnati butchers, that tumors are not unfrequently found inside the meat, and that when laid open by the

knife, purulent matter gushes out. But still these diseased and bloated carcasses are raised to sell, and, for shame be it said, form one of the most common articles of food, in our large cities. Many a pork eater has been cured of his partiality for "spare rib," "pigs feet," "head cheese" and "souse," by visiting the slaughter-houses of the great "porkopolis" of America.

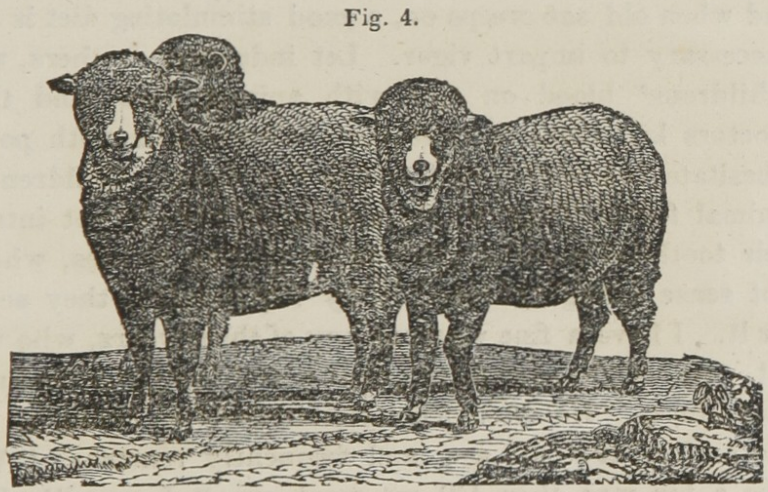
It is but recently that a gentleman living near the town of Rockingham, Va., lost five head of young cattle and five milch cows by permitting them to run in the same lot where his hogs were feeding. The hogs ate the stalks of corn, or rather chewed them, and left them on the ground. These were taken up by the cattle, eaten and swallowed. Soon they were taken with an itching all over, and commenced rubbing their heads; their throats swelled; and in a short time death ensued! Their disease might be termed an acute attack of scrofula, with which they became infected from the virus communicated to the stalks by the dirty swine. Still the flesh of these diseased animals is regarded as a healthy and relishable article of food, by a large majority of civilized mankind! Ugh! let us not upbraid the barbarian who eats snails and lizards, for his disgusting epicurean eccentricities, while civilization tolerates hog-eating.

Mutton ought universally to be substituted for pork. It is the easiest digested, and may be strictly regarded as a healthful meat. Besides, it can be produced at much less expense than pork, and yields more nourishment. Sheep need no corn, and can be kept during the winter on hay, turnips, beets, etc. True, pigs will eat what nothing else will, and consume all the slops of the kitchen; but a great deal of corn or other solid food is required to fatten them for the butcher. Besides, sheep will eat all that is fit for food from the kitchen slops, and their preparation for the slaughter house is attended with trifling expense.

The use of animal food of every kind has been pronounced injurious by many. That it is not necessary for the sustenance of man I am fully convinced; equally satisfied am I that its moderate use is attended with no injury. But almost everywhere it is used to excess. Too much animal food inflames the blood, and thus generates too much heat in the system. In our climate and in southern latitudes little or none should be used in summer, while a moderate use of wholesome meats in winter aids the system in preserving warmth. Beef, mutton, lamb, venison, poultry, and even horse-flesh, may be regarded as wholesome meat. Prof. St. Hilaire, of Paris, strongly

urges the introduction of the latter as an aliment. He says that during the great French wars, the celebrated surgeon Larry was accustomed to give horse flesh to the wounded soldiers, and that he attributed their cure, in many instances, to this nourishment. The ancient Germans were in the habit of eating horse-flesh, and to this day shops for the sale of this meat, under the superintendence of a veterinary college, exist by authority in Copenhagen. It is also resorted to by the poor of Vienna, while in Hamburg it commands a high price. The horse is considered a great delicacy in some of the southern portions of South America, where it is introduced at the festive board as a luxury equal to our sirloin of beef. I doubt not its utility and even cheapness on the battle ground, where the majestic steed is hourly falling before the destructive cannon ball. Those who turn up their noses at the idea of eating horse flesh, are requested to lead a horse from the stable and a pig from the gutter, and ask themselves which is the most respectable looking candidate for the carver.

Fig. 4.



SHEEP.

Wholesome to the eye and wholesome to the stomach.

Parents who give their children, under ten or twelve years of age, a meat diet, commit a vital error. The great mortality among children of tender age, is, in my opinion, mainly attributable to ignorance on this point. A healthy infant or child glows with animal heat. His little vital machinery, fresh from the ingenious hands of nature, is full of life, electricity and animation. At birth, his palpitating little heart contracts from 130 to 140 times per minute. At the age of three his pulse is above ninety, while that of an adult averages seventy-five. Is it not, then, manifestly wrong to give him

a stimulating diet? In rigid winters, the indigent mother sometimes freezes to death; not so the babe in her arms. Who cannot call to remembrance some instance in illustration of this remark? The fact is, to speak electrically, children are in a *positive* condition. They are full of vital electricity; to augment in them that active element is simply to inflame the blood and render them susceptible to positive diseases. What I mean by positive diseases are fevers, bowel complaints, croup, water on the brain, &c. Hence their diet should be plain and nutritious; not stimulant. Vegetable food is the best adapted to the nourishment of their little bodies, and keeps their blood pure and healthful, while flesh generates large quantities of carbonic acid gas, which contains 72 parts of oxygen in 100. As the child approaches youthhood, and his vital machinery gradually becomes more sluggish, his diet may be made more stimulating. Fish and poultry may be added to his vegetable regimen. At adult age, beef and other strong meats may be used in moderation, to advantage, and when old age creeps on, a good stimulating diet is imperatively necessary to impart vigor. Let indulgent mothers, who set their childrens' blood on fire with animal food, and then let their doctors kill them in endeavors to quench it with poisonous drugs, hesitate before they add fuel to the flame. Children do not crave animal food. They would not eat it were it not introduced into their toothless mouths while in swaddling clothes, when they have not sense enough to reject it, by which means they acquire a taste for it. I have a fine vigorous boy of three years, who will not eat meat. He weighs over forty pounds, and has never had an hour of serious illness. He often felicitates himself on what he will do when he arrives at adult age, and frequently remarks: "When I get to be a big man then I'll eat meat, won't I papa?" Still the little fellow has no desire for it now, and if I happen by mistake, while helping others, to put a piece on his plate, he laughingly exclaims, "Why, papa!" He would manifest still more surprise could he comprehend the physiological objections to his indulgence in such diet.

If I may be allowed a brief paragraph to deviate from the legitimate purpose of this chapter, I will remark that the excessive use of animal food is a great *social evil.* It is a proverbial fact, that mankind are too much given to the brute diversion of fighting. Even our halls of legislation are disgraced with personal encounters, between gentlemen who are *supposed* to be far elevated above the brute crea-

tion, by their distinguished intellectual endowments. Now we have as good authority as Prof. Liebig, that meat makes men more pugnacious. He says: "It is certain that three men, one of whom has had a full meal of beef and bread, the second cheese or salt fish, and the third potatoes, *regard a difficulty which presents itself* from entirely different points of view. The effect of the different articles of food on the brain and nervous system is different, according to certain constituents peculiar to each of these forms of food. A bear, kept in the anatomical department of this university, exhibited a very gentle character as long as he was fed exclusively on bread. A few days feeding with flesh rendered him savage, prone to bite, and even dangerous to his keeper. The carnivora are, in general, stronger, bolder, and more pugnacious than the herbivorous animals on which they prey; in like manner, those nations which live on vegetable food differ in disposition from those which live chiefly on flesh." Forbearance is a great Christian virtue, and should be cultivated by every enlightened man. Had human beings been intended for fighting animals, their finger's ends would have been decorated with huge unbending nails, and their jaws distended with savage tusks, like the boar. The excessive use of flesh is, therefore, sinful, and leads man to forget his present duty and his heavenly destiny, because it excites those lower faculties which are so prone to dethrone reason.

Grease is supplied quite too abundantly for the table, to preserve the purity of the blood. Weak stomachs call loudly for reform in this particular, while strong ones faithfully perform their work of sending the offending substance to the vascular system, to feed or create humors. Fat is not digested in the stomach, but simply melted and absorbed into the blood. A certain amount is necessary to nourish the brain and save the "wear and tear" of the nervous system; but fatty meats and rich gravies are positively injurious. Grease is a non-conductor of electricity, and its presence in large quantities in the stomach tends to resist the action of the nervous fluids furnished by the brain through the pneumo-gastric nerve, and impair digestion. Lean meats, eggs, milk, butter, bread, potatoes, corn, &c., furnish all the oleaginous substance necessary to carry on the processes of nature.

Protracted intervals between meals should always be avoided if possible. In large cities it is the custom of many business men to go from 8 or 9 A. M. to 4 or 5 P. M. without eating. Three-fourths of the merchants of New York do not dine till 5 o'clock, and a large

number of these take no luncheon. Some one has remarked that "the idle man is the devil's man, and it may also be said of the stomach, that if it has nothing to do it will be doing mischief." The gastric fluids require something to act upon, and if there is no food in the stomach they take to the membrane and coatings, causing irritation if not inflammation. They act upon the food in the stomach the same as the acid in the battery upon the galvanized zinc. If the latter is not frequently replenished with a coating of quicksilver, the zinc will soon be destroyed. So with the stomach; if it is not well supplied with food, the gastric fluids will do mischief to its delicate membranes.

Long fasting also tends to another evil, viz: overloading the stomach. Better take four light meals a day than overload the stomach once in three. Too much food overpowers the nervous system as much as excessive muscular exercise. To sum all, under this head, people must be more careful what they eat, at what times they eat, and how much they eat, if they would preserve the healthy condition of the vascular and nervous systems. There can be no precise rule laid down for the governance of all. A little careful observation, however, would teach every one of mature age what is best adapted to his particular organization. If men would watch with half as much anxiety the influences of different articles of food on their systems as they do the effects of growing crops, and financial failures on the money market, longevity would oftener be obtained than large fortunes.

2ND. THE LIQUIDS WE DRINK.

A proper understanding of the effects of various liquids commonly used as beverages, would do much to prevent nervous derangements and blood impurities. The Chinese tea forms the principal beverage of all the Northern States and British provinces of America. In Central America, the heterogeneous population resort to chocolate, whilst in South America the tea of Paraguay is freely indulged in. In the Southern States and West India Islands, coffee seems to be the greater favorite, particularly with the adopted citizens, and perhaps this remark is equally true of this class in the Northern States. In France, Germany, Sweden and Turkey, coffee is principally used; in England, Russia and Holland, tea; in Spain and Italy, chocolate; in Ireland, the husks of cocoa. The Chinese tea has found its way to the Himalayas and the Plains of Liberia, and is probably drank by more

people than any other beverage. Coffee leaf tea is sipped in Sumatra, while the Ethiopians of Central Africa quaff the Abyssinian chaat. Thus we see that warm drinks are popular with Christian and Savage, and if we accept the wisdom of intuition and instinct, we must consider them, as a general rule, healthful.

Fig. 5.

THE CHINESE GATHERING TEA.

The fact that tea does not agree with me does not prove it a dangerous or injurious beverage. Some people cannot eat strawberries, without a succession of colic. Others enjoy strawberries but a sweet apple will create constipation. The effects of tea and coffee depend entirely on the peculiar idiosyncrasies of the drinkers, and, the same as in the use of food, no definite rule can be laid down General directions may be given, which, if observed, will enable

most intelligent persons to judge what is positively hurtful in their individual cases. Nervous people should never drink tea, while those of a bilious and lymphatic temperament can usually indulge with impunity. The effects on the former are usually weakness, tremor, hysteria, and hypochondria; while on the latter, they are mental and corporeal exhilaration. Tea acts at once on the nervous system, quickening the circulation of electrical elements and imparting to the man of sluggish nerve, activity and vivacity. With its narcotic properties it possesses peculiar exhilarating powers, which may result, in a measure, from the speedy reactory effects of the former. Coffee, on the other hand, is generally suitable to nervous persons. It acts more upon the blood and is bracing to the muscular system. Persons who are not bilious may often allay a severe headache or a weakness of the stomach, by a moderate potation of this luxury. Asthmatic persons also find relief in its use provided other peculiarities of their systems do not reject it. Coffee should not be used by fleshy and bilious people. It thickens the blood, and apoplexy is sometimes the result of its excessive use. For the same reason, chocolate and cocoa may be drank by nervous people, while they are injurious to those of corpulent tendency. Many nervous individuals, however, cannot drink coffee, chocolate or cocoa, for the same reason that they cannot drink any hot beverages, i. e. they stimulate in too great a degree the action of the stomach battery, by which means the system becomes over-powered with animal electricity, and the vital organs rendered too active. Pour hot water into the acid of a galvanic battery and the generation of electricity is greatly accelerated. As in eating, therefore, effects should be watched and heeded. Tea and coffee, like meats, are abused. They are universally used to excess, and by many who should not use them at all Children, particularly, are better off without them. They require no artificial stimulus; only nourishment.

Beer is a very ancient beverage, and may be considered wholesome, if unadulterated, for lean, nervous and bloodless people, for which reason it is not a proper drink for corpulent and muscular men. As might be inferred from the present beer-drinking propensities of the Germans, it is no new beverage to them. The ancient Latin historian, Tacitus, speaks of its use among this people over a thousand years ago. It is well that the avaricious, scheming Yankee did not live then, or it may reasonably be questioned whether the fat

representative of "faderland," would have been in existence to-day. The reader is not probably aware that a very large proportion of the beer sold now-a-days, under the various names of porter, ale, etc., are base adulterations; but it is so, particularly in the "corner groceries" of large towns. Wormwood and aloes are often substituted as a bitter for the invigorating hop; sulphate of iron, alum and salt are sometimes used to give it a frothy or effervescent property. Bad or weak beer is made palatable by the addition of coriander seed, hartshorn, liquorice, copperas, Spanish juice, quassia, orange-peel, capsicum, ginger root and so forth. New beer can be made to taste like that two years old, by the addition of sulphuric acid. I have had this article imposed on me in New York, so bunglingly prepared as to betray its poisonous, artificial *maturity* as soon as tasted Great care should therefore be taken, by those who wish to derive benefit from beer, to obtain a good article. Do not buy unless you know the retailer and brewer, at least by reputation. The patrons of promiscuous beer cellars are filling their blood with inflammable impurities which render their systems ready victims to rheumatism, fevers and epidemics.

VINOUS AND DISTILLED LIQUORS have accomplished a great deal of good and misery for mankind. The useful medical properties of unadulterated wine, brandy, gin, rum and whiskey, have never been disputed; while, as beverages, they have been held in much favor by not a few of the intelligent as well as illiterate men of all civilized nations. And I am in doubt if the strenuous efforts of temperance philanthropists to check the excessive use of them, have not augmented the evils of intemperance by driving almost all respectable men from the traffic, in consequence of which it has been left open to the piratical speculations of unprincipled vagabonds, who do not scruple to sell their customer a destructive compound of Spanish juice, spirits, sulphuric acid, burnt sugar, &c., for brandy. The coercive laws for the suppression of the sale of ardent spirits seem to have proved utterly futile. The enormous quantity of forty seven million gallons of whiskey, rum and brandy were made in the United States during the year 1856, being nearly two gallons to every man, woman and child in the country. More than one-half of these were undoubtedly slaughtering compounds, whose pernicious properties have already sown the seeds of death in the blood and nerve of millions of people. The physician in the House of Correction at Law-

rence, Mass., says it is almost impossible to treat delirium tremens successfully now, in consequence of the utter prostration of the nervous system of drunkards by the strychnine so generally used in the manufacture of liquors. The chemical inspector of liquors in Cincinnati gives additional "aid and comfort" to inveterate tipplers, by announcing that he has made 249 inspections of various kinds of liquors during the past two years, and has found more than nine tenths of them imitations, and a great portion of them poisonous concoctions. Of brandy he does not believe there is one gallon of pure in a hundred, the imitations having corn whiskey for a basis, and various poisonous acids for the condiments. Of wine, not a gallon in a thousand purporting to be sherry, port, sweet malaga, is pure, but they are composed of water, sulphuric acid, alum, cayenne pepper, horse-radish, and many of them without a drop of alcoholic spirit. He further says, that he will warrant that there are not ten gallons of genuine port wine in Cincinnati. Speaking of whiskey he adds that in his inspection he has found only 17 to 29 per cent. of alcoholic spirit, when it should have been 45 to 50; and some of it contained sulphuric acid enough in a quart to eat a hole through a man's stomach. According to newspaper accounts, several hundred hogs recently died at a distillery from the effects of strychnine used in the preparation of whiskey—they having feasted their ravenous stomachs on the slops. With all these startling facts staring us in the face, it is clearly the duty of the physiologist to warn people against the use of spirituous liquors. Pure liquors accelerate the generation and circulation of nervo-electricity, and may be used advantageously, in moderation, by those whose vital organs are sluggish or brain inactive. As a general rule they are very injurious to nervous people, and are apt to induce insanity, delirium tremens, hypochondria, fits, and other diseases common to those of easy nervous excitability. But drug liquors are alike injurious to all. There was a time when whiskey drunkards frequently attained a remarkable longevity. How many whiskey drinking octogenarians can be found to-day? Few, if any. Strychnine destroys the equipoise of nature—augments the alkalies of the mucous membranes, and thereby destroys

Fig. 6.

THE MAN WHO DRINKS MODERN LIQUORS.

the harmonious evolutions of vital electricity carried on by the combined action of the internal and external fluids.

Having hastily reviewed the physiological effects of the most common beverages concocted by man, I will now call the attention of the reader to those fluids which nature has so abundantly furnished for the use of mankind. Many may be surprised to find that these are not entirely above criticism.

Milk is the first liquid which is permitted to enter the human stomach; and, perhaps, considering the ignorance, indiscrimination and reckless folly of the mass of human animals, it were better if others had never been provided. True, milk is extensively adulterated in large towns, but the articles used for that purpose are usually comparatively harmless, except to small children whose delicate little stomachs are hardly prepared to digest or expel such substances as yolks of eggs, sheep's brains, flour, subcarbonate of potash, chalk and hard water. So much is not to be feared from adulterated milk as from that obtained from diseased animals. Cows are kept the year round in stables by many dairymen in cities. By confinement, if not by bad food, they become diseased just as men and women do when shut in from open air and exercise. Their disease as a matter of course, renders their milk unwholesome and innutritious. When, together with confinement, cows are fed on still slops, their milk becomes actually poisonous. Some hard stories are told of New York dairymen, who, it is said, keep their cows closely tied up in sheds and fed on still slops till they actually drop dead in their stalls. From the specimens of milk that I have seen in that city, and the dishonest character of many of those engaged in the milk traffic, I am not disposed to doubt their entire truthfulness.

Fig. 7.

A MAN WHO DON'T.

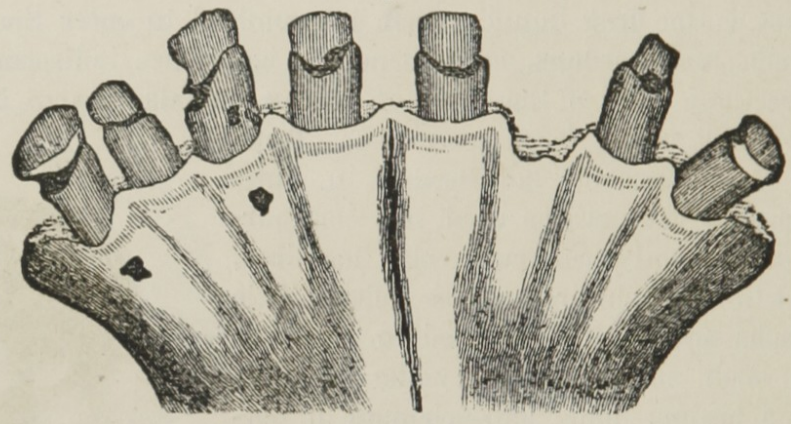
Fig. 8.

THE AUTUMN OF A TEMPERATE LIFE.

The shocking consequences of such speculative recklessness falls with particular severity on the juvenile portion of a metropolitan

population, and it is sad to contemplate that the perversity of man can lead him to the perpetration of such wholesale slaughter of innocent babes who, by reason of maternal disability, are denied the nourishment of a mother's breast. But the cupidity of the unprincipled money-seeker knows no limit, and the fact that such imposi tions are practiced, should lead the consumer to guard himself against them.

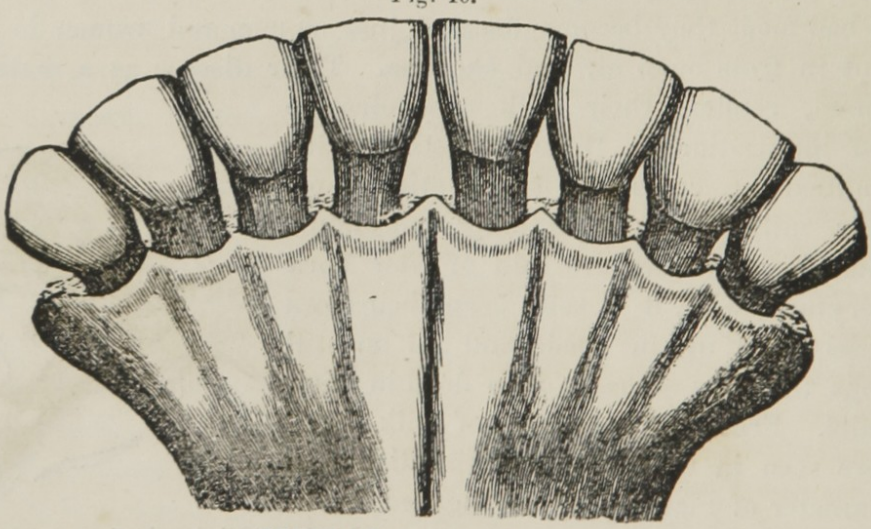
Fig. 9.



TEETH OF A STALL-FED COW.

Pure milk is not congenial to every one. In some, by its dilution of the gastric fluids of the stomach, together with the resistant action of its oily property, the generation of vital electricity is impeded and

Fig. 10.



TEETH OF A GRAZING COW.

drowsiness induced. In others, who are predisposed to catarrhal difficulties, the gluten of milk increases slime and tends to aggravate the complaint. But with the majority of people milk is a highly

nutritious drink, and when copiously added to tea and coffee often renders these beverages harmless to those who otherwise could not use them.

WATER is sometimes the cause of blood diseases. If good, pure spring water could be obtained in all parts of the world, it would be the healthiest drink for man. And so would it be if nature were more bountiful in the distribution of such streams as the Croton, Cochituate and Schuylkill of America; the Seine of France; and the dashing rivulets which play in the mountains of Switzerland. But when the thirst can only be quenched by the muddy and sewerage waters of the Ohio, the Mississippi and Thames, pregnant as they are with the filth of cities and the decomposed matter of vegetables and dead animals, it is not strange that the vitality of the blood is impaired by their vegetable and animal exuviæ. Many of the denizens of Cincinnati, Louisville, St. Louis, New Orleans and London, flatter themselves that their river waters are very wholesome! But it is a proverbial fact that every traveller must have a dysentery or something approaching thereto on initiating his stomach into the use of them. Like an unwilling slave, the system can after awhile be whipped into submission, but it reposes only long enough to collect in the blood sufficient impurities to revenge on the individual in the form of diarrhœa or bilious, typhoid, intermittent or yellow fever. Hence, together with bad diet, the frequency of these forms of disease in the cities mentioned.

Some of the residents along the shores of these rivers are aware of the injurious properties of their waters, and resort to rain water. Unfortunately they only "jump from the frying pan to the fire." In the large cities designated, the air above is no cleaner than the streets beneath. It is the reservoir of the animal effluvia of crowded populations. The breath of thousands of diseased men and animals mingle with the rains as they descend, infecting them with their poisonous gases. I have no doubt that, in seasons of epidemics, the seeds of the prevailing diseases are often drank with water. Consequently those who drink rain water should first expose it for several days to light and air and then to filtration. By these means it may be rendered wholesome, and better by far than the heterogeneous compound of decayed vegetation, solution of dead horses and dogs, and the city slops, which flow in the channels of many rivers.

The well water of limestone countries is productive of gravel and kidney difficulties, while that of new countries is often rendered

unwholesome from the drainage of decayed vegetation. The former is known by its hardness and the latter by its peculiar odor and frequent discoloration.

Brook-streams which have the appearance of purity are not always safe to be drank, in consequence of the possible presence of dangerous animalculæ; many instances of frogs, evets and worms in the stomach, having occurred in consequence of want of care in this particular. Those having their sources or channels near marshes, frog ponds, hog-pastures, cesspools, distilleries, poultry yards, slaughter houses and saw mills, may with good reason be avoided. Pedestrian travelers and sportsmen, when overtaken with thirst should look for some farm house and regale themselves with a bowl of milk, rather than suck in the waters of an unknown brook. Everywhere that good milk can be obtained it may safely be regarded as the most wholesome and nutritious drink.

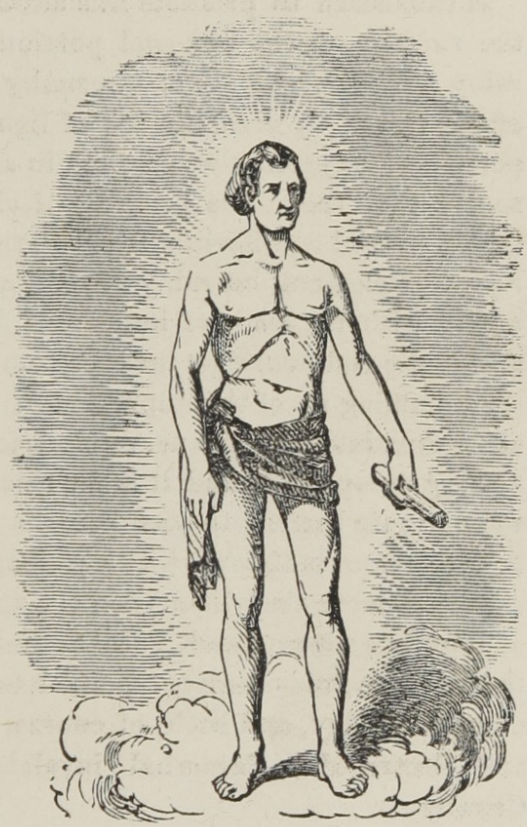
3RD. THE ATMOSPHERE WE LIVE IN.

This is a fruitful source of nervous derangements and blood impurities. And as my views with regard to the influence of air upon the human system are somewhat peculiar, and a proper understanding of them necessary to aid the reader in readily comprehending many important points in subsequent pages of this work, I shall subserve both the purposes of this chapter and many which are to follow, by a general treatise on the nature and effects of this wonderful element. Air is composed of 78 per cent nitrogen, 21 per cent oxygen or electricity, nearly 1 per cent of carbonic acid gas, and more or less vapor of water, according to its temperature. I am not alone in believing that oxygen is identical, or nearly so, with electricity, but if I were, my opinion would remain unchanged until some good philosophical argument could be adduced to show the contrary. The origin and real nature of both are unknown, but certain it is their effects are similar, and whatever difference is observable may be occasioned by its combination with other substances, for, according to generally received opinion, "nature never presents it solitary." Still, this view of the subject is not vital to the theory I am about to advance, for it is now universally admitted by scientific men, that electricity permeates everything—the air around and above us as well as the earth beneath our feet.

The quantity of electricity diffused in the air exerts a potential influence on the health of man, and an excess of the element in the

atmosphere, is as injurious as a moiety. In dry and pleasant weather the human system is relatively in a positive and the air in a negative condition; that is, the former possesses more electricity than the latter. The result produced by this disparity between the body and the element which surrounds it, is a constant *radiation* from the former, or in other words a continual flowing off of the electrical element into the atmosphere, as represented in the annexed cut. It is well known to physiologists, that when the pores of the skin are in a healthful condition, there is an incessant discharge from the skin of what is termed insensible perspiration; but nothing is said of the motive power by which the effete particles of the system are thus so wonderfully carried off. Now, if a doctor should retire at night with his garden strown with filth and rubbish, and on arising in the morning should find the whole mass emptied into the street, he would naturally enough inquire who or what had re-removed it. Surely dead and waste matter could not remove itself. Strange it is, then, that the astute professors of anatomy and physiology have never thought to ask themselves how the corrupt particles of the system day by day, and year by year, during the natural life of man, are emptied into the great thoroughfare of life—atmospheric air. The pores possess no power in themselves to throw them off, and if, by the act of contraction, they should succeed in expelling these impurities, with no motive power to carry them away from the skin, the latter would daily become coated with the diseased exudations of the body. There are about seven millions of pores in the human body, and the quantity of useless matter that is daily discharged from them amounts to from *twenty to forty* ounces. The reader can see, there-

Fig. 11.



ELECTRICAL RADIATION.

fore, how soon the avenues of the skin would close up, were the discharge of effete matter produced by merely a contracting process of the pores. Nature has manifestly employed a motive power, and that agent is the same which the mind of man uses in controlling his muscular organization, and the same, too, that the Almighty employs in moving and sustaining the planetary systems of innumerable worlds.

Dry and pleasant weather, then, is most conducive to health, because the relative conditions of the atmosphere and the body, are best calculated to promote this electrical radiation which carries off the *rubbish* of the external portions of the system. In damp or rainy weather, the air is unusually charged with electricity, as is often evinced by vivid flashes of lightning. There is a greater proportion of oxygen in water than in air, and it is probably from this source that the undue presence of electricity is derived. Owing to this, a partial equilibrium is produced between the body and its surrounding element, on rainy days, and the healthful radiation of electricity with its loads of impurities, is for a time suspended. Then rheumatic and neuralgic invalids complain of increased pain, because the damming up of the impurities of the system prevents the harmonious circulation of the nervo-electricity, and thus aggravates inflammatory symptoms; and it is for this reason that the application of the galvanic battery to such persons usually gives partial relief; by it, the system is thrown into a positive condition, or, in other words, rendered more electrified than the atmosphere, so that the radiation of impurities is renewed. No one feels as well on a rainy day, except those whose fluids radiate too much to the surface, leaving the mucous membranes dry, and such, of course, feel better while the air is moist and electrified. Catarrhal invalids, vice-versa, are made worse thereby.

For other reasons the air is not as wholesome in wet as in dry weather. When the latter prevails, the density of the air causes a rapid passing off of earthly, vegetable and animal impurities, which, owing to their vapory form, rise with such rapidity as to scarcely affect the air we breathe. But when it is damp or rainy, the air is lighter, as is evinced by the falling of smoke. One would naturally suppose that owing to the unusual presence of oxygen, it would be heavier, but it must be remembered, that hydrogen is one of the elements of water and vapor, and that it is the lightest of any known substance. When, therefore, it rains and the air is light, the gases

of decaying vegetation and animal effluvia (which are also light) mingle with the air we breathe. A popular writer, who has said a great many good things, erroneously remarks as follows:

"The amount of exhalation and effluvia which rise from the ground depends much upon atmospheric pressure. When the air is heavy, these substances are, as it were, confined to their sources, that is, they are liberated at the slowest rate; but as the barometer falls the pressure is taken off, and the miasmatic emanations rise much more freely."

A more palpable error was never uttered. It is contrary to the laws of gravitation. Investigate it any way you choose and you will find it wrong. If you suppose the miasmatic emanations *heavier* than air they remain near the ground in consequence of their own *weight*. Suppose them *lighter* and it is impossible for them to be held down by the *pressure* of the air, for the latter will then settle down under them and *raise them up*. Who ever heard of putting a flat stone on water to hold it down? No, the quotation is absurd, and contrary to fact. Miasmatic emanations are lighter than air on a clear dry day, and rapidly rise above the strata of air we breathe; but on damp and wet days, when the air is also light, miasmatic emanations rise sluggishly, and mix with the air we breathe. From this it appears that *nature* sometimes disturbs one of the chief elements of life, a fact which rather disproves the writings of some fanatics, who assert that there is no reason why a man may not live on earth for ever, if he strictly observes the laws of life and health. It is well enough to say that few men live as long as they might, for that is *true;* and I shall now proceed to treat upon matters relevant to this subject, which go to prove the fact.

If pains were taken to preserve the purity of the air we breathe, health would be promoted and longevity increased. The venous blood which enters the lungs, is in a negative state, and it depends upon the oxygen or electricity of air to electrify it, remove its carbon and restore its arterialization. Hence the air we inhale may contain its natural constituents in their due proportions, but that which we exhale contains almost the usual quantity of nitrogen with eight or nine per cent of its oxygen replaced with an equal amount of carbonic acid. The stomach, in the digestion of food, cannot produce all the electricity which is necessary to move the animal machinery, and therefore the lungs, with their curious mechanism receive the blood from the nervous system, and expose it to the electrifying

influence of the atmosphere. I may be asked why the blood is not, like the body, electrically *positive* in relation to the air. I reply that it is, when it leaves the lungs; but in passing through the arterial system it distributes its electrical properties, and returns through the nervous system destitute of that element. The lungs are very generous to the stomach and keep up a neccessary supply of electricity during the hours of sleep, when the digestive organs are permitted to take partial repose. Did ever the reader notice what long, deep inhalations a person takes while sleeping? While the stomach is enjoying rest the lungs work their utmost to keep up a supply of vital electricity, and although they exhale the useless gases with the same rapidity that they do when the individual is awake, they draw in deeper and more copious draughts of the electrifying element. The stomach being on such amicable terms with the respiratory apparatus, and having made such excellent arrangements with it to aid in doing its work during the hours of partial repose, (for the stomach never sleeps sound) the reader can see how wrong it is for him to give his stomach a job of work on going to bed, by eating a late supper, and that he has no right to complain if the digestive organs refuse to do the work, but allow the food to ferment and fill his blood and brain with inflammation. When the stomach has such perfect confidence in the integrity and industry of the lungs, it is also wrong to oblige the latter to cheat the former, by going to sleep in badly ventilated rooms, or where malaria exists, by which the system will become poisoned instead of electrified, and the stomach find its work not only undone, but itself disqualified in a measure to resume its labors. Facts go to prove that there is a greater proneness to disease during sleep than in the waking state. In Turkey and Hindostan, if a person falls asleep in the neighborhood of a poppy field, over which the wind is blowing towards him, he is liable to "sleep the sleep which knows no waking." The peasants of Italy who fall asleep in the neighborhood of the Pontine marshes are invariably smitten with fever. Even travelers who pass the night in the Campagna du Roma inevitably become more or less affected with the noxious air.

The reason of this, after what has been said, must be obvious. The stomach battery having partially suspended operations in sleep, the lungs redouble their efforts to inhale the indispensable element, and unfortunately receive it, most poisonously adulterated, and the various organs of the system, if not murdered in their slumbers,

awaken to find themselves invaded by a destructive foe. An English traveler in Abyssinia has asserted that he could live in health, in that sickly climate, by a proper selection of the situation where he slept every night.

All this argues the deleterious effects of late suppers as well as the necessity of well ventilated and healthful sleeping apartments, and people who complain of ill health while they persist in the former, and take no pains to secure the latter, are as foolish as the boy who thrust his hand into hot embers and then cried because it was burned. Let those who sleep in small rooms with windows and doors closed remember that every individual breathes, on an average, from 13 to 20 times per minute, and inhales from 13 to 40 cubic inches of air at each inspiration. Now take, as a low estimate, the consumption of air at 20 inches, and the number of inspirations at 15, and we find that in the space of one minute, 300 cubic inches of air are required for the respiration of one person, during which 24 cubic inches of oxygen are absorbed by the blood, and the same amount of carbonic acid given out. Proceed with this estimate, and we find that in one hour, one pair of lungs have consumed 1440 cubic inches of oxygen, and in seven hours, the time usually allotted to sleep, 10,080 cubic inches of oxygen have been replaced with an equal quantity of carbonic acid. The deadly effects of the latter are illustrated by the fact that canary bird, suspended near the top of a curtain bedstead where persons are sleeping, will almost invariably be found dead in the morning. It has further been demonstrated that when there is one-half per cent. of carbonic acid in the air, it renders it unfit for the support of life. In view of these facts, how many churches, school-houses, places of amusement, factories, work-shops and dwelling houses are but the nurseries of disease. Nor is it surprising that such a great majority of tombstones in our cemeteries are inscribed with ages below two score.

Some physiological writers have said that Scrofula is often *produced* by bad air. That it is rendered contagious through the medium of the air is certain, but I am hardly inclined to believe that Scrofula would directly arise from breathing the atmosphere of a crowded room unless there were persons in the apartment affected with it. Scrofula and all diseases are rendered in a measure contagious by the diseased animal vapors from the lungs and pores of persons affected with them. These vapors mingle with the natural ingredients of air in a confined room, and are conveyed to the blood of others through

the respiratory apparatus, and hence, impure air may, in one sense, be said to produce Scrofula. Certain it is, that it will convey the disease to those not affected with it, if it is rendered impure by the presence of scrofulous persons. Every man and woman is constantly perspiring or radiating from the skin, and exhaling from the lungs, waste animal matter, and if a person is diseased, these vapors partake of the nature of that disease.

Inasmuch, then, as there is at least one diseased person to every ten sound ones, in every community, the reader can see how liable he is to contract disease in a crowded lecture or show-room. The best ventilation does not render us entirely safe, but improper ventilation makes the spread of disease positively certain. Prof. Faraday gives his experience regarding the atmosphere of crowded rooms, as follows:

"Air feels unpleasant in the breathing cavities, including the mouth and nostrils, not merely from the absence of oxygen, the presence of carbonic acid, or the elevation of the temperature, *but from other causes depending on matters communicated to it from the human being.* I think an individual may find a decided difference in his feelings when making part of a large company, from what he does when one of a small number of persons, and yet the thermometer give the same indication. When I am one of a large number of persons, I feel an oppressive sensation of closeness, notwithstanding the temperature may be about 60° or 65°, which I do not feel in a small company at the same temperature, and which I cannot refer altogether to the absorption of oxygen, or the inhalation of carbonic acid, and probably *depends upon the effluvia from the many present;* but with me it is much diminished by a lowering of the temperature, and the sensations become more like those occurring in a small company."

Were mankind generally aware of the effects of the diseased radiations and exhalations of invalids, popular lecturers and preachers and favorite dramatists and negro-dancers, could hardly induce the convocation of the crowded audiences that they now do, and people would be as particular in the air they breathe as the water they drink. The use of stagnant waters could not be more deleterious to the nervous and vascular systems than the inhalation and absorption of vitiated air. Still most men are regardless of the latter, while they throw out with disgust, a glass of water which has sediment or color.

The introduction of stoves for purposes of heat, has been as injurious to health as it has been universal. Air to be healthful

must possess a certain amount of moisture (which is more electrical than dry air) to prevent a too copious radiation of the electrical elements and fluids of the body. The effect of stove heat, as every one knows, is to render the atmosphere dry. But if this were the only objection to the use of stoves, some means might be devised to overcome it. Says Prof. Youmans: "While, in point of economy, stoves are most advantageous sources of heat, yet in their effects upon the air they are perhaps the worst. We saw that in the stoves called *air tight*, the burning is carried on in such a way that peculiar gaseous products are generated. These are liable to leak through the crevices and joinings into the room. Carbonic oxide gas is formed under these circumstances, and recent experiments have shown that it is a much more deadly poison than carbonic acid. The slow, half smothered burning of these stoves requires a feeble draft, which does not favor the rapid removal of injurious fumes. Besides, carbonic acid being about half as heavy again as common air, must be heated 250° above the surrounding medium to become equally light, and still higher before it will ascend the pipe or flue. If the combustion of the fuel is not vivid, and the draft brisk, there will be regurgitation of this gaseous poison into the apartment." The same writer continues: "Probably all stoves, from their imperfect fittings, are liable to this bad result. Hot-air furnaces, also, have the same defect. They are cast in many pieces, and however perfect the joinings may be at first, they cannot long be kept air-tight, in consequence of the unequal contraction and expansion of the different parts under great alternations of heat. Combustion products are hence liable to mingle with the stream of air sent into the room." Dr. Ure also remarks: "I have recently performed some careful experiments upon this subject, and find that when the fuel is burning so slowly as not to heat the iron surface above 250° or 300°, *there is a constant deflux of carbonic acid into the room.*"

To warm an apartment there is nothing like the old-fashioned fireplace, and all who have ever had the felicity of warming themselves before it, will join with me in this assertion. A fire on the hearth does not heat the air, but, as a writer truly remarks, "*the heat rays dart through it* to warm any object upon which they may fall." The sun passes his floods of light through the atmosphere without warming it a particle. Air is made to be *breathed*, and we again discover Providential wisdom in the arrangement by which the sun warms us, without disturbing, in the slightest degree, the respiratory medium.

But if we heat the *air itself*, we at once destroy the natural equilibrium of its composition, and so change its properties that it becomes more or less unpleasant and prejudicial to health."

Modern grates are very good substitutes for fire-places, and should take the places of stoves, particularly in churches, theatres and show rooms, where the animal effluvia of a crowded assemblage are sufficient to render the air vitiated without the further addition of stove or furnace heat.

Too much care cannot be taken for the maintenance of the natural purity of air. School-houses, churches, theatres, dwellings and factories, should be daily aired, in cold as well as hot weather. The permanency of impure air in a close building, is forcibly illustrated in a recent account given by the American Medical Gazette, of the vault of the old Cathedral Church of Bremen. Hundreds of years ago, when the old church was built, the plumbers occupied the vault for melting and preparing materials for the roof, and since that time its atmosphere has possessed the peculiar property of preserving from decay all bodies placed therein. That paper remarks—

"Visitors are shown eight human bodies, besides a number of cats, dogs, monkeys, birds, etc., all of which, by mere exposure to this atmosphere, have become dried and free from all offensive effluvia; resembling in appearance coarse parchment.

"The body nearest the door is that of an English major, said to have lain there one hundred and eighteen years.

"The second that of a German student, who lost his life in a duel. The hard, dry flesh, still shows the sabre wounds on his throat and arm. His body has been here one hundred and seventy years.

"The third, that of a Swedish Countess, whose body has remained free from the lot of common mortals for one hundred and forty years.

"The fourth, that of a Swedish General, who was killed in the "Thirty Years' War," and whose throat still exhibits the mark of the wound of which he died.

"The fifth is that of his aid-de-camp, who lost his life at the same time, by a cannon ball striking him in the side. The destruction of the parts is plainly visible.

"The sixth body is that of a workman, who fell from the steeple of the church when near its completion—four hundred years ago—and broke his neck. Owing to this accident, the peculiar properties of the vault became known; for the body of the deceased workman was laid in this vault for a few days, and, having evinced no signs of

decomposition, the singularities of the fact induced the authorities to permit it to remain, and here it has remained during all that time.

" The seventh is the body of an English lady, who died 130 years since of a cancer on the lower jaw; the ravages of the disease are still perceptible in the ulcerated flesh.

" The eighth is the body of a working man, who has lain here for sixty years.

" In a marble sarcophagus, standing in the middle of the vault, are said to repose the mortal remains of the Swedish Chancellor, Van Englebrechten; but they are not permitted to be exposed to public view, on account of some still surviving relative of the family.

" Each of these bodies retains to a great degree the appearance peculiar to itself in life. Thus, the Swedish General was a short round-faced man inclined to corpulency; his aid-de-camp was a slender, well-proportioned man, in the prime of life. As in general appearance so also in facial expression do these bodies differ; the parchment-like skin, though drawn tightly over the bones, still shows something of the manner in which the muscles beneath once worked.

' No other part of the church possesses this peculiar atmosphere, and we can only suppose that the entire chamber became so surcharged with lead, that it has continued ever since to give forth vapors, which, forming an antiseptic chemical compound of lead, have operated upon the cadavera exposed to its influence."

Now this condition of the air is well enough for dead bodies but baneful enough to live ones. Mechanics who work in metal can see from this, how prolific of diseases their work shops may become by being daily and nightly closed, as they frequently are in winter. There can be no doubt, too, that churches, closed up as they generally are, at the end of every Sabbath, retain a great deal of the diseased emanations of unhealthy visitors, which cannot be removed by a day's airing towards the end of the week when sextons usually sweep and ventilate the buildings. Churches should, therefore, be aired immediately after, as well as just before the day for services, and an airing every day would be still better.

Those who are struck down by the hand of disease and marvel at the *cause* of their afflictions, because, perhaps, they have been regular in their habits of eating, drinking and sleeping, may find in this essay a solution of the secret. That it may have a happy effect upon mechanics who build houses; upholsterers who furnish them; ser-

vants and housewives who have the care of them; the artizan in the workshop; the pale faced woman in the cotton factory; the hotel keeper who entertains lodgers; the conductors of railways; the parson ; the sexton ; the dancer ; street commissioners ; the frequent visitors of cemeteries; and the mothers of large families, is the hope of the author.

4TH. THE CLOTHES WE WEAR.

It is almost useless to speak of the evils of dress. If fashion should decree that men and women must adorn themselves in their grave clothes, the mandate would be cheerfully obeyed. In these days of "fuss and feathers" an ephemeral life of gaiety and glitter is esteemed more desirable than a long life of quiet usefulness. But inasmuch as the clothes we wear exert a mighty influence on the health of the vascular and nervous systems, this chapter would be incomplete without a few remarks on the subject. Reference to the pernicious effects of tight lacing will be deferred for another essay. In this I shall turn my attention to other evils equally destructive to health. Tight clothes of any description are injurious. Knit shirts, knit drawers, tight stockings, tight pants, close fitting vests and waists, tight shoes, tight boots and tight caps and hats, all tend to obstruct the electrical radiation which carries off the impurities of the system. So long have these habits of dress been indulged in, that a very large proportion of the men and women of civilized countries may be said to be "hide-bound;" that is, the pores of the skin have been closed and gummed up by the noxious exhalations of the skin which have not been permitted to pass off naturally. Were it not for offending the prudish modesty of many who might be termed *doubly extra civilized*, or, in the language of flour dealers, "extra superfine," "superlative," &c., I should advocate a return to the breech-cloth, hoping thereby to get some one to meet me half way. I may yet, before I leave this subject.

With the exception of savages, who go nearly or quite naked, the semi-barbarians who envelop but a small portion of their bodies in clothing, and the Turks who wear loose pants, tunics, robes, &c., there are no people in the world who approach health and comfort in their fashions of dress. The indigent and mercantile classes of the Ottoman Empire particularly, indulge themselves in a peculiarly comfortable costume. Fig. 12 represents a Turkish fruit vender. At least a couple of pairs more of brawny legs with their haunches

could be easily stowed away in his loose breeches, and his sleeves, etc. correspond with the expansiveness of his nether habiliments. There is some chance here for electrical radiation to go on unobstructedly.

Fig. 12

THE COSTUME OF A TURKISH FRUIT VENDER.

The invention and adoption of knit shirts and drawers have done much to destroy the purity of the blood and the harmonious action of vital electricity. The use of flannel as an article of under dress in

changeable climates is certainly commendable. But to obtain the benefit which wearers usually seek, i. e. health, such garments must be made loose, and changed often. Knit shirts usually set close to the skin, and very often draw so tight around the chest as to prevent a free action of the lungs. I have frequently had occasion to examine consumptive invalids, who were hastening decline by wearing flannel shirts so closely fitted to their skin that Indian rubber could not have been much more objectionable. Flannel shirts should be made up from the cloth, and loose enough to admit a free circulation of air between them and the skin. It is well to wear two during the week, changing every alternate day. Every other day hang the one last worn in the air and sunlight, so that the impurities which it may have absorbed can pass off.

In this connection I would not omit to warn invalids against the use of plasters. Almost daily am I consulted by those who have been in the habit of wearing them more or less for years. "But," says one, "they are recommended by my physician." Shame on your physician! If he knows the offices of the pores of the skin, he is guilty of willful malpractice; if he does not, he ought not to be your physician. I know that by thus speaking I shall incur the maledictions of the "regulars," and not a few of those who call themselves "reformers," but what do I care—I have them already. There are said to be nearly *three thousand* pores in every square inch of the human body, and there are from seven to ten square inches in an ordinary sized plaster. Now think, for one moment, of the effects which must ultimately ensue from plastering up *twenty to thirty thousands* of those useful little orifices through which the electrical radiations of the system carry off the noxious and waste matter of the blood. True, you feel a temporary suspension of pain, but do you not know that skillfully prepared embrocations will produce this happy result as well, while they allow the machinery of nature to go on uninterruptedly? When an invalid comes to me plastered up from the top of his neck to the extremity of his spine, I am invariably reminded of the way in which some South Americans kill prisoners. It is at Monte Video, I believe, that they sew them up in a wet hide, leaving only the head and neck exposed to the vitalizing influences of the atmosphere. When the hide becomes dry it sticks just about as close as a "pitch plaster," and the unfortunate victim dies a slow, but excruciating death. Why, "Mr. Doctors," (as the Germans sometimes call the members of our profession) do you not

know that the pores are of as much importance to the human system as the safety valves to the steam engine? The pores are actually safety valves to the animal machinery, and the Divine architect has not made *one* more than is necessary. Do not, then, delude the suffering victim to disease, who has already more noxious and health-destroying matter in his system than he can carry, with the hope that a plaster can be of any possible benefit to him. If he has pains and you cannot cure them with unexceptionable remedies, pass him over to some of your brethren who can. "There is a balm in Gilead, and a physician there."

Over-coats made of the skins of buffaloes are extremely warm in cold climates in winter, and rubber coats in all climates in rainy weather. Garments of both descriptions are unhealthy, because their texture is of such a nature as to prevent the escape of the insensible perspiration. They are, undoubtedly, comfortable for a day, but their injurious effects may last for a life-time.

Much has been said for and against low-neck dresses for ladies. Some physiologists, even, have raised their voices against them, and pronounced them the cause of consumption in many cases. That ladies may and often do take cold by suddenly changing their costume from high to low neck, I will not gainsay. But that does not prove the latter style injurious; but simply that an instant change from one to the other is productive of evil. On the contrary, I believe that a general adoption of low-neck dresses by the ladies, would cause a decrease of that terrible disease among their sex. The exposure of the neck, I have found to be highly efficacious in lung and bronchial diseases. By exposure it soon becomes

Fig. 13.

A HEALTHFUL NECK DRESS.

toughened like the hands and face to the changes of weather. Then, too, the pores of the skin have perfect freedom to perform their offices, whereas the high-necks usually set as close as the skin. Ladies should be cautious in the spring when they change from high to low, and then wear no other but low-neck dresses till cold weather sets in again. It must be borne in mind that constant or occasional changes are what produce mischief.

The use of fur tippets by ladies, and comforters and fur collars by gentlemen, are a great source of bronchial difficulties, and ought (though I suppose will not till fashion says so) be abandoned. By the use of such superfluities the neck becomes tender, and liable to affections on the slightest change of weather. Many cases of bronchitis may be entirely cured by the simple abandonment of neck cloths. I have practically tested this theory and with satisfactory results.

Second hand clothing is a medium through which many an aristocratic disease is conveyed to poor people. A wealthy invalid who gives his coat to a poor man bestows no blessing. No man can wear a garment for one week without imparting to it a portion of himself, and if he be diseased his garment is also diseased. A dog will recognize his master's clothes by the smell, and I have seen those whose clothes any body with less acute olfactories could recognize by their odor. There is a perfectly simple and philosophical solution of this phenomenon. The electrical radiation of the impurities of the system, commonly known as insensible perspiration, enters the minutest threads of the cloth, and an old coat and pair of pants contain many ounces of waste animal matter from the body of the wearer. Bring these in contact with the absorbing pores, and a person is at once innoculated to a certain degree with the noxious matter contained in them. Syphilitic and other venereal diseases are frequently transmitted in this way, and other complaints, probably quite as often, only the latter are not as immediately detected as the former.

Persons should never wear their deceased relatives' clothes, unless they consist of articles which can be thoroughly washed, and then it is doubtful if they can be entirely cleansed of the diseased radiations which must have taken place weeks and perhaps months prior to the last sickness of the wearer. Although individuals of robust constitution often appear well till thrown at once on a bed of sickness, there are unhealthy conditions of the system which always precede acute attacks and render the clothing unfit for the use of others.

Some philosophers and reformers have recommended a return to the fashion which the God of nature introduced before the fall of Adam, i. e. nudity. According to an account given in a late number of the *Dublin Evening Mail*, the experiment of ascertaining whether clothing can be dispensed with, is actually being tried on a child in Ireland. That paper remarks as follows:

"The subject of the costume of the ancient Britons has often been discussed; it has been asserted that they were naked. Those who opposed that view, adduced as reasons the coldness and variable nature of the climate. The question has been set at rest by an experiment which has recently been made on a child at St. Anne's, Blarney, near Cork. The child is 14 months old, and is the son of Mr. ——, who determined to ascertain what the human frame would bear. The child is perfectly naked night and day; he sleeps without any covering, in a room with the thermometer at 38 degrees; from this he goes into a bath 118 degrees; he sometimes goes to sleep in the bath; he is perfectly indifferent to heat or cold, is lively, active, cheerful and intelligent; his appearance constantly reminds the observer of the best efforts of our best painters and sculptors Therein is the *beau ideal;* he is the reality. His simple, natural, easy, graceful and ever varying postures are charming. He arrests the attention and commands the admiration of all who see him. The peculiar character of his skin is very striking; it is exquisitely healthy and beautiful. It may be compared to the rays of the sun streaming through a painted window.

"During the progress of the experiment he has cut three teeth without manifesting, any of the disagreeable symptoms usual to children in that condition. He appears to be quite insensible to pain. Occasionally he has an ugly fall, but not a sound escapes from his lips. His manners, demeanor and general behavior are equally striking. His mode of saluting a person is to take the hand in a graceful manner and kiss it. He is under the complete control of his father, and is perfectly quiet during meals, and also whenever he is told to be so. He goes about all day amusing and occupying himself in a quiet way. No one accustomed to children would know there was a child in the house. So incredible are these results that some of the residents of St. Anne's regard the whole matter with mingled feelings of horror, amazement and wonder.

"He has two meals — generally boiled rice, which is put on a napkin on the ground, and he picks it up to the last grain. After

that, wheaten flour cake with butter, and a cup of milk which he drinks. While eating his rice he looks a different being; there is at once a pride and an enjoyment of performance. He has the air of an orator addressing an audience.

"During the day he goes to sleep when he likes, merely lying down on the floor. The attitude he assumes in sleeping is that of a Mussulman making prostrations—on his knees with his hands spread out before him which could not be if he suffered from fatigue; but his muscles are too hard for that. By this means he concentrates the caloric in his stomach, and so it is indifferent to cold; however cold, the limbs (and they get frightfully cold to the touch) are never numb, being, on the contrary, mottled red; the loins are always warm. The problem he presents physiologically is this; a development of the nerves producing pleasurable sensations, and a corresponding deadening of those of the contrary. The intensity of the enjoyment which he derives from contact with the skin, is only equalled by the insensibility of the flesh. We have never known him since his exposure to extreme cold to cry from pain."

This appears like a cruel experiment, but I question whether that parent inflicts as much suffering on his child as the majority of parents do on their children by loading their little bodies with unnecessary, and too close-fitting raiment ; and, I further question, whether this child in a state of nudity, may not grow up with a far better and healthier physical organization than will any of his little mates in clothes. The experiment, so far, is really a triumph, and, after all, only proves what physiology, deeply studied, teaches. It is quite a mistaken notion that a great amount of clothing is necessary for comfort and health in cold weather. The ancient Spartans who were distinguished for their physical powers and beauty, were allowed but scanty clothing in childhood, even in the depth of winter. Our extreme sensitiveness to changes from heat to cold is merely the result of tenderness induced by long habits of pernicious dress.

In conclusion, I would say, that if costume is indispensable, there are three rules to be observed to secure that which is healthy, viz: 1st. Cover no more of the body than the dictates of sound modesty require. 2d. Let the clothes be made of new material, and of such as will allow the uninterrupted egress of the bodily impurities. 3d. Mantuamakers and tailors must make clothing to hang loosely about the body. When men and women become wise enough to observe

these, the adoption of the more primitive style of our first parents, will appear less called for.

5TH. WEALTH.

Wealth, with its attendant dissipations, is a prolific source of nervous derangements and blood impurities. Many physiologists have described money as the "elixir of both mind and body." Dr. Hall, in his Journal of Health remarks as follows:

"This idea of the hygienic value of money on men is strikingly illustrated in the report of M. Vallerme, secretary of the poor house commissioners in Havre, where the average age of the rich is twelve years greater than that of the poor. Thus, 1088 prosperous persons died at an average age of 42 years; 4791 of the middling classes at 29 years; and 19.849 poor at 20 years."

Now these statistics, at first glance, look like "knock-down arguments;" but those who argue from them that wealth is a promoter of health and longevity, overlook one important consideration which strikes at the very root of their philosophy, to wit: *health begets wealth, instead of wealth begetting health.* It must be remembered that a large proportion of mankind is born into the world with hereditary disease or enfeebled constitution, which disqualifies them for the active pursuits of life, and consequently, unless they become heirs to wealth they must live and die poor. Look over our country now, and learn the history of its wealthy men; what do we find? two-thirds at least have been the architects of their own fortunes. They have amassed their wealth by that indomitable perseverance and industry which they could only have maintained under the encouragement of vigorous physical organization. What chance has the invalid to gain wealth, or even a competency? He is interrupted in his business pursuits by the visitations of disease, and the harvests he may reap during the intervals of comfortable health, are at once absorbed in the expenses of sickness which follows. If, as the statistics indicate, the average age of wealth over poverty is only twelve years, the argument is in favor of the latter; for if, with good health to start with, and subsequent wealth to enable them to live as they choose, rich people cannot exceed an average of twelve years over a class, a majority of which is born in sickness and physical deformity, we may justly conclude that wealth, with its usual dissipations, shortens the lives of its possessors. Dr. Hall has fallen into

the same error that many other physiological writers have in treating on this subject.

Men who have been gifted with that mental and physical energy, united with extraordinary powers of endurance, which has enabled them to stem with success the opposing currents of life, ought to live from 20 to 50 years longer than the sickly crew who follow in their wake with spirited oars to-day, and exhausted strength to-morrow. But it appears that they can only average twelve more, and probably these are obtained from the extraordinary longevity of the minority of wealthy men, who have attained remarkable age in consequence of an adherence to temperate and industrious habits, unallured by the vices of wealth.

A *few* men use riches as if they were a loan from God—strewing the paths of indigency and suffering with blessings; *many* men value riches only because they enable them to live in sluggish idleness—to glut their bellies with besotting wines and rich viands—to gratify in full measure their stimulated passions, and dazzle the world with glittering gew-gaws. The former possess placidity of mind and harmony of body; the latter, mental uneasiness and physical debility, and from the dissipations of these arise the common evils of wealth. The mind, under constant excitement, the blood hot with excessive stimulus, and the muscles paralyzed with habitual inactivity, cannot fail to destroy the tone of the nervous and vascular system.

There is a happy medium between wealth and poverty, which promotes physical health and social comfort, and beyond this boundary 'twere well if none could pass. Inasmuch as man can carry nothing with him at the close of life except a record of good works, he who possesses a competency during life, enjoys all the pleasures that money can buy without surfeit. But some wish for wealth to be enabled to do good. An excellent lesson for such, may be found in the life and sayings of Socrates: A Grecian youth, who saw the errors and follies of the people, and wished to reform the world, exclaimed :— "O that I were rich, and famous as an orator, I would move the world so soon! Here are sins to be plucked up, and truths to be planted. O that I could do it all! I would reform the *whole world*— and that so soon." Socrates, hearing the youth, said: "Young man, thou speakest as silly women. This gospel in plain letters is written for all—'LET HIM THAT WOULD MOVE THE WORLD, MOVE FIRST HIMSELF.' It asketh neither wealth nor fame to live out a noble life. Make thy light thy life; thy thought thy action. Others

will come round, and follow in thy steps. Thou askest riches to move the world. Foolish young man, as thou art, begin now. Reform thy little self, and thou hast begun to reform the world. Fear not, thy work shall never die."

The general tendency of wealth is not Benevolence, but prodigality, selfishness, idleness, and gluttony. There is more true benevolence exhibited by the poorest than the wealthiest classes. Hon. Geo. S. Hilliard has beautifully remarked—"I confess that increasing years bring with them an increasing respect for men who do not succeed in life, as those words are commonly used. Heaven is said to be a place for those who have not succeeded on earth; and it is surely true that celestial graces do not best thrive and bloom in the hot blaze of worldly prosperity. Ill success sometimes arises from a superabundance of qualities in themselves good—from a conscience too sensitive, a taste too fastidious, a self-forgetfulness too romantic, a modesty too retiring. I will not go so far as to say, with a living poet, that the 'world knows nothing of its greatest men,' but there are forms of greatness, or at least excellence, which 'die and make no sign;' there are martyrs that miss the palm, but not the stake; there are heroes without the laurel, and conquerors without the triumph."

The view I take of the *physical* effects of riches is sustained by Dr. Channing. He gives it as his opinion that the difference between the rich and the poor in regard to physical suffering is not as great as has been imagined, in support of which he says: "That some of the indigent among us die of scanty food is undoubtedly true; but vastly more die from eating too much than from eating too little; vastly more from excess than from starvation. So as to clothing, many shiver from want of defence against the cold; but there is vastly more suffering among the rich from absurd and criminal modes of dress which fashion has sanctioned, than among the poor from deficiency of raiment. Our daughters are oftener brought to the grave by their rich attire, than our beggars by their nakedness. So the poor are often over worked; but they suffer less than many among the rich who have no work to do nor interesting object to fill up life; to satisfy the infinite cravings of man for action. According to our present modes of education, how many of our daughters are victims of ennui, a misery unknown to the poor, and more intolerable than the weariness of excessive toil."

6TH. BAD HABITS OF CHILDREN AND YOUTH.

Many of the blood and nervous derangements of adult age are but the harvests of seeds sown in childhood and youth. The injurious habit in which children are usually indulged, of devouring meats and other stimulating food, has already been discussed under the head of "The Food we Eat." I shall herein treat of other habits common to immature age, which exert an influence more or less destructive to health and longevity.

Fig. 14.

BAD POSITION IN SITTING.

At school children acquire many injurious habits, one of which is illustrated in Fig 14. The effect of this posture is to cramp the lungs, thereby preventing the usual quantity of electrifying air from coming in contact with and arterializing the venous blood. It also curves the spine, the great nervous trunk, and in a measure interrupts the harmonious distribution of the nervo-electric fluid. Hence, both blood and nervous derangements are induced thereby. Parents and teachers are not particular enough in observing and criticising the posture of the school boy. Many a case of spinal disease and pulmonary consumption had its origin on the bench of the school-room Seats should always be provided with suitable backs for the support of the spine, and children should be required to maintain a correct posture.

A great error is generally committed by parents in sending their children to school at an age so tender that the development of the mental faculties seriously interferes with the vigorous formation of their physical parts. A child of three or four years of age seated on a bench in school, is no more in his place than a twelve years old boy would be on the judge's bench in a court of chancery. What does he care about letters or syllables? What he learns is not the result of a gratification of a thirst for knowledge, but of a severe and health destroying discipline, which effects a forced growth of the mind at the expense of the body. The vital nervo-electric forces, withheld from the generous development of the chest, the vital organs and the muscles, are consumed in nourishing and enlarging

the brain. In art mankind exhibit common sense. The master builder who is about to decorate his grounds with a superb edifice, first lays a strong and perhaps an inelegant foundation, upon which to raise the monument of his superior skill in architecture. So the parent, who wishes his child to occupy a commanding and useful position in society, when he shall have arrived at the stature of manhood, should take pains to secure for him a physical foundation which can firmly sustain the mental superstructure. To this end children should be kept out of school and allowed to dig play-houses in the sand, play horse with strings, jump ropes and roll hoops until their little limbs become hard and chests broad, and, too, until they evince some desire for study. If this desire is manifested before the age of five or six, it should not be encouraged. The first six and even ten years of boyhood are none too long to prepare the physical trunk for the nourishment of mental growth. It is related of a gentleman now occupying a seat in the United States Senate, that his wife taught him his letters after marriage, while he prosecuted his calling as a journeyman tailor. But advancing step by step, reading with avidity, studying closely, and striving constantly to inprove his condition, he has at last attained one of the most eminent positions in the gift of his countrymen. Nor is this an isolated instance of the rapid mental progress of a mind after the body had gained, not only strength, but maturity. History is embellished with such. The great Patrick Henry was mentally a dull boy, and hated books, but when the flowers of his mental garden, enriched by the nutriment of a strong and matured physical organization, did bloom, the whole country was intoxicated with their fragrance, inspiring the American patriots with an enthusiasm which naught but success could satiate. In the face of such facts, let not parents make intellectual prodigies and physical wrecks of their children. If they have the germ of greatness in them, there is no danger but it will become developed by the time society, the state, and the nation have need of them.

Colored candy eating is a habit in which many parents indulge children to an extent calling loudly for the warning of the faithful physician. The innocent darlings are almost ready to bound out of their shoes, when papa or mamma brings home from the confectioner a sweet little package of beautiful striped, red, blue, green and yellow sugar-plums; of course they are, for they have the most implicit confidence in their dear parents, and know they will not

give them any thing which will injure them! But parents may not know that there are fatal poisons concealed in the pretty spiral streaks which ornament the confectionary, and papas are so absorbed in business and mammas in fictitious literature, it is a chance if they either of them ever find out. So long as no immediate fatalities occur to the little ones, it is supposed that such indulgences are harmless. As in excessive meat eating, and other bad habits, nature does not cry out at once, and as a consequence physical injury therefrom is not dreamed of. But ignorance does not shield the juvenile or adult from the deadly consequences of pernicious habits, which gradually undermine the constitution and induce premature decay.

A brief specification of some of the drugs used for coloring candies, I trust, will suffice to show parents who peruse these pages, that however pretty sugar-sticks and toys are to look at, they are entirely unfit to enter the susceptible little stomachs of children. Reds are often obtained from red lead, vermilion or bisulphuret of mercury, bisulphuret of arsenic, Iodide of mercury and Venetian red. Greens from false verditer or subsulphate of copper and chalk, emerald green or arsenite of copper, Brunswick greens or oxychlorides of copper, verdigris or diacetate of copper, mineral green, green verditer or subcarbonate of copper, and mixtures of the chromates of lead and indigo. Yellows from gamboge, massicot, or protoxide of lead, the three chrome yellows or chromates of lead, yellow orpiment, or sulphuret of arsenicum, King's yellow or sulphuret of arsenicum, with lime and sulphur, Iodide of lead, sulphuret of antimony or Naples yellow, yellow ochre. Blues from indigo, cobalt, Antwerp blue, a preparation of Prussian blue, Prussian blue, or ferrocyanide of iron, smalt and blue verditer or sesquicarbonate of copper. Litmus is also used in coloring blue, which, if unadulterated, is harmless; but it is frequently adulterated with common arsenic and peroxide of mercury. Browns are often obtained from umber and Vandyke brown, while purples are generally made by mixing some of the objectionable minerals used to produce other colors.

"It may be alleged by some," says Hassell, "that these substances are employed in quantities too inconsiderable to prove injurious; but this is certainly not so, for the quantity used, as is amply indicated in many cases, by the eye alone, is very large, and sufficient, as is proved by numberless recorded and continually occurring instances, to occasion disease and even death. It should be remembered, too, that the preparations of lead, mercury, copper,

and arsenic, are what are termed cumulative, that is, they are liable to accumulate in the system, little by little, until at length the full effects of the poisons become manifested."

Continues Hassell—"That deadly poisons should be daily used for the sake of imparting color to articles of such general consumption as sugar confectionary—articles consumed chiefly by children, who, from their delicate organization, are much more susceptible than adults—is both surprising and lamentable. It is surprising on the one hand, that the manufacturers of these articles should be so reckless as to employ them; and, on the other, that the authorities should tolerate their use."

Many confectioners do not sufficiently understand the chemical properties of the colorings they use, to know their poisonous effects. They have learned the trade of candy making, but have never stopped to enquire into the nature of the articles used for ornamenting their pretty drops, sticks and toys. For this reason, if no other, parents should not feed their children colored candies. Those which are not colored, will please the little folks quite as well, if they do not see the others.

Candies flavored with the ordinary essences, such as peppermint, wintergreen, lemon, sassafras and rose, are also less hurtful than those which are flavored with almond, pineapple and peach. The latter often contain fusil oil and prussic acid.

From the foregoing remarks, the reader will see that cake ornaments, composed as they are, of colored confectionary, are equally objectionable, and should not be eaten by child or adult. If they are necessary as ornaments, no one is obliged to eat them.

Going "barefoot," a very common practice among the children of the indigent in cities, and those of all classes in the country, is a common cause of blood diseases. In large towns the streets and gutters are the receptacles of filth of every description, a partial specification of which would embrace the diseased expectorations of men and animals, dead carcasses of flies, cockroaches, rats and mice, killed by poison, poisonous chemicals and acids swept from drug stores and medical laboratories, filthy rags which have been used in dressing foul ulcers, mucus from syphilitic sores, etc., the bare touch of which is polluting. But when, as is almost daily the case, the barefooted urchin "stubs his toes" against a projecting stone, rupturing the skin, and then brings his bleeding feet in contact with this heterogeneous compound of mineral, vegetable, and animal poisons, the

blood is sure to receive an impure inoculation which, unless eradicated by vegetable medication, clings to the individual through life, rendering him ever a susceptible subject for epidemics, colds and chronic diseases. In villages, although less exposed to corrupt animal inoculations, barefooted children are liable to have the purity of their blood contaminated by contact with poisonous plants, which abound in country places. And merely a thoughtless gallop through stubble fields, where wheat or oats have been harvested, may impart to the blood of the barefooted child, a humor which is sooner or later to cause his death. Because serious effects do not manifest themselves immediately, many parents flatter themselves that the practice is not attended with bad results. But blood impurities are generally insidious, and produce disease when it is least expected.

I do not believe God ever intended that every child should pass through the retinue of diseases which is considered the lot of childhood. All tender mothers appear to think that their children must have the mumps, whooping cough, measles, and scarlet fever, and the sooner the "darlings" have them the better. Now is it reasonable to suppose that human nature requires these diseases as *settlers*, the same as coffee requires eggs or codfish-skin? If children are brought up properly, they may escape all these diseases. What, with stimulating animal diet, poisoned confectionary, bare feet, and so forth, by which the vital fluids of the system become rivers of death, can be expected but nursery diseases! *Corrupt blood* is that which renders the child a ready victim to a whole train of juvenile ills.

A habit which is considerably prevalent in almost every family, of allowing children to sleep with elder persons has ruined the nervous vivacity and physical energy of many a promising child. Those having dear old friends, whose lives they would like to perpetuate at the sacrifice of their innocent offspring, alone should encourage this evil; but every parent who loves his child, and wishes to preserve to him a sound nervous system, with which to buffet successfully the cares, sorrows and labors of life, must see to it, that his nervous vitality is not absorbed by some diseased or aged relative.

Children, compared with adults are electrically in a positive condition. The rapid changes which are going on in their little bodies abundantly generate and as extensively work up vital nervo-electric fluids. But when, by contact for long nights with elder and negative persons, the vitalizing electricity of their tender organizations is absorbed, they soon pine, grow pale, languid and dull, while their

bed companions feel a corresponding invigoration. King David, the Psalmist, knew the effects of this practice, and when he became old got young women to sleep with him that his days might be lengthened. Dr. Hufeland, the German physiologist, attributes the frequent longevity of schoolmasters to their daily association with young persons.

Invalid mothers often prolong their existence by daily contact with their children. I once knew a woman who, by weak lungs and mineral doctors, had been prostrated with incurable consumption. Her infant occupied the same bed with her almost constantly day and night. The mother lingered for months on the verge of the grave, her demise being hourly expected. Still she lingered on, daily disproving the predictions of her medical attendants. The child, meanwhile, pined without any apparent disease. Its once fat little cheeks fell away with singular rapidity, till every bone in its face was visible. Finally it had imparted to the mother its last spark of vitality, and simultaneously both died. I saw it recently stated in a newspaper that a man in Massachusetts had lived forty-one days without eating anything, during which period he had been nourished altogether by a little cold water, and "by the influences absorbed by him while daily holding the hand of his wife."

Many old men who marry young wives are aware of the nourishing effects of such unequal unions, and are not such "old fools" as many pronounce them, while the young women who become their wives are bigger "young fools" than they are ever reputed to be. Some old ladies, tenacious of life, and wickedly regardless of the welfare of others, often coax children or compel their servants to sleep with them. Parents, therefore, who feel that affectional devotion to their children which is usually instinctive, should exercise vigilance and protect their offspring from a robbery which can never be repaired. Great care should also be taken to have diseased and healthy children sleep in separate beds. Although the effect of putting them together is favorable to the former, it is attended sometimes with fatal and always injurious results to the latter. It is better, in raising a family of children, to preserve in health a rugged child, even if its puny brothers and sisters die, than to distribute his full measure of vitality among two or half a dozen, and thus place him on a debilitated level with the whole.

Masturbation, or self-pollution, is a very prevalent vice among both children and youth. The amative passions, prematurely deve-

loped by stimulating diet, importune gratification which cannot be granted in the manner prescribed by nature, because marriage is an institution only fitted for adults. Ignorant of the physiological effects of resorting to artificial means, and goaded on by the perusal of popular romances, the unsophisticated youth falls an easy victim to a habit which taps the very fountains of nervo-electric vitality. It has always been surprising to me to see some parents allow their tables and book shelves to become loaded with yellow-covered literature, while they carefully exclude every book which treats on physiological matters. If Mr. Beelzebub should write out a prescription for the ruination of young men and women, and in its punctuation use a grave for a period, its adoption could prove no more fatal than has the prescription of civilization. Am I asked what is the latter? Then I will tell you. In utero-life, before the child has breathed the atmosphere of this world, the treatment begins. Excessive sexuality between the parents imparts to the unborn child a too great preponderance of the animal organs. After its birth this excess continues, and through the milk which it sucks from its mother's breast these organs derive immoderate nourishment. Before the natural fountains are dried up, animal broths are introduced into its active little stomach, and ere it reaches the age of three years it daily gluts itself with the diet of a full grown man. Coffee and steak for a three years old child! Next it is learned to read, and at the age of ten or fourteen years, while it feeds its stomach with highly seasoned meats and drinks, it quenches its mental appetite with fictitious romances. Is it strange then that masturbation is a prevalent vice? Some of my readers may not think it is. This only proves their physiological ignorance. Five children in every ten over twelve years of age bear the marks which the disgusting vice stamps on the countenances of its victims. Children of both sexes are included in this estimate, although the evil is not as prevalent with girls as with boys. Should I speak of boys only, I would say, at least, seven of every ten were addicted more or less to it. The fatal consequences of masturbation are painfully apparent when viewed from the observatory of the medical profession. It acts slowly but powerfully in destroying the harmony of the nervous system, producing ultimately a great variety of diseases according to the idiosyncrasies of its slaves; but most commonly insanity or consumption. I am daily written to by invalids from all parts of the country, who freely confess the cause which led to their ill health.

Although physiological works generally fail to explain the reason why masturbation is worse in its consequences than sexual indulgence, most of them are good for something, because they serve as a warning to thoughtless youth. I have never, as yet, read a physiological or medical work, which exhibited the real difference between the effects of self pollution and those of sexual intercourse. In fact, many young people, who have studied the writings of medical men considerably, have asked me why masturbation moderately indulged in is any more injurious than a natural gratification of the passions. This work shall not be incomplete in this particular; it shall not only sound in the young ear the tocsin of alarm, but give philosophical reasons why the former is positively deleterious and the latter, in a measure, beneficial. Such an explanation, however, is reserved for Part Second, in which all matters pertaining to the amative passion and sexuality will be thoroughly discussed. Let all of both sexes, old and young, read it, for no one should hesitate to obey the injunction—"know thyself."

The juvenile feat of standing on the head, is quite extensively practiced by school boys without a knowledge of the injurious effects. I have seen urchins remain in an inverted position till the blood appeared as if ready to gush out of their eyes and cheeks. The effect of this exploit is to impair the circulation of both the blood and nervous fluids, and congest the brain. On a par with this exercise, is that of turning around sufficient to become dizzy and fall down. Little girls are most addicted to this practice. It is injurious to the optic nerve, which is irritated by the sudden changes of objects passing before it, and also to the brain, whose functions of distributing nervo-electricity to the system is partially suspended. A rapid spiral motion, in brief, tends to destroy the general harmony of the animal functions. School teachers should have an eye to their pupils out as well as in school, and discourage all practices so obviously injurious.

To make healthy men and women, an entire revolution is necessary in the training of children. Very few girls and boys, now-a-days, bloom into womanhood and manhood with healthy physical organizations. Some of the causes are indicated in what has been said in this essay. The principal errors in their training have been briefly alluded to, and a thousand minor ones cannot fail to suggest themselves to the experienced mother.

7TH. BAD HABITS OF MANHOOD AND WOMANHOOD.

One of the worst of these is the use of tobacco, which is indulged in by about eight hundred thousands of the world's inhabitants, and to an extent almost incredible. In New York city alone $10,000 a day is spent for cigars, while only $8,500 are expended for bread. And in the United States about $12,000,000 are expended annually for tobacco in some form. The gentlemen smoke and chew, and the ladies snuff and sometimes puff.

Now tobacco is a medicinal plant and should not be indulged in by healthy persons any more than cathartics and emetics. It is a very active narcotic and sternutatory, and should only be used by neuralgic and catarrhal invalids, or those troubled with constipation, and then only by the direction of a physician. Its use by healthy people is attended with injury to the nerves and blood. The poisonous properties of tobacco are forcibly exhibited in the following extracts which I make from a little work by Dr. Alcott.

"By the ordinary process of distillation, an alkaline principle in small quantity is obtained, called by chemists "nicotin" as well as an oily substance called 'nicotianine.' A drop of either of these, but especially of the former, is found sufficient to destroy life in a dog of moderate size; and two drops destroy the largest and most fierce. Small birds perish at the bare approach of a small tube holding it.

"There is another oil procured from tobacco by distilling it at a temperature above that of boiling water, called *empyreumatic* oil. It is of a dark brown color and has a smell exactly like that of old and strong tobacco pipes. A drop of it forced into the lower portion of the intestine of a cat, causes death in most instances, in about five minutes; and two drops, applied in the same way to a dog, are often followed by a similar result.

"The experiments on which these conclusions are based, have been repeated and verified, in this country, by Dr. Mussey. His subjects were dogs, squirrels, cats and mice. The following are among the most important of his experiments:

"Two drops of oil of tobacco, placed on the tongue, were sufficient to destroy life in cats which had been brought up, as it were, in the midst of tobacco smoke, in three or four minutes. Three drops rubbed on the tongue of a full-sized young cat, killed it in less than three minutes. One drop destroyed a half-grown cat in five minutes.

Two drops on the tongue of a red squirrel, destroyed it in one minute. A small puncture made in the tip of the nose with a surgeon's needle, bedewed with the oil of tobacco, caused death in six minutes.

"Mr. Barrow, the African traveler, assures us that the Hottentots use this plant for destroying snakes. 'A Hottentot,' says he, 'applied some of it from the short end of his wooden pipe, to the mouth of the snake while darting out his tongue. The effect was as instantaneous as that of an electric shock. With a momentary convulsive motion, the snake half twisted itself, and never stirred more; and its muscles were so contracted that the whole animal felt as hard and rigid as if dried in the sun.'

"'The tea of twenty or thirty grains of tobacco,' says Dr. Mussey, 'introduced into the human body for the purpose of relieving spasm, has been known repeatedly to destroy life.'

"Dr. Rush says, that even when used in moderation, 'tobacco causes dyspepsia, head ache, tremors, vertigo and epilepsy.' 'It produces,' he again says, 'many of those diseases which are supposed to be seated in the nerves.' 'I once lost a young man,' he adds, 'seventeen years of age, of a pulmonary consumption, whose disorder was brought on by intemperate use of cigars.'

"Dr. Woodward, after presenting a long array of facts showing the tendency of tobacco to produce disease—apoplexy, aphony, hypochondria, consumption, epilepsy, headache, tremors, vertigo, dyspepsia, cancer, and insanity—concludes with the following inquiry:—'Who can doubt that tobacco, in each of the various ways in which it has been customarily used, has destroyed more lives, and broken down the health of more useful members of society, than have been sufferers from the complaint in question, (bronchitis) up to the present time, or than ever will be hereafter?'

"Prof. Silliman mentions an affecting case of a young student in Yale College, who fell a victim to tobacco. "He entered," says he, "with an athletic frame; but he acquired the habit of using tobacco, and would sit and smoke whole hours together. His friends tried to persuade him to quit the practice, but he loved his lust, and would have it, live or die,—the consequence of which was, he went down to the grave a suicide." Prof. S. mentions also the case of another young man, in the same institution, who was sacrificed by the same poisonous weed. Prof. Pond, of the Bangor Theological Seminary, relates one or two similar cases of students whom he knew at Andover and elsewhere"

"The German physicians state in their periodicals, that, of the deaths occurring among men in that county, between eighteen and thirty-five years of age, one half die from the effects of smoking. They unequivocally assert, that "tobacco burns out the blood, the teeth, the eyes and the brain." It has been observed, that the manufacturers of this article carry pale, ghastly countenances; and it is also said that few of them live to old age. Agriculturists say that it soon poisons the soil on which it grows, or rather, that it impoverishes the soil more than any other plant in the vegetable kingdom."

In the form of snuff, tobacco is a common cause of palsy. Several cases, corroborative of this assertion, have occurred under my own observation.

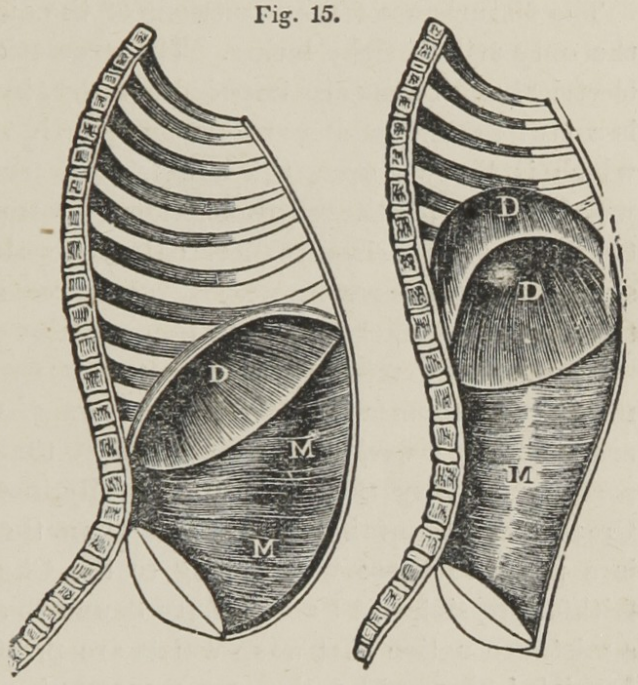
In some countries Indian Hemp is the fashionable poison, in others the betel nut, and to sum up all, there are about three hundred millions of opium eaters! Verily, it seems as if mankind were universally bent on self destruction, and that those who put the razor to the throat are the impatient few who cannot await the gradual results of the popular methods of suicide.

The prevalence and fatal consequences of intemperance in the use of ardent spirits have been fully considered under the head of "The Fluids we Drink," likewise the injurious results of excessive meat eating under the caption of "The Food we eat." It is only necessary to advert to them in this place, in order to remind the reader that there are other popular habits, equally as destructive to health as the use of tobacco. It is a peculiarity of human nature "not to see ourselves as others see us," and, frequently the tobacco-chewer will upbraid his brother for drinking, and vice-versa, and the excessive meat-eater moralize on both of these practices, while the pork-eater considers himself the very paragon of sobriety and christianity. Probaby two-thirds of the temperance philanthropists who are making such strenuous efforts to put down the rumsellers, are themselves constant patrons of the hog-butcher, and do not dream that they are inconsistent. By eating distillery fed pork, they actually consume *second-hand liquor*, or in other words, eat it after the hogs have drank it, and still they would religiously refuse a piece of mince pie which was known to contain brandy. Now, my object in writing thus is not to throw ridicule upon the philanthropic movements of the day, but rather to suggest for them a wider scope.

Bad habits in dress have been investigated under the head of "The Clothes we Wear;" but as I declined in that place to treat of the evils

of tight lacing, I will devote a little space to them here inasmuch as it is a practice more destructive to health and longevity in fashionable circles than tobacco chewing, liquor drinking or pork eating. The ladies who "will not put their arms through rum-jugs," (as some have appropriately termed the elbows of liquor topers,) must not consider themselves immaculate, which they may be inclined to do if one of their iniquitous habits is not exposed in this connection.

Fig. 15.



POSITIONS OF THE DIAPHRAGM.

One of the most injurious effects of tight lacing can be seen in noticing the peculiar office of the diaphragm as represented in Fig. 15; D D exhibit the diaphragm, and M M M the abdominal muscles. The first view represents the diaphragm as it appears when air is inhaled, the other as when the air is expelled. The diaphragm rises and falls to aid the lungs in inhaling vital air, and exhaling that which has been deprived of its electric property and loaded with animal effluvia.

How common it is for ladies to complain of *shortness of breath!* Strange it is that they do not know the cause, when they compress the chest so tight that the free action of the diaphragm is interrupted. Of over thirty thousand ladies whose lungs I have examined, at least 75 per cent. of them could expand the upper parts of their chest from one to three inches, by tape measurement, while the expansive powers of the lower portions were often less than half an inch and seldom exceeded one. In those persons who have not habituated themselves to the wearing of tight clothes the expansive power of the upper and lower portions of their lungs varies only about a quarter to half an inch, whereas, in fashionable ladies, it almost invariably varies from one to three inches. Any lady can try this experiment and convince herself, with a tape measure, placing it first around the chest immediately under the arms, and then to the lower

extremity of the lungs. The experimenter, after adjusting the tape, should exhaust the air from the lungs and then draw the tape as close as possible; then inhale, gradually allowing the tape to slip through the fingers until the lungs are swelled out to their utmost capacity. The figures on the tape generally give a result which will convince the fair experimenter that she has been from childhood a constant violator of nature's laws.

The disturbance of the functions of the diaphragm is by no means the only evil of tight lacing. The circulation of the blood and the electrical radiations are impeded thereby, in addition to which there is a still greater and more alarming evil. I allude to the pressure which is thrown upon the bowels, and from the bowels upon the womb. The peculiar organization of woman renders the practice ten fold more injurious to her than it would be to the male. The shocking prevalence of prolapsus uteri, commonly termed falling of the womb, is greatly owing to the pernicious practice of tight lacing.

The greatest mystery to me is that the ladies lace at all. A majority of them who do are members of Christian churches, and are instructed weekly from the pulpit that the works of God are perfect; do they then mean to willfully insult the wisdom of their Creator by attempting to improve upon them? Now this question is a poser to those who belong to the Church of Christ, but as a faithful physiologist I am in duty bound to ask it. The fact is, it is a mistaken notion that wasp waists are pretty. They look *perfectly horrible!* I would rather see a woman's waist as big round as a bushel basket than to see it contracted to a size a trifle larger than the neck. I am glad to see that many of the ladies themselves are beginning to regard small waists as physical deformities. One of them, a Mrs. Merrifield, speaks right out as follows:

"The very expression 'a small waist' implies a disproportion. A small waist is too small for the general size of the figure to which it belongs, just as a low-pitched room or a narrow room is too low or too narrow in proportion to its height. A well-proportioned room has none of these defects, and the waist of a well-proportioned person should be in harmony with the other parts of the figure.

"The ancients do not appear to have recognized the virtue of small waists: and a modern lady would be in an agony if her waist were of the proportional dimensions of those of some antique statues. The celebrated Venus de Medicis—'the bending statue that enchants the world'—has what would, at the present time, be called a *large*

waist; yet modern connoisseurs and artists have unanimously declared that this is the most perfect female form which the art of ancient or modern times has transmitted to us. They commend, not only the faultless shape of each part, but the admirable proportion of one part to another. Let us devote a short space to a few observations relative to the dimensions of the waist of this figure.

"The Venus has been frequently measured, and with great accuracy, by artists; but the view taken is a painter's view of a flat instead of a round surface; consequently, instead of the whole circumference of the waist, we have only its breadth from side to side, and from back to front.

"The whole figure is divided into seven heads and three-quarter parts; each head into four parts, and each part into twelve minims. The diameter of the waist from side to side is one head (or four parts) and eight minims, or nearly one-seventh of the entire height, the diameter from front to back is only three parts of seven minims; it is, therefore, nearly one-fourth longer in one direction than the other. This is the first point in which fashion is at variance with the finest forms of nature and art. Fashion requires that the waist shall be round instead of oval, and she attains her object by compressing the lower ribs, which are forced closer together. To such an extent is this construction sometimes carried, that the impression of the ribs is left permanently upon the liver.

"But it is not sufficient that the waist should bear a due proportion to the height, it must also be proportioned to the breadth of the shoulders. Now, the Venus is just two heads, three parts,

Fig. 16.

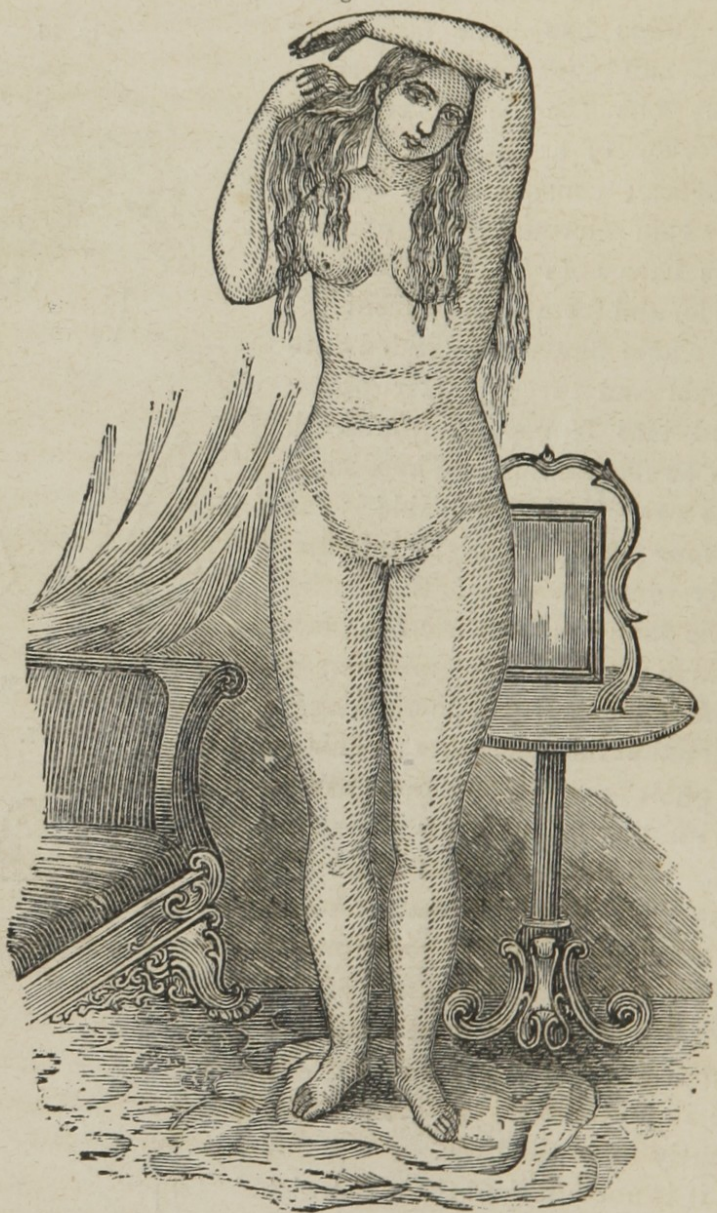
A CONTRACTED WAIST.

Fig. 17.

NATURAL WAIST.

and eight minims across the shoulders—exactly half a head more than the diameter of her waist from side to side. When, therefore, there is more or less than half a head proportionate difference between the breadth across the shoulders and the waist, the figure is deficient in just proportion. It is to be observed that some individuals are tall

Fig. 18.



A PERFECT FEMALE FIGURE, AS DESCRIBED BY MRS. MERRIFIELD.

and slight, others short and broad; in all cases, however, there must be a corresponding agreement between the breadth of the shoulders and that of the waist.

"As we know the two diameters of the waist, we are able to calculate the circumference, which is equal to three heads and four minims, or somewhat more than two-fifths of the entire height. We shall assume this approximation to be correct. Now, the real height of the Venus de Medicis being four feet, eleven inches and two lines, and her proportionate height seven and three-quarter heads, the proportionate circumference of her waist, being three heads and four minims, is equal to twenty-four inches, eight minims, more than two-fifths. It may be considered, then, that a well-proportioned waist should be *at least* two-fifths of the height of the figure: whatever is smaller than this, is disproportioned. According to this scale, therefore, the waist of a person five feet three inches high should not be less than twenty-five and a quarter inches; of five feet five inches, twenty-six inches; of five feet seven inches, twenty-six and three-quarter inches; of five feet eight inches, twenty-seven and a quarter inches.

"We have heard of a young lady of the middle height, or perhaps somewhat under that standard, who found fault with her stay-maker for having made her stays nineteen inches round the waist, when she knew that the young lady's measure was eighteen inches! Eighteen inches! According to scale of two-fifths of the entire stature, which, as we have seen, is under the mark, the height of a young lady whose waist did not exceed eighteen inches, should have been *three feet nine inches!*—the height of a child, with a proportionate of a woman.

"Enough has been said," concludes Mrs. M., "to convince our readers that a very small waist is a defect rather than a beauty, and nothing can be truly beautiful which is out of proportion. Would that we could also convince them that they cannot possess an excessively small waist without the certain sacrifice of their health!"

Would that the female portions of civilized society were made up of Mrs. Merrifields, and my word for it, men would have merrier and more beautiful wives, and healthier children. I have never had the pleasure of seeing Mrs. Merrifield, and know not if she is pretty or ugly, but if, by any possibility, she be the latter, her offspring cannot fail to be both handsome and healthy, as a reward to the mother for her obedience to nature's laws.

In the next place I should treat of some of the pernicious habits of married people, in their private relations, were it not for the fact that extended remarks on these will be given in Part Second. They

might with propriety be introduced here, for they are common causes of nervous and blood derangements. But the consideration of all matters relating to marriage, its excesses, etc., will be deferred for the place specified.

There is one habit growing with fatal rapidity in the United States, which demands the criticism of the physiologist, and that is *medicine taking*. The country is flooded with patent medicines, and every village store has shelves appropriated to the display of this kind of *semi-apothecary* merchandize. If they would remain shelved no injury could ensue from their preparation; but unfortunately there is a ready market for them, as is evinced by the rapid accumulation of wealth by those who manufacture them. The origin of each one of these medicines is something like this: Mr. Unfortunate has a wife or other relative sick with consumption; he tries every thing and every body with little or no success; finally he resorts to something which his own fertile brain suggests, and, astonishing to say, the invalid actually recovers. The surprised discoverer at once thinks he has found an infallible remedy for consumption, and the bottle maker and the printer at once receive stupendous jobs—the former to make some quart bottles with a jaw-breaking name blown in one or all sides, the latter to get up labels and flaming posters. He is received at once by credulous invalids as a great benefactor, and by the old school doctors and "knowing ones," as a huge humbug. But, reader, he is neither of these two—only a *mistaken man*. He does not understand the law of temperaments. Many physicians do not. I might say further : the majority of the medical profession do not.

Notwithstanding the adage "what is cure for one is poison for another," has become trite from daily repetition, its true import is not comprehended. It should be understood, that every variety of temperament denotes as many varieties of human beings, the same as the leaves and bark of trees indicate different varieties of trees. For this reason a medical man or a discoverer of patent medicine should not give to a black haired, brown complexioned man the same medicine which has cured a light haired and fair complexioned individual, even if his disease is the same.

It is plain that patent medicines must act upon the principle of "kill or cure." They are absolutely dangerous and the amount of mischief they are doing is incalculable. Many an invalid is rendered hopelessly incurable by experimenting with these nostrums before

consulting a skillful physician. I have frequently been called upon by poor emaciated creatures who have swallowed forty or fifty bottles of different panaceas. If their cases are at all curable, a great deal has to be *undone* before any relief can be administered. If people would exercise half as much discrimination in dosing as they do in many other things of less importance, patent medicines would be robbed of half their power to harm. They understand why Parson A's coat will not fit Capt. B's back—why the pretty dark dress of blue eyed Mary does not become "black eyed Susan," and why a hymn in long metre does not sound well to a tune of short metre, but it does not occur to them that the rule of adaptation extends equally to medicine. Let it be understood, then, that difference in form, size and complexion, indicate difference in temperament, and that difference in temperament indicates difference in constitutional peculiarity. Next we arrive at the irresistible inference that what is beneficial to a man of a nervous temperament may be injurious to one of a bilious temperament, &c. The intelligent farmer understands the temperaments of soils, and throws on such manure as they require. On soil deficient of alkali he strews ashes or lime; on that deficient of ammonia, the gleanings of the stable, etc. A majority of intelligent physicians do not understand the *laws of temperaments*, and such not unfrequently have to bear the name of "kill or cure doctors," and such they manifestly are.

It will now be seen by the preceding, that while those who buy and take patent medicines are often ingloriously humbugged, the manufacturers are by no means, in all instances, humbugs. Many honest men and women think they are doing a great amount of good in the world by compounding and selling "one-cure-alls." Their error lies in the head and not in the heart.

Patent medicine eaters and drinkers should, therefore, be careful what they put down, and take nothing in the form of medicine unless necessary. It is said that there is a tomb-stone in one of the English cemeteries, on which are inscribed the following words:—"I was well, took medicine to feel better, and here am I." There are thousands of tomb-stones in America which might truthfully bear this same inscription.

Turning night into day is an injurious and prevalent custom, particularly in fashionable life. Observation and experience have taught almost every one of adult age, that the habit is destructive to the nervous system, but these teachers often fail to improve any one in

the absence of testimony founded on philosophy. I have looked in vain in the writings of medical men and physiologists for any rational reason why man should lie down at night and rise with the sun. The *effects* of the non-observance of this hygienic rule are plainly exhibited by many popular medical authors, but frequently not so forcibly in their literary productions on the subject as in their own faces, which betray the secret that the physiological teacher does not always practice what he preaches.

Such is the happy predominance of the social faculties in the best classes of human beings, the social circle is more attractive than the embraces of morpheous, and most persons are ready to attribute the injurious physical effects of unseasonable hours for rest, to any other cause than the true one. There is, therefore, great need of new light on this subject—something which will appeal to the *reason* of men, and demonstrate the fact that one hour of sleep at night is worth more than three after the sun has risen. From the investigations I have made, I have come to the conclusion *that during the day the magnetic or electric currents from the sun predominate, and, descending perpendicularly or obliquely the upright body is brought in harmony with the descending currents, while at night the magnetic or electric currents of the earth predominate, and flow from North to South, horizontally, in consequence of which the human body should be in a recumbent position, with head to the north, in order to preserve the harmonious circulation of the nervo-electric fluids.* That this hypothesis will be favorably received by those who have had much experience as electrical therapeutists, I am confident, for all who understand the proper application of electricity, know that, with few exceptions, the electrical currents from the machine must be passed from the positive to the negative in the directions which the nerves ramify. This being the case, ought not the electrical currents from the sun during the day and those of the earth from North to South during the night, be made to observe the same rule by a conformity of the position of the body to them? In applying the galvanic battery, if the electrical currents are passed contrary to the nervous ramifications, or from their termini to their source—the brain—nervous irritation ensues, and the patient is rendered more nervous. Such it seems to me, must also be the result of a non-conformity to the directions of the currents of the earth and sun. In fact we see it exhibited in a majority of those who turn night into day. True, there are a few whose strong nervous organizations appear to resist

all such influences, but the continual dropping of water wears away a stone, and these exceptions finally favor the truth of this philosophy.

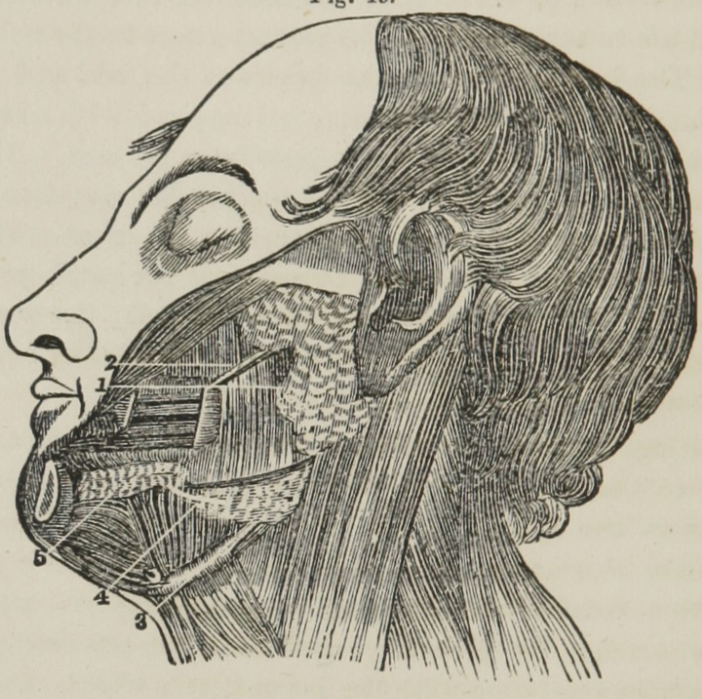
The sun exerts a powerful magnetic influence on the earth, arousing all animal life to activity, from the merest insect to the noblest work of God. The fowls of the air, the beasts of the field and all human beings who obey the laws of nature, feel inspired with new life when the golden rays of the rising sun radiate from the east. The activity of the animal fluids increases till she reaches her meridian, and then gradually decreases until she sinks to rest in the west. When "old Sol" retires, the colder magnetic currents of the earth prevail with greater power; animal life becomes more sluggish; the wearied body seeks repose; and the most perfect repose is obtained by reclining in a position consonant with the earth's currents.

Fast eating, a universal habit with Anglo-Americans, is highly injurious to the nervous and vascular systems, and induces those conditions in the system which usually ultimate in dyspepsia. It is eminently characteristic of the Yankee to do every thing in a hurry. Not satisfied with praying fast, walking fast, working fast and traveling fast, he generally, and that too unconsciously, eats fast. His jaws keep time with the locomotive's wheels, and his arms and elbows with the rapid alternate movements of the piston rods. I was once much amused with an illustration an Italian gave of a Yankee at a steamboat table. Just previous to the sounding of the dinner gong, he was descanting most wittily in broken English, on the customs of the Americans, and, when dinner was announced, he proposed to show how a Yankee enjoyed (?) a good meal. With true Yankee impetuosity he rushed to his seat at the table; knives and forks flew in every direction; one arm shot to the right for one thing and the other to the left for another; while the fork was performing a rapid trip to the mouth, the knife, which had just discharged its load, was nervously returning to the plate. A few such spasmodic motions, and impulsive calls to the waiters, ended the repast, and with a whirl of his chair, he turned almost breathless from the table. Nor was his delineation over-wrought. I have myself seen just such spectacles hundreds of times at public tables.

At home, at his own table, the Anglo-American is not much more moderate in eating. The mouth is crowded with food and successively washed down with tea, coffee or some other liquid. Now it is the duty of the physiological writer to admonish the reader of the

effects of this habit, and if, after knowing the consequences, it is still persisted in, no one will be in fault but the sufferer, if the worst form of dyspepsia is the result.

Fig. 19.



THE SALIVARY GLANDS.

1, Parotid gland; 2, its ducts; 3, Submaxillary gland; 4, its ducts; 5, Sublingual gland.

The thorough lubrication of the food with saliva is necessary to promote good digestion. Saliva is an alkali, and, electrically speaking, a negative, while the gastric fluid in the stomach is an acid and a positive. When, therefore, food descends into the stomach, only half masticated, and lubricated with some other fluid than saliva, digestion for some time is almost suspended, because the negative fluid is wanting to attract the immediate action of the positive fluid, and the presence of other liquids tend to dilute and destroy the power of the latter. In addition to this, the labor of the jaws and teeth is thrown upon the disabled stomach. How surely, then, must the electrical or nervous machinery of the digestive apparatus be disturbed. Then again, food in the stomach, unless at once acted upon by the gastric fluid, commences a process of decomposition and fermentation, by which means the blood also becomes involved in the pernicious results which follow. If a person eats slowly, masticates thorougly, and omits all drinks, nature furnishes *three or four ounces of salival fluid* with which to moisten his food, preparatory to its

entrance into the stomach. No one requires liquids to drink at the table. This habit is the result of fast eating. The salivary glands cannot furnish lubricating fluids fast enough for the rapid eater, so he depends on artificial liquids, which dilute what little saliva is used as well as the gastric juices. Liquids should never be swallowed till after eating, and then not to the extent that they are usually Eat slow and depend only on the fluid nature furnishes to moisten your food.

"Habit is second nature." So says the proverbialist. How important then it is that we should form such habits as will tend to develop physical health and mental vigor, instead of physical decay and mental imbecility. Habit is not acquired in a day—seldom in a year. It creeps upon an individual gradually, and if its effects are disastrous to health and longevity, so imperceptible are the changes it produces in the system from day to day, the victim is seldom aware of the cause of a disease which is developed by it.

Experiment has demonstrated that a man may endure, without pain, the heat of an oven hot enough for baking purposes, if he be placed there while the oven is cool, and the heat is slowly raised to the baking point. But does any one believe that a person kept in such a temperature, however comfortable it may become to him, will live as long as if he were surrounded with a temperate atmospheric element? Dr. Kane and his gallant band of Arctic navigators, became so habituated to a cold temperature, that they could walk themselves into a comfortable perspiration with the thermometer at *forty-two* degrees below zero, or *seventy-four degrees below the freezing point!* But their enterprising adventure made sad inroads upon their physical organizations and the brave commander of the American Polar Expedition, with several of his heroic companions, have since paid the forfeit with their lives. Thus we see the flexibility of the human body to conform to whatever conditions we force upon it, and we also perceive how fatal to longevity are all deviations from the injunctions of *first* nature. We may change our natural habits of eating, drinking, sleeping, &c., to some others acquired, as easily as we can accustom our systems to extreme temperatures, and experience no immediate discomfort; but first nature will some time demand a settlement and second nature will turn bankrupt, throwing the loss upon his superior.

Those who strive to save the souls of men counsel all to take a daily retrospect of their conduct, to see if they have violated any

moral law. I would also advise a daily retrospect to ascertain if any physical law has been disregarded; for how can the immortal spirit maintain purity and complacency in a corrupt tabernacle. It is also the duty of the Christian mother to watch over the physical as well as moral tendencies of her children, and to train them into habits which will conduce to a healthy corporeal and mental development.

8TH. UNHAPPY MARRIAGES.

These conspire to destroy the tone and vigor of both the nervous and arterial fluids. The mind, chafing in the galling fetters which bind it to an uncongenial companionship, almost forgets its corporeal dependency, and consumes within itself the nervo-electricity which should be dispensed through the nervous system, to impart healthy action to the blood and the organic machinery. Unhappy marriages are unlike any other troubles, because society is so constituted that a majority of their victims prefer rather to fall suicides to their self-inflictions than to encounter the frowns of their friends and acquaintances by practically severing a contract which yields little but mental disquietude, affectional suffocation and nervous and vascular debility.

The world little knows the extent of matrimonial inharmony. Each pair who find themselves unhappily mated imagine that they belong to the unfortunate *few* who have made the great "mistake of a life time;" but the physician, in whom is generally confided the secrets of the broken heart, after the constitution has also become broken, knows from the frequency of such confessions that they form a part of the great majority instead of the minority.

An English paper states that in the year 1854, there were in London 1,132 runaway wives; 2,348 runaway husbands; 4,175 married people legally divorced; 17,345 living in open warfare; 13,279 living in private misunderstandings; 55,340 living in mutual indifference, while only 3,175 were regarded as happy; 127 nearly happy; and 13 perfectly happy.

In what way the English statistician obtained these facts, if they are facts, I am unable to say. In this country it would be impossible to gain correct information of the amount of connubial infelicity as compared with the real happiness in the domestic relation, unless every physician of extensive practice should contribute the results of his observations. Seldom are the most gossiping neighborhoods of the United States acquainted with the actual state of feeling existing between the husbands and wives which live therein, and it

is not uncommon for husbands and wives to deceive each other, with regard to their real sentiments when they find that they have mistakenly entered into a companionship distasteful and perhaps disgusting to one or both.

I was once called upon by a lady, in one of the New England States, whose mind was distracted and nervous system nearly exhausted, because she had formed an unhappy alliance with a man whom she found she could not respect and love. But she had great benevolence, and rather than make him unhappy by a disclosure of her feelings, she had concealed them from him, and they were secretly gnawing away the nervous threads that connected her spirit with her body. Ah! how many wives whose eyes fall upon this story will see in it the mirror which reflects their own miserable situation. Rest assured that lady is not the only one whose benevolence and pride bind her to an unnatural union, and a concealment of her wretchedness.

Unhappily, the victims to uncongenial marriages, are not alone sufferers thereby. The nervous, puny offspring, which is the issue of such adulterous alliances, opens his eyes on a world of physical and moral wretchedness, and hence the sin of the parents is visited upon their children of the first and every succeeding generation. So marked are the physical influences of unhappy marriage on the offspring, that I can generally tell at once, when I see a family of children, whether the father and mother are happily or unhappily mated. Both mental and physical suffering is the inevitable inheritance of the unfortunate child who is born of ill-mated parents; and if he survives the fatal tendencies of a poor constitution till he himself becomes a father, his child, in turn, will possess at least a trace of his progenitor's infirmities, and so on through the whole line of his posterity.

For further remarks on this subject, embracing a treatise on the causes, effects and remedies for unhappy marriages, the reader is referred to Part Second of this work, where it will receive the attention its importance demands.

9TH. PROSTITUTION AND LICENTIOUSNESS.

Prostitution may be compared to a vast sea of physical corruption, in whose waters the licentious lave and come out lepers. Where the beautiful river, lake or ocean contributes to the commercial prosperity of any city, there also this great sea of corruption rolls most unob-

structedly, and thousands of peaceful villagers, who daily or yearly frequent a metropolis, in an unguarded moment get submerged in its dirty waters, and then carry home to their faithful wives a disease more loathsome than a suppurating cancer.

The blood of the whole human race is becoming contaminated with venereal poison. Do you question this assertion? Look at the fact that in the United States there are not less than *one hundred thousand* harlots, and in London alone nearly an equal number, nightly dealing out sensual pleasure and physical death to a still greater number of inconsiderate men. But they are not all diseased, says one. Admit that; it is safe to presume that one-third of the whole number are, and a little exercise in simple division shows to us that the seeds of venereal poison are communicated nightly to over 30,000 persons in the United States, many of whom have wives or bed companions, to whom they impart the disease. Next, perhaps, offspring become infected, and they, with their ulcerated little gums communicate it to the nipples of nurses who have been called to supply the places of diseased mothers in nurseries, and they in turn impart it to other innocent babes. And so the infection spreads like fire on the prairie, throughout the whole human family.

The "street walkers" of New York city have been vulgarly termed "Pox Peddlers," but a more significant name cannot be found in the English vocabulary, and I quote it because it explains more forcibly than many pages could, the real nature and consequences of their vocation. Thousands of virtuous married ladies in our country to-day are suffering with aggravated forms of fluor-albus and annoying humors, which originated from the syphilitic diseases of the wretched women who nightly promenade the great thoroughfare of the metropolis of America. These abandoned creatures are supported by the stangers who daily throng the commercial mart, for the resident population are well aware that they are but painted sepulchres, full of disease and rottenness. How well they are maintained by the floating population, is a question which their gaudy and expensive costumes answer with more force than language can express; for it is a proverb that they, "like the squirrels, cover their backs with their tails."

It has been argued, and with a show of plausibility, that prostitution is a *necessary evil.* That did it not exist, our wives and daughters would be unprotected from the insidious advances of libertines and the forcible outrages of men of reckless passion. My own observation has convinced me that libertines in towns of moderate size,

where prostitution is not tolerated, are more given to the seduction of thoughtless wives and unsophisticated young girls than the same class in large cities. But the Rev. Dr. Wardlaw asks, and with good propriety,—"What special title have the wives and daughters of those who employ this plea to the protection of *their* virtue, more than other wives and daughters? Why are theirs to be protected at the expense of others, and not the others at the expense of theirs? Who, in the community, are to be the victims—the vice doomed safeguards of the virtue of the rest—the wretched safety valves of unprincipled and unbridled passions? Are we to have a decimation, by lot, of the virginity of the country?—or is some inferior class to be sacrificed to the demon of lust for the benefit of those above them? Is vice essential to the preservation of virtue? That were indeed a hard necessity. Where is the individual, male or female, and in what rank soever of society—whom I am not to dissuade from vice?—whom it would be wrong so to dissuade?—the successful dissuasion of whom would be an injury to the public?—by prevailing with whom to give up the evil course, I should incur the responsibility of one who shuts a high pressure safety-valve?—where the individual whose body and soul I am bound to leave to death and perdition, lest perchance some others should come to be exposed to temptation?"

These questions are suggestive, and cannot fail to awaken reflection on the part of those who claim that prostitution is a necessary evil. Perhaps a little inquiry into the causes of prostitution will settle this difficult question. One of the primitive causes, I maintain, is the premature development of the amative passions of youth by a too stimulating diet. Most parents allow their children in swaddling clothes to indulge in a diet only suitable for adult age. Do they not know that condiments, animal food and coffee early arouse the slumbering sexual passions of the young? These articles of diet at once impart undue warmth to the blood, and awaken early sexual desires in their children, leading boys to early acquire the arts of the libertine, and rendering girls susceptible to the amorous advances of the opposite sex. Thus, from one parental error, spring up on one side a host of amative libertines, and on the other scores of voluptuous women who have not the power to resist temptation, all of whom are required by custom to abstain from legal marriage until they have nearly or quite passed their teens. The remedy for this evil suggests itself.

Another cause is unhappy marriages. These create thousands of bad men and women. The indissolubility of the marriage contract drives both parties to desperation; makes the husband a willing patron of the harlot, and the wife an easy victim to the libertine. Ignorant of the laws which should govern marriage, men and women are daily rushing into matrimony whose physical and mental uncongenialities are only discovered to them after the "honeymoon" has cooled down their impulses, and left their reasoning faculties unobscured by the infatuation of passion. But when they awake from their dream, they find the civil law a reality, and that they must content themselves to live in adultery, one with the other, or incur public disgrace by the commission of some crime which will entitle them to a divorce. A remedy for this evil will be given in Part Second.

Another fruitful cause of prostitution in large cities, is the small compensation awarded to female labor. In consequence of this few are able to earn more than enough to supply present necessities, and when "hard times" prevail they have neither work nor the means of subsistence. In such an extremity a very few whose pure souls abhor a life of shame, choose death rather than the princely abode of the courtesan, and end their existence by poison or drowning. But many rush into harlotry, for observation has taught them the humiliating fact that men will pay dollars for sexual gratification who will only bestow cents in charity. When such reward is offered for vice, and want and threatened starvation held out to virtue, it is only surprising that more do not abandon the flickering night-lamp and needle, for the dazzling chandelier and easy cushioned tete-a-tete of the fashionable brothel.

The "hard times" of 1837, '54 and '57 drove hundreds of New York seamstresses and shop girls to a life of prostitution. The streets of that metropolis throng with this class of females, whenever there is a financial pressure, local or general. Some thirty thousand women are dependent upon the products of their needle in New York, many of whom have helpless parents and children who look to them for subsistence. Imagine their terrible extremity when thrown out of employment.

It is said that out of 5,000 prostitutes in Paris whose cases have been minutely examined, 1,400 were reduced to that state by sheer destitution! A writer remarks that "there are fifty or sixty families in Edinburgh who are almost wholly supported by the

secret prostitution of the mother, and three times that number who are partially maintained in the same manner. A daughter had struggled on six years to support herself and bed-ridden mother by the needle; before sacrificing her virtue she sold the last blanket from her mother's bed, and her own last dress.

"Who will deny that these are startling considerations. And what is true of European cities, is true of American ones, to a greater or less degree. Young girls can always get money in our large cities by bartering their virtue. It is an unfailing dernier resort. Why should it be thought strange that a female, pressed by pale want, should do that which a male will do in the absence of this necessity, and without a scruple? And why, especially, should it excite wonder, while black hearted seducers and procuresses, knowing this want, swarm thick around, ever ready to take advantage of their distressed condition?"

For this evil it is difficult to suggest an immediate remedy, such is the spirit of rivalry and speculation in the commercial world. But there is one which time and change in public opinion may introduce. It is to educate girls as we do boys, in the practical business matters of life, and then open to their pursuit all trades and professions, in order that their field of industry may not be so unreasonably circumscribed.

Still another cause of prostitution has its origin in the general ignorance which prevails concerning the power and phenomena of animal electricity, or magnetism, as it is generally termed. All classes of females, from the daughters of the affluent to the pretty shop girls, contribute inmates to the brothel, in consequence of ignorance on this point. They are not aware that some men possess an electric power to charm, like the snake. The philosophy of this will be thoroughly explained in Part Second; but the consequences demand at least an allusion here. Coquettish ladies are apt to invite the attentions of prepossessing strange young gentlemen; and coquettish young ladies, I am sorry to say, are numerous. They commence flirting with their admirers with the pre-determination of keeping their affections to themselves. Still they will venture much to ascertain the sentiments of their pretended lovers. Gradually the latter practically mesmerize them, when pretty coquettes find themselves, like the fluttering bird before the charming serpent's mouth, utterly unable to control themselves. The keepers of houses of ill-fame in large cities, know that many men possess this singular power to

charm, though perhaps not one of them know the mysterious agent they employ to produce this fascination. The result is, that men who are so powerfully electric or magnetic as to be able to exercise such a controlling influence over young ladies, are stationed in all large manufacturing towns where female operatives are numerous, to furnish fresh victims for the fashionable dens of prostitution. A partial remedy for this evil may be given in few words. Young ladies must not make too free with young gentlemen whose characters are not favorably known in the neighborhood in which they reside. Observance of this rule may sometimes cause Miss Julia to turn her back upon an angel, but as devils are most numerous in traveling pants and waistcoats, so serious a slight will seldom be given to celestial broadcloth.

In reviewing some of the principal causes of prostitution, can we not see that if it really be a necessary evil, it is so because of important errors in the training of children; in indiscriminating civil laws regulating marriage; in despotic custom, circumscribing the industrial sphere of women; in the ignorance of the electrical power of every individual, for good or evil? Reformation in the training of children is the first place to begin to do away with prostitution. So long as the sexual passions of children are stimulated to precocity by an exciting regimen, and goaded to illicit gratification by the romantic yellow-covered literature of the day, so long will there be men who will violate the marriage bed and destroy virgin purity where the institution of prostitution is not tolerated; and so long will houses of ill-fame be annually furnished with voluptuous young females from all ranks of society.

Were it universally known to what an alarming extent the pernicious physical effects of prostitution are felt throughout all communities, more decided measures would be adopted under the paternal roof to cut off one of the main tributaries to this gigantic evil. The word of the mother is the law of the household, and she seldom dreams, even if suffering with disease induced by venereal poison, that prostitution can ever inflict a pang in her sheltered home. Why, I have cured hundreds of ladies from nearly every State in the Union, whose diseases arose directly or indirectly from syphilis, and who would have died of grief had I divulged to them the real nature of their complaints. I will not venture to compute how many have been my patients for the cure of venereal disorders, or diseases arising therefrom. Fowler, in a little work on Amativeness, remarks,

"Many do not know how prevalent this disease is in its various forms. Its victims keep their own secret as long as possible, and doctor themselves, except when their case becomes desperate; and then confide it only to their medical adviser, whose very profession forswears him to keep the secret. Oh! how many of our young men have ruined their constitutions, and become invalids for life, solely by means of this disease or attempts to cure it. Indeed its prevalence at the Sandwich Islands actually threatens the extinction of that nation; which at its present rate of mortality, it is computed to effect in about sixty years! And if it goes on to increase in the ratio of its past progression, it will ultimately cut off our race itself!

"The fact that SEVERAL THOUSAND COPIES of a little work of less than twenty pages, on the cure of venereal diseases, are sold *every month, at one dollar per copy*, and that other works of this class sell in proportion, shows conclusively that there are *several thousand new victims* every month! No patient wants more than a single work, yet TWENTY THOUSAND PER MONTH does not equal the sales of these works, and of course falls short of the number of victims, for none but venereal *patients* will pay thus dear for so small a book, of no manner of interest to those not thus afflicted. All this, besides all those who indulge with other than harlots by profession! Almost incredible but nevertheless true!"

I have not the least doubt—and my estimate is based on authoritative "figures which cannot lie"—that *thirty thousand* males are daily infected with venereal poison in the large cities of the United States, a majority of whom are residents of inland towns, whither they return to spread the seeds of the loathsome disorder! Men of vicious habits in cities are generally too well acquainted with the different grades of courtesans to contract disease. They know who are "sound," as they express themselves. Their acquaintance with lewd women is not so limited but that they can exercise the privilege of choice. Still, the boasted smartness of these men does not always avail. When the medical seine is drawn, this class is quite as numerously represented as fishermen usually find the catfish at each "haul."

The reader cannot fail to see from the foregoing that prostitution is a prolific source of blood disease, and that it is rapidly converting the great fountain of life, as originally imparted to man by his Creator, into a slough of death. Of all blood impurities, there are none which lead to such endless varieties of disease as those induced by the virus with which whoredom is inoculating the whole human race!

10TH. FAILURES IN BUSINESS.

Of those casualties which, through their depressing influence upon the mind, disturb the harmony of the nervous system, there are none, which prudence has power to avert, more prolific of nervous derangements than failures in business. In fact, financial prosperity often sustains men in apparent health, whose systems are loaded with diseases in embryo, and the first stroke of misfortune which causes the brain to withhold and consume within itself the measure of vital electricity which it habitually dispenses to the various organs of the body, removes the restraining power which holds the latent disorders of the system in check, and, all at once, the unfortunate business man becomes the tenant of a sick bed or the inmate of a lunatic asylum.

The human brain sustains a similar relation to its dependency—the body—that the bank does to the commercial world. Its medium is not "rags," but vital electricity; and its depositors and patrons are not merchants and manufacturers, but organs and functions. When trouble overtakes a man, a physiological "panic" ensues, and the brain discounts sparingly. If a "run" is made upon it, it partially or wholly "suspends." The process of digestion and the action of the heart, liver, lungs, kidneys, etc., are dependent upon the vital electric forces emanating from the brain, and when the latter is over exercised with trouble and hard thinking, it reserves its electricity for its own use, leaving the body only partially supplied; and if the organs retaliate by denying nourishment to the brain, as they are obliged to do, in a measure, the delicately organized man becomes a lunatic, and the vigorous man, whose system is filled with inflammatory matter, a victim to some corporeal disease, acute or chronic.

"Hard times" invariably increase the labors of a physician, although they do not always increase the gold in his coffers. A bankrupt man is generally an invalid, a prostrate patient, or a mental imbecile. The commercial revulsion of 1857 increased the number of inmates in lunatic asylums more than twenty-five per cent., and in Pennsylvania, where its effects were the most immediately and severely felt, the Insane Hospital in West Philadelphia, and the State Asylum at Harrisburgh, were filled to the extent of their accomodations. Such were the commotions between mind and matter, that many severed the unhappy relation existing between the two by

suicide. Failures in that year were numerous, and disease, insanity and suicide increased pro rata.

Such being the effects of business failures upon the health of a people, they should be avoided, as far as possible, by prudence and economy. "Live within your means" is an old and good proverb, and he who does not, almost invariably brings upon himself nervous derangements which are sure to lead to fatal results.

Every married man should confide to his wife the real condition of his finances. Much is said of the extravagance of married ladies. Their conduct is often pronounced the cause of their husband's ruin. Much truth is uttered in such assertions, but not the whole truth. Men are apt to represent their pecuniary resources much greater than they actually are. As a sequence, wives laugh at their admonitions of economy—think their consorts "stingy"—and govern their wants by the supposed capacity of their purses. Nothing short of a failure reveals to them their insolvency.

The wife's condition, under the most favorable circumstances, is a hard one, and she cannot be blamed for reaching for the good things of life, if her husband leads her to believe he is rich, particularly if he gives plausibility to her delusion by indulging in such superfluities as Havana cigars and expensive wines.

It is high time that men began to appear to their wives exactly what they are, pecuniarily, morally and socially. Frankness in these respects would not only tend to lessen the number of business failures, but would greatly diminish the evils of prostitution. But deception, in most cases, commences with the moonlight nights before marriage, and continues until some pecuniary or physical disaster reveals things as they are. This sometimes happens unexpectedly early. Fowler gives an amusing illustration in commenting on the motive which induces many to marry:

"A *distinguished* young man from the South, making great pretensions to rank and wealth at home, paid attentions to a young lady residing near New York Bay, whose father had been very wealthy, but owing to reverses had become quite reduced in circumstances; still, the family maintained their style, and the display of affluence equalled fully what it had been in their palmier days, and, by so doing, sustained their reputation in society, in order to allow the young ladies a better opportunity of settling in life. The new comer, prompted by the desire of securing the prize, and thinking she possessed sufficient of the "needful" to pay all expenses, dashed out in

fine style, ran into every extravagance, and displayed the fastest and most beautiful horses, &c. Finding debts accumulating and becoming pressing, he hurried on the wedding day, this being the only prospect for their discharge. Meanwhile, she, not suspecting that he had falsely represented his situation, and delighted at the idea of obtaining so liberal and generous a husband, encouraged his expenses, and was profuse herself, thinking he had the means to settle the bills. They were married—when, to their astonishment and shame, they found themselves not only destitute of the means to discharge their liabilities, but unable to buy the necessary furniture for housekeeping."

Deception on both sides rather hastened the result in this instance. Had it only been practiced by the gentleman, the lady really possessing the supposed wealth, the deluded wife would have probably put her fortune into a princely establishment, relying on his purse for its maintenance, when a failure involving extensive loss would have ultimately followed.

There are unquestionably some wives who, with full knowledge of their husband's limited resources, endeavor to vie with their wealthiest neighbors, and bring upon their indulgent providers premature ruin and death. Such, however, are exceptions, and when the grave closes over the victims to their foolish extravagance, they bitterly reflect on the errors of their conduct.

Running in debt to an extent beyond all present prospect of liquidation, is a common cause of failures in business. This error is almost characteristic of the Yankee, whose enterprising spirit leads him to embark in hazardous speculations. His organ of "Hope" generally predominates over his "Causality," and, urged on by largely developed propelling faculties, he frequently finds himself in deep water, without plank or life preserver. He is, too, of all men, least calculated, physically, to endure reverses, for although he may succeed, by his indomitable will, in buffeting the waves of adversity, his physical health suffers from all such encounters. Here, too, the proverbialist whispers—"Live within your means."

Dishonesty causes many failures. Let one man of extensive reputation and high standing in the commercial world, turn trickster and defraud a bank or railroad of a large sum of money, and the whole community suffers. Public confidence is shaken. Men who have contracted debts with a good prospect of being able to pay, cannot extricate themselves from an unexpected dilemma. Failure after

failure follows in the wake of the defaulter, destroying the prospects of many careful as well as careless men. Do defaulters ever reflect that their dishonesty carries thousands to premature graves? Observation proves such to be the fact. But reckless men seldom look at consequences, and if they can only raise themselves from the ashes of a financial ruin, which their dishonesty has brought upon a community, their humane curiosity is not sufficiently awakened to inquire how many have been buried in it. Burns truly said "Man's inhumanity to man makes countless millions mourn."

Commercial men, who are supposed to regulate the monetary affairs of the world, should realize the powerful influence they exert over the physical well being of the race. Recklessness by the few should not be tolerated by the many, or at least, not countenanced. Every "false step" brings with it multitudinous failures, and failures in business produce depression of mind, and depression of mind disturbs the harmony of the nervous system, and this leads to mental and corporeal diseases of every variety, according to the predisposition of victims. Do not strive to acquire sudden fortune. Remember that contentment is wealth, and that there is no real wealth without it. He who passes through life with a sufficiency of food and clothing, and a contented heart, has the benefit of all the wealth the world possesses.

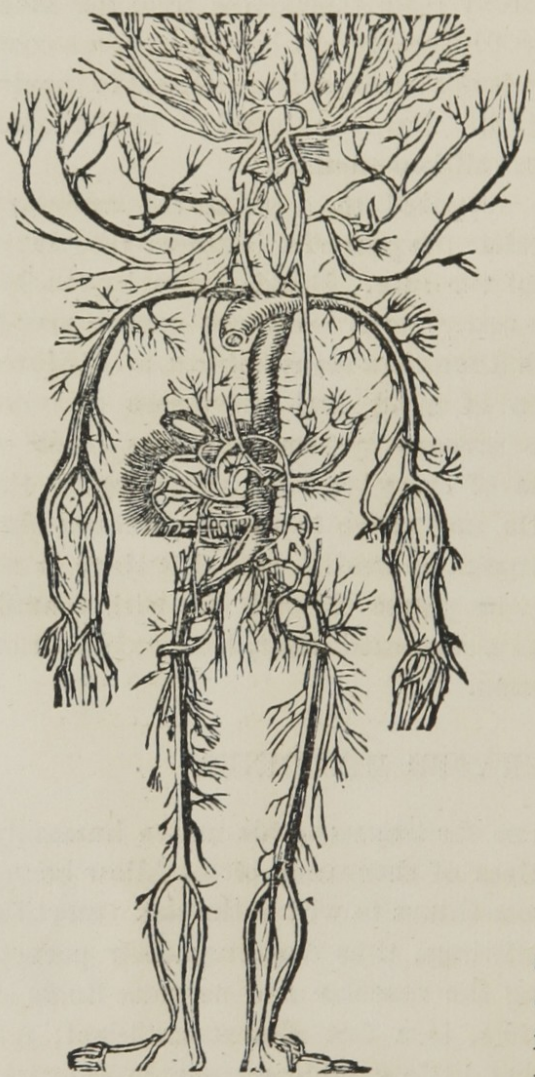
11th. ADULTERATED MEDICINES.

That man's cupidity should so far transcend his native humanity as to lead him to imperil the lives of thousands of his fellow beings by the base adulteration of those things to which the sick resort for relief from their physical sufferings, thus depleting their pockets simultaneously with corrupting the vascular and nervous fluids of their already enervated systems, is a fact almost sufficient, one would suppose, to destroy what little confidence men do entertain in the integrity of each other.

The extent to which the adulteration of medicines is carried, is truly surprising. Says Normandy, "adulteration is a wide spread evil, which has invaded every branch of commerce: everything which can be mixed, or adulterated, or debased in any way, is debased." The report of the examiner of New York for ten months, ending April, 1849, made it appear that "about 90,000 lbs. of various kinds of drugs were rejected and refused admittance at that port

alone. Among these were 3,000 lbs. of opium, 5,000 ounces of iodine, 16,000 lbs. of rhubarb, 34,000 lbs. of spurious yellow bark, and 12,000 lbs. of jalap."

Fig. 20.



ARTERIAL CIRCULATION.

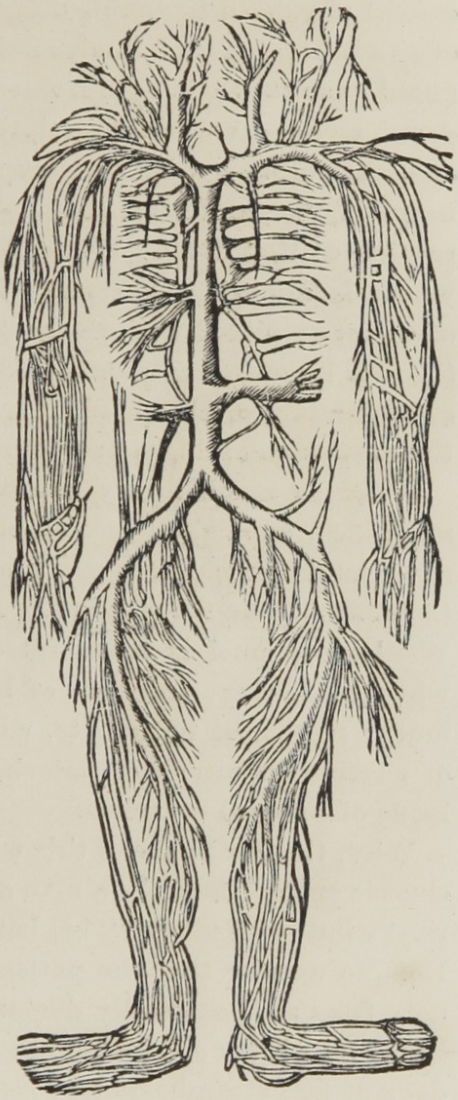
A writer remarks that "more than half of many of the most important chemical and medicinal preparations, together with a large quantity of crude drugs, come to us so much adulterated, or otherwise deteriorated, as to render them not only worthless as medicines, but often dangerous "

Nearly all kinds of vegetable medicines, such as sarsaparilla, yellow dock, elder flowers, uva ursi, rhubarb, Iceland moss and other useful roots and herbs which are thrown into the medicine market, are either adulterated in such a way as to elude the detection of those unacquainted with the botanical descriptions and fragrance and flavor of the pure articles, or have been rendered inefficient by being gathered at the wrong season of the year. So much difficulty have I encountered in obtaining well preserved and pure medicinal roots and herbs that I long since adopted the system of gathering myself, or through agents under my direction, such valuable articles as I have occasion to use in my practice. It is impossible for a physician to predict with any certainty the effects of a prescription upon a disease, if it be prepared from the ingredients furnished by most medicine dealers, however honorable, for if they do not themselves practice adulteration, those of whom they purchased may have done so, and the worthlessness of any root or herb

cured in the wrong season, can only be determined by a trial of its strength.

Those who reside in the country, surrounded with the numerous antidotes which nature furnishes for the diseases of mankind, might easily avoid this species of imposition, and do much to preserve and restore their own health, by acquiring a little knowledge of the medicinal properties of the numerous plants springing up about them, and preserving, in their season, such as are valuable in sickness. It is true that adulterations in roots and herbs are not so positively injurious, as those of mineral medicines, which I shall soon consider, but time is too valuable in sickness to be trifled with by the administration of medicines of an uncertain efficacy.

Fig. 21.



VENOUS CIRCULATION.

The Botanic System of practice has not gained that high reputation for success which it would have done, had its practitioners been their own botanists, and gathered *in their season*, the many health restoring plants which they rely upon.

The industrious farmer knows how difficult it is for him to buy as good corn, potatoes, eggs and butter in the city markets, as he can raise himself. Now, it is just as difficult for the botanic physician to purchase as efficient medicines, at drug stores, as he can himself gather if he only has the industry and enterprise to harvest the annual medicinal products of forest and field.

I have cured hundreds of cases of difficult chronic diseases with botanical medicines *bearing the same name* as those the invalids had been using for weeks and months without benefit, under the direction of other physicians, which fact can only be accounted for by the sup-

position that adulteration or carelessness in curing had been practiced upon those administered by my medical cotemporaries.

There are, of course, some medicinal vegetable productions of foreign countries, which we can only get by importation. Nearly all are generally more or less adulterated, which fact should lead the careful physician to double diligence. Indian opium, for instance, is often adulterated with mud, sand, powdered charcoal, soot, *cow-dung*, (hold your stomach, opium eater!) powdered poppy petals, and powdered seeds of various descriptions. Smyrna scammony frequently contains chalk, guaiacum, jalap, sulphate of lime, gum tragacanth, bassorin, &c., and some samples are met with which do not possess a particle of that drug. The Mexican jalap is of two varieties, one of which is almost worthless. The latter is called male jalap, and often comes mixed with the genuine, and sometimes unmixed. The Spanish liquorice is also much adulterated. Hassal found in twenty-eight samples of the powdered, *eleven* which were adulterated, and the extract can seldom ever be obtained pure.

When so much injury results from the adulteration of vegetable medicines, what shall be said of those arising from the adulteration of mineral medicines, whose counterfeits are often more pernicious in their effects than the genuine? According to Normandy, Bingley and Wakley, calomel is adulterated with chalk, sulphate of barytes, white lead, clay, sulphate of lime; mercury, with lead, tin, bismuth; mercurial ointments, with Prussian blue, clay, etc.; nitrate of silver with nitrate of potash, and so on through the whole catalogue of mineral remedies.

Why, the disclosure of this wholesale deception in drugs and medicines is enough to make a man see red and blue lights in the apothecaries' windows if all the "big bottles" of colored fluid were taken out. It is no wonder that the patients of old school physicians make up ugly faces at their family doctors, and call them hard names. It is hard enough for a man to ride horseback an hundred miles in these days of fast steamboats and railroads, without having a lame nag for a motive power. Mineral doctors, under the most favorable circumstances, are unsuccessful enough without having their remedies perverted.

As a general rule all internal medicines, whether vegetable or mineral, are potent for good or evil. They seldom have a passive effect, but a positive or negative. It is all important, therefore, that they should be just what the prescriber supposes them to be, or serious

mischief must necessarily occur. It is always advisable, when possible, for *the medical practitioner to prepare with his own hands the prescriptions he would give to his patients.* And if he aims to know *precisely* the effect any medicine will have on a disease he must also collect himself the ingredients which enter into its composition. Anything like an approach to unerring success is *impossible* without these precautions. Although the records of crime would indicate that mankind are beginning to place a trifling estimate on human life, its most depreciated value is quite too great to warrant the carelessness, which is often manifested in the preparation and administration of drugs, particularly when the extent to which adulteration is practiced, is so widely known among the intelligent members of the medical profession. I most candidly confess that the main secret of my success lies in the fact that I collect nearly all the plants which enter into the composition of my medicines.

12TH. CHLOROFORM.

In this, as an anæsthetic, we have a nerve-destroyer which, in the hands of men of little or no medical erudition, such as dental surgeons usually are, is doing a world of mischief. The peculiar effects of this powerful anæsthetic upon the mind and nervous reservoir, were forcibly exhibited at a meeting of the dentists of New York, Brooklyn, Williamsburg and Jersey City, at the Dental Academy, in New York, a year or two ago, when the following facts were elicited. "Dr. Main stated that after extracting three teeth of an etherized gentleman, the latter coolly demanded of him ten dollars. He thought he had been driving a chariot with four white horses, at the Hippodrome, and had beaten a span of black horses, and won ten dollars which he had bet. Another man while under the influence of chloroform, thought he was driving a fast team, eating, smoking and drinking. Another thought he had been locked up in the Tombs, and wanted the doctor to go his bail. A boy thought he was fishing; a lady thought she was planting flowers; and an Irish girl—a Catholic—pronounced her priest and her religion a humbug. While having eleven teeth extracted by Doctor Marvin, of Brooklyn, a lady, after having taken a large quantity of chloroform, screamed violently and thought they were squeezing her head between the hinges of a gate, and that they afterwards threw her among a drove of cattle, which tried to gore her to death with their horns. Dr. Griswold, of Williamsburg, stated that recently, after he had given chloroform

to an athletic man, the owner of a distillery, the latter sprang up, and, with clenched fists, swore violently, and on returning to consciousness, stated that he thought he was in his distillery, and that one of the men had carelessly produced some derangement in the machinery, at which he became enraged. Dr. Rich said that a young lady, having a remarkably fine head of hair, thought, while under the influence of chloroform, that her brother, by whom she was attended, plucked out a quantity of her hair, *and she persists in that impression to this day.* A gentleman, under the same influence, thought he was in heaven, and described the glorious vision he saw there. Another man, under the hands of Dr. J. W. Smith, of Brooklyn, on recovering from the intoxication of chloroform, thought he had been in hell, and the idea took so firm a hold of him afterward that he could not dispel it, and he is now, in consequence, in the Lunatic Asylum! A lady who had received chloroform from Dr. Smiley without any immediate unpleasant effect, got up on the same night and went, *en chemise*, to a fire in the neighborhood, and did good service in inciting the firemen to the performance of their duties. Several instances were also related in which amorous and other improper manifestations had been manifested by ladies while under the excitement, and in which they imagined that insults had been offered them, and could not be dissuaded from that impression after returning to their natural state."

Although these effects are pernicious enough, immediate death not unfrequently ensues from the inhalation of chloroform. Dr. Warren knew of ten cases of this kind, all occurring in a little more than one year, and it is difficult to judge how many more, unknown to Dr. W., might have died from its effects. The same authority says that "were he obliged to substitute chloroform for ether, in inhalation, he would do it with anxiety." Here is an eminent physician who dares not substitute it for ether, when dentists and many illiterate tooth extractors all over the country are making common use of it!

The electrical effect of chloroform on the system is indicated by the strange hallucination and insensibility produced in the mind and body of one under its influence. In addition to the powerful solvent property of chloroform, and its consequent effects on the alkalies or negative principle of the animal organism, it produces a kind of mesmeric phenomenon, ungoverned by the will of a skillful operator. A power is used to benumb the sensibilities and destroy the nervous

equilibrium of the system, and none employed to remove these effects. Nature has to make a struggle, and sometimes an unsuccessful one, to throw them off. If a person is mesmerized or psychologized, the same operator who induced the suspension of sensorial power, restores it again. If he does not, injurious results are sure to follow. Probably a majority of my readers have known of persons being mesmerized by novices in the science, who, having produced the influence, knew not how to dispel it, and how serious have sometimes been the consequences! Now chloroform produces a kind of mesmeric or psychological effect in the system, and then, instead of possessing human intelligence to throw it off again, this work is left for disabled nature.

Chloroform ought never to be employed as an anæsthetic, except in very painful surgical operations, and not then, unless all other means for benumbing the senses fail. Mesmerism should be tried first. If the sufferer is a susceptible subject, any operation, however painful, may be performed while the patient is under its influence. When all is over, the experienced mesmeric operator can remove the influence and restore the system to its normal condition again.

Ice has also been highly recommended, and might be resorted to when mesmerism fails. A writer in the London Illustrated News, supposed to be the editor of the Lancet, says that "the experience of the past few weeks has proved to his complete conviction that local anæsthesia can be obtained by the benumbing influence of ice, without resorting to the administration of chloroform, which, by its subtle power, renders insensible the system generally, and occasionally produces those fatal effects to which almost every surgeon can bear testimony." "I have tried the ice," continues the same writer, "in several cases, in both hospital and private practice, and in almost every instance the success was evident, the patient, when blindfolded, being ignorant of the use of the knife." Cases which cannot be effected by either mesmerism or ice, should have recourse to strong chloric ether, which is far preferable to chloroform, because its effects are not so injurious or dangerous.

For extracting teeth I question the expediency of employing any presently known anæsthetic, except mesmerism. Seldom are dental operations attended with pain of sufficient duration to warrant the employment of any. It is reported that a physician in Philadelphia has invented what he terms galvanic forceps, which are intended as a relief to the pain of extracting teeth. They are said to be a com-

bination of the ordinary forceps, with a galvanic arrangement attached, whereby the nerve of the tooth may be charged with a galvanic influence, and its sensibility suspended. Such are the numerous uses to which electricity, in its various forms, may be successfully adapted, the story looks plausible; but if untrue, it would be well for the dental profession to exercise their ingenuity, in electrical experiments, to ascertain if that element cannot be made to accomplish an object so desirable. If not, the administration of chloroform as an inhalant should be dispensed with by dentists and doctors who extract teeth, and it would be well if its employment by them were interdicted by statutory law. No law would be necessary were the public better acquainted with its nature and effects; but so long as so little is known of it by the masses, who are ever ready to avail themselves of any thing to silence pain when about to undergo a surgical operation, however trivial, the use of it by those not qualified by medical education, should be forbidden.

13TH. EXCESSIVE STUDY.

"The mind, just like the stomach, takes
Its food for pleasure, profit, use,
Reflection all the virtue makes,
And serves it for its gastric juice."

The mind may be overloaded as well as the stomach. Reading too constantly and studying too closely, is as injurious to the mind and nervous system as is eating too much to the stomach and blood. The back doors of many of our Colleges and Seminaries open into lunatic asylums and cemeteries. The literary world is full of physical wrecks, and many a mind has become bankrupt by trying to acquire knowledge too fast, like the ambitious business man who fails, through his over exertions to get rich. Avarice for knowledge is generally more unsuccessful than avarice for money, but while the failure of the former leads to an empty head, that of the latter only leads to an empty pocket. Every man is born into the world with a certain amount of mental capacity which will admit of cultivation, but not of forced growth. By gentle discipline the mental powers of a man will gradually develop, and reach maturity as early as good physical health will permit, but when the student attempts to crowd his mind with learning all at once, he not only fails to reach the high summit of his inordinate ambition, but often falls a helpless imbecile.

Studies, to be improving, must be pursued with a relish, the same as good edibles are sought after by the epicure. If the mental appetite is too craving, gratify it sparingly, as every man should his corporeal appetite; if too dull, nurse it gently. An observance of this rule will prevent our institutions of learning from sending thousands of *mental dyspeptics* into the world to flash and flicker with intellectual light, and then go out like a used up tallow candle.

14TH. EXCESSIVE LABOR.

Foolish pride and aspirations for wealth, more frequently than necessity, drive men to excessive labor. Both the mental and physical system demand rest, and inflict a penalty on the individual who refuses to grant it. Not only has nature ordained night as a season of repose, but the God of nature has commanded that one day in each week shall be observed as a period of rest for all human beings, and has so impressed the necessity of such a regulation on the human mind, that, however diverse may be the religious opinions of different people, all have a day *professedly* set apart for that purpose. Thus, Sunday is appointed by the Christians, Monday by the Grecians, Tuesday by the Persians, Wednesday by the Assyrians, Thursday by the Egyptians, Friday by the Turks and Saturday by the Jews. The strict observance of the day is, however, unusual. The business man, although he be a constant attendant at church, is apt to look over his accounts and lay down his programme for the week, while the literary character meditates on what he will write or speak, regardless of the sentiment of the Roman philosopher, Seneca, who said that "the mind of man is like the fields, the fertility of which depends on their being allowed a certain period of rest at the proper season." And all this over-work is for the frivolous purpose of driving a prettier span of horses than some neighbor, wearing a fine coat, holding larger estates, or possessing more of that attractive commodity—gold! The best remedy for this evil is *contentment*. This should be cultivated, for it is *wealth*. A contented man with fifty cents in his pocket, and a clear conscience, is far wealthier than the millionaire, whose Sunday, week-day and night dreams are all about gold, and how more may be accumulated. Dismiss your avocations at night and on Sundays and acquire contentment if you would preserve your nervous systems in health, and your minds in happy placidity.

15TH. MELANCHOLY.

Some writer has facetiously remarked that "there are many people who keep pet griefs as certain other people keep lap-dogs, that they carry about with them wherever they go. These are the people who feel the best when they feel the worst, and are never so happy as when they are utterly miserable. Like the maiden 'who milked the cow with the crumpled horn,' they are always '*all* forlorn,' and they keep a figurative dog to be 'tossed,' and a cat to be 'worried,' and a rat to be 'killed' upon every possible occasion. They turn down the leaf at 'O that my head were waters, and mine eyes a fountain of tears,' as if griefs were like bulrushes, and flourished best in wet places."

Melancholy seriously disturbs the circulation of the nervo-electric fluids, and causes an undue consumption of the latter in the brain. Melancholy people are almost invariably dyspeptic because a full supply of the electric element is withheld from the pneumo-gastric nerve, which conveys from the brain the force that gives tone and activity to the digestive organs. Despondency of mind, in fact, affects all the organs of the system, more or less, on the same principle; the brain consuming, in its excitement, more than its natural allowance of nervo-electricity, and as a consequence, withholding the vital element from the various organs which are dependent upon it for healthful action.

Cheerfulness should be cultivated by every one. It is an antidote for many ills; and a laugh is of immense value, physiologically. It produces an electric effect throughout the whole system. It is felt in no one place particularly, but every nerve, muscle and fibre is simultaneously titillated with the electric flash from the brain. All who have melancholy friends should try to excite them to laughter. A few hearty laughs will cure the most desperate case of melancholy. It is a Christian duty to look cheerful and a blessed privilege to laugh. "Away with melancholy."

CHAPTER III.

Common Sense Remedies.

HAVING glanced at the proximate and many of the remote causes of disease, next in order is a consideration of appropriate remedies. In pointing out and commenting on these, I expect to encounter the universal denunciation of old school physicians, and some opposition from the new.

I am often asked the question—"To what school of medicine do you belong?" My reply is—no school, except the school of nature, which I shall christen the *Utilitarian School.* I have been a diligent pupil of all the old masters, and have investigated all systems. I am now a devoted pupil of nature; intuition is my counselor; common sense my pharmacopœia. In other words, I am *independent*—bound by the tenets of no medical association, and consequently prejudiced against no new discovery which can be made subservient to suffering humanity. Whatever I find in earth, air, water and science, useful as remedial agents, I appropriate, and resort thereto, when occasion demands, without fear of being confronted by a conservative brother who sees merit in nothing which has not the sanction of antiquity.

I have wasted much time in the exploration of what is inappropriately termed medical science, but have always found instruction and entertainment in the great book of nature. The literary productions of old school writers are often interesting and contain much sophistry; nature is refreshing and pregnant with truth.

Hippocrates flourished over eighteen hundred years before the modern science (?) of medicine was founded. He was even unacquainted with the circulation of the blood; yet he was styled the "father of medicine," and his success in curing disease so excited the superstition of the ancients, that many of them believed he stayed the plague of Athens. Some are born physicians. Hippocrates was. Every man possesses a special talent for something, and he who becomes a doctor, when nature designed him for a reaper, will mow down human beings when he should have cut wheat.

Redfield, the physiognomist, says that he can tell who are natural physicians by the bones in the face. He describes them as men having an elevation of the arch of the cheek bone, called the zygomatic arch. He says that one possessing this peculiarity, other things being equal, "is not only inclined to study and practice, but will have a certain instinct for it, which will materially assist his scientific knowledge." "Without this faculty, and its sign, in a superior degree," continues that popular physiognomist, "no person ever attained to skill and eminence in the medical profession, or even made a good nurse. The North American Indians have this sign very large, one of their characteristics being high cheek bones, and they are equally remarkable for their 'medicine men'—so much so, that some persons consider the name 'Indian Doctor' a sufficient offset for ignorance and presumption." With regard to my natural qualifications, my interested readers will pardon me for saying that, besides possessing the sign Redfield describes, my medical proclivities manifested themselves at an early age. My parents have often reverted to my boyhood, when pill-making, &c., entered conspicuously into the diversions in which I indulged, and facetious neighbors dignified the contents of my juvenile waistcoat with the title of "Doctor."

With these remarks, prefatory and egotistic, I will enter upon the legitimate mission of this chapter, which is to advocate the merits of those classes of remedies which have rendered my practice so eminently successful and popular, and to expose some of the most prevalent medical errors of the day.

VEGETABLE MEDICINES.

The trees, shrubs, flowers and plants, I contend, possess, in a refined form, all the medicinal properties of the mineral kingdom. Their numerous and far-reaching roots span rocks, ramify in various strata of soil, and extract from good old mother earth her hidden medicinal treasures, which are transposed to regions of air, light and heat, where chemical changes are effected which at once deprive them of their grosser characteristics, and render them far more efficacious and harmless, as antidotes for human infirmities, than they can possibly be made in the laboratory of the most skillful chemist.

It is said that "if a bone be buried just beyond and a little at one side of a root, the latter will turn out of its direct course and go in pursuit of the bone, and when it finds it, it will stop and send out

numerous little fibers which, forming a net-work, will envelop the bone; and when all the nourishment has been sucked out of it, the root will again pass on its way, and the temporary fibers thrown out around the bone will gradually disappear."

Fig. 22.

A SPECIMEN OF WHAT CHEMIST NATURE PRODUCES IN HER LABORATORY.

Thus the inflexible relic of a decomposed carcass may be transformed into a beautiful flower! What human chemist can do this? And yet it is trifling, compared with what nature is daily producing in her boundless laboratory. The roots of herbage and trees have the same power to extract the useful properties of minerals, and, in a measure, derive their nourishment from the various ingredients of the soil. An intelligent writer remarks that "one of the most remarkable properties of plants is the power with which they are endowed of selecting their food. The soil contains various kinds of aliment for vegetation, and the little fibrous roots that fill the ground select from the whole, and suck in through their minute openings just the kind suited to the nature of the plant or tree to which they belong. All plants will not thrive on the same soil, any more than all animals will live on the same kind of food. Grass and grain require a soil that contains an abundance of silica or flint."

It is this power of selecting nutriment which renders plants so various in their medicinal properties. When we reflect that the earth is covered with an endless variety of vegetable products, no two of which possess precisely the same properties, how absurd appears the conduct of those who wander from the vegetable to the mineral world in search of remedial agents!

Paracelsus was the Adam of the medical world. Through him came sin into the profession. He was the introducer of mineral medicines. He is the prototype of the old school. Read what his biographer says of him:

"Paracelsus was a man of most dissolute habits and unprincipled character, and his works (opera) are filled with the highest flights of unintelligible bombastic jargon, unworthy of perusal, but are such as might be expected from one who united in his person the qualities of a *fanatic* and a *drunkard*."

Gross minds beget gross ideas—demand gross food and gross remedies. They naturally turn from the study of the green trees and beautiful flowers with which the brown earth is adorned, and whose luxuriant branches point upward to Heaven and Health. Thus it was with Paracelsus, who, in the fifteenth century, exalted quicksilver, or quack-silver, usually called mercury, to the family of medicines. For this great exploit he earned the name of *Quack*. This epithet was never applied before. His followers like his remedy, but not his name, and have ever since been trying to shift it upon the Botanics, who desire neither the "game" or "name." But those who know the origin of the term, cannot, with propriety, misapply it.

They may loom up in science as high as they will,
The odor of quack must stick to them still.

The value of mercury as a remedial agent has been ably handled in the Journal of Medical Reform, and for the benefit of those whose "one cure-all" is the Blue Pill, or other preparation of mercury, I cannot do better than copy it in full:

"If evidence were wanted," says the writer, "to prove the injurious effects of the various preparations of mercury on the organism, we know not where we may look for more decided testimony than is to be found in the admissions of those physicians who have the most extensively employed them in their own practice. The same amount of evidence against any other article of the *materia medica* would have rendered its use a matter of universal reprehension. It would, doubtless, have become obsolete, or, possibly, have been made a penal offence, under all circumstances, to exhibit it.

"That mercury has destroyed more lives than it has saved, and entailed upon the human family a train of disorders, and an amount of suffering past computation or description, no physician who is not wholly wedded to the errors of early education, or a slave to the

authority of musty books and the edicts of self-constituted medical tribunals, will venture to deny. The system of medical training in this country—the abject deference which is rendered to the opinions of the graybeards of the profession, the ceaseless iteration in the ears of students of the stale axioms and mouldy dogmas of "the fathers," and the love of mental ease and indolence which characterizes so large a portion of the old school physicians, explain the reason why so many worthless and destructive remedies are still retained. Said a physician not long since—'We discover, first, the pathological condition of our patients, then administer such remedies as *the books* prescribe. If they live, well; if not, they die *secundum artem.*' There spoke a host of Allopathic practitioners and professors, who are too submissive, or too lazy, or too stubborn to think, act and investigate as becomes a free, intelligent being, living in a day of light, improvement and progress.

"Some people have insensibly learned to regard this metal as indispensable—as possessing such peculiar virtues and adaptability to cure the ailments to which mankind are subject, that the resources of the physician would be fatally restricted if he were deprived of its use. But if in all the range of argument, the experience of the medical world and the history of the Healing Art, one sound, irrefragable reason can be advanced in proof of this supposition, we will cheerfully abandon all further opposition to its employment. And more, if in the animal, mineral, or vegetable kingdom a solitary agent can be found, the use of which has caused, universally, more permanent suffering, or wrought more disastrous consequences to the human frame, we will confess our ignorance, and charge to the account of prejudice or stupidity all the disfavor it has encountered from both friends and foes.

"If, for a long succession of years, the milder as well as the severer forms of disease had not yielded to the influence of harmless remedies, our attack might be considered misdirected and impertinent. But, fortunately, the truth lies in the reverse of this; and it is an insult to the honesty and intelligence of a large class of physicians, both in this country and in Europe, who are combating successfully with every phase and character of physical disorder, without in a single instance subjecting the systems of their patients to the effects of mercury, to tell them and the world that the changes from a state of illness to a condition of health cannot be promoted without its agency, or if at all, not as well, as speedily or as safely

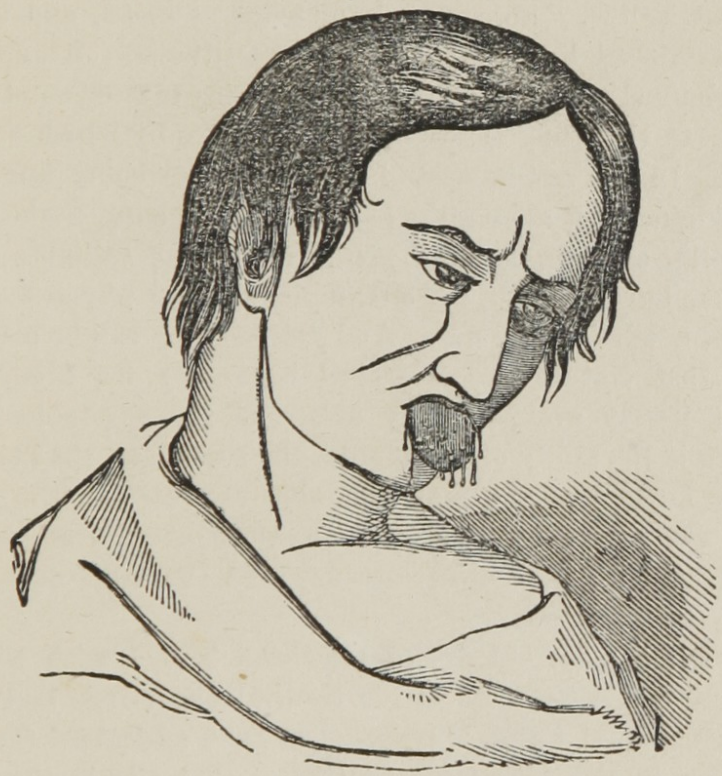
Opinions and speculations here are valueless. FACTS, unanswered and unanswerable, can be and have been brought to support our assertions. It is well known by all who have paid any considerable attention to the history of medicine in the United States, that it is but a few years since mercury was the principal remedy depended upon by Allopathic physicians for the cure of scarlet fever. If the judgment of the "Faculty" was to be taken as final, how does it happen at the present day that but few intelligent physicians can be found who ever venture to give it in that disease? If it were indispensable twenty years ago, nothing has occurred in the nature of the disease itself to render it needless and positively hurtful now. A medical journal of the old school, published in this city, told its readers, a few months since, that the unprecedented success of Botanic physicians in treating Scarletina, and the great mortality consequent on a course of mercurial treatment, had *forced* "the Profession" to abandon it altogether. The truth is, our Doctors, learned though they may be in the mysteries of the Art, are not infallible—they are liable to mistake; and if they have committed one such fatal error, they being judges, in so important a matter as life and health we may with propriety challenge the correctness of their opinions, regarding its necessity and virtue in the cure of other maladies.

"We well recollect during the early prevalence of an epidemic that visited some of the counties of this State five or six years since, that this 'indispensable' remedy was exhibited without stint or scruple in those cases that came under the charge of Allopathic physicians. The proposition that every effect must have a cause, probably set the people to inquiring why it was that a very large majority of the cases so treated terminated fatally, while, with scarcely an exception, those patients who were attended by botanic practitioners recovered. And the inquiry was a very natural and a very proper one. The 'accumulated wisdom of a thousand years' said 'give calomel, and give it again and again;' and it was given; but new graves were dug day after day notwithstanding. Mercury was *not* indispensable here. It was a withering, blasting scourge to whole families. Death needed no better auxiliary. The contrast in these cases is too important and too significant to be wholly disregarded.

"If a *substitute* for mercury is demanded, we answer, no substitute is wanted,—none required. It is a pernicious poison, that has

no legitimate right or claim to a place in the list of MEDICINES adapted to the necessity of a human being; and it was hundreds of years after it stole its way into the *materia medica* before any but the most reckless and empirical ventured to employ it. Agents there are in rich profusion, adapted to the cure of every physical ill—safe, innocent and efficacious. God has scattered them with an unsparing hand wherever man suffers, or an antidote is required. In the days of his primitive simplicity—before he had begun to seek out 'many inventions' or had learned to disregard the instincts of his own nature, man turned to the vegetable kingdom in the hour of sickness; and if we do not mistake the signs of the times, the day is not far distant when he will be brought back to a just appreciation of the wisdom of his original choice."

Fig. 23.



A SALIVATED PATIENT.

It is difficult to regard the system which Paracelsus introduced in any other light than a great stumbling block in the way of progress in the healing art. Had the undivided attention of the medical profession, for the past three hundred years, been turned in the right channel—had physicians studied more to ascertain the proper-

ties of plants and left the mineral kingdom to the researches of professed mineralogists, what sublime results would reasonably have accrued for the promotion of the skill of the physician and the convalescence of the sick of the present century! Like unto the children of Israel, a large majority of medical professors have been worshipping the metal calf which Paracelsus,—not Aaron,—set up for them, seeing which, the anger of Æsculapius waxed hot against them, and he commanded them to "go in and out from gate to gate throughout the camp," in the language that Moses used to the idolaters of old, "and slay every man his brother and every man his companion, and every man his neighbor." [Exodus xxxiii. 27.] How many have been slain since the God of medicine issued this edict, there are not figures enough, Roman or Arabic, to compute.

"The present system of medical education," truly remarks a newspaper writer, "imparts a knowledge of *books*, and the *precedents* established by certain ancient practitioners; it explores the narrow channel of usage and custom, deferring to names and opinions, but neglects the study of the *natural* remedies by which we are surrounded. In the commonest of our fields, springing unnoticed by the brook-side, and among the pastures, or growing neglected along stone walls, are hundreds of plants possessing valuable medicinal properties, but of which, *not one in forty* of our physicians can tell the name, much less the *use*. And yet nothing can be plainer than the fact that Nature has furnished a remedy for every disease, and that nearly every remedy exists in the vegetable kingdom. Why then is the study of the plants, the roots, and the herbs of the field, the forest and the mountain-side neglected in the education of those who are styled doctors? Is the acquisition of Latin terms and a general reliance upon mercury and the knife deemed to be more important or safe?"

Now and then an old school physician is met with who voluntarily confesses the results of his medical experience and research. Prof. Magendie, of Paris, is reported to have addressed the students of his class in the Allopathic College of that city in the following language:

"Gentlemen: Medicine is a great humbug. I know it is called a science—science indeed! It is nothing like science. Doctors are mere empirics when they are not charlatans. We are as ignorant as men can be. Who knows anything in the world about medicine? Gentlemen, you have done me the honor to come here to attend my

lectures, and I must tell you frankly now, in the beginning, that I know nothing in the world about medicine, and I don't know anybody who does know anything about it. Don't think for a moment that I haven't read the bills advertising the course of lectures at the Medical School; I know that this man teaches anatomy, that man teaches pathology, another man teaches physiology, such-a-one therapeutics, such another materia medica—*Eh bein! et apres?* What's known about all that? Why, gentlemen, at the school of Montpelier, (God knows it was famous enough in its day!) they discarded the study of anatomy, and taught nothing but the dispensatory; and the doctors educated there knew just as much and were quite as successful as any others. I repeat it, no body knows anything about medicine. True enough we are gathering facts every day. We can produce typhus fever, for example, by injecting a certain substance into the veins of a dog—that's something; we can alleviate diabetes, and, I see distinctly, we are fast approaching the day when phthisis can be cured as easily as any disease.

"We are collecting facts in the right spirit, and I dare say in a century or so the accumulation of facts may enable our successors to form a medical science; but I repeat it to you, there is no such thing now as a medical science. Who can tell me how to cure the headache? or the gout? or disease of the heart? Nobody. Oh! you tell me doctors cure people. I grant you people are cured. But how are they cured? Gentleman, nature does a great deal; imagination does a great deal. Doctors do . . . devilish little . . . when they don't do harm. Let me tell you, gentlemen, what I did when I was the head physician at Hotel Dieu. Some three or four thousand patients passed through my hands every year. I divided the patients into two classes: with one I followed the dispensatory, and gave them the usual medicines without having the least idea why or wherefore; to the other I gave bread pills and colored water, without, of course, letting them know anything about it . . . and occasionally, gentlemen, I would create a third division, to whom I gave nothing whatever. These last would fret a good deal, they would feel they were neglected (sick people always feel they are neglected, unless they are well drugged . . . . (*les imbeciles!*) and they would irritate themselves until they got really sick, but nature invariably came to the rescue, and all the persons in the third class got well. There was a little mortality among those who received but bread pills and

colored water, and the mortality was greatest among those who were carefully drugged according to the dispensatory."

Now, this is talking right out. Here we have the experience and consequent inferences of an eminent Allopathist. What do his brother professors think of it? We shall not probably know what they think, for few of them are so candid as this one. When it is borne in mind that the curability of any disease is determined in each school of practice by the results of its labors, there is one point particularly noteworthy in Prof. Magendie's address. He asks—"Who can tell me how to cure the headache? or the gout? or diseases of the heart?" and then replies—"nobody." This conclusion, as well as that of many other of his brother professors, that consumption is incurable, is manifestly drawn from the results of the Allopathic practice. It is not strange, then, that he pronounces the diseases mentioned incurable, for it is contrary to the rules of Allopathy to acknowledge any skill outside of its bigoted ranks. Did its members not willfully shut their eyes to the astonishing cures effected, of these very diseases, by those who have entered a more comprehensive field of medicine, they would not give utterance to such truthless assertions. If Prof. Magendie will regale himself for one summer at Saratoga, and spend his leisure moments in my office, I will convince him, by the palpable results of my practice, that the diseases he enumerates can be cured.

The closing portion of his address, concerning his experiment with dispensatory medicines, bread pills, colored water, &c., is also suggestive. He says there was the greatest mortality among those who took his drugs; a little among those who used the colored water, and that those to whom he gave nothing got well. This result is just what any man of a particle of common sense would have expected. His mineral drugging, as a matter of course, only added another load to nature, already burthened with disease; and colored water was not nutritive, but, on the contrary, poisonous, as almost all dye stuffs are. The presence of this in a weak stomach could not fail to have something of an injurious effect.

There are certainly hopes of the reclamation of this professor. He may yet learn that all the sick man needs is simple nourishment adapted to the nature of his system and disease, such as can always be found in the forests and fields. All enfeebled nature wants is a little mild assistance, and if (to use the language of tree-climbing boys) you attempt to "boost" too fast, you are sure to upset her.

The brute creation is more enlightened to-day in medicine than the Allopathic profession. When the horse feels unwell, he eats dock and other herbs, if he can get them, and recovers. The cat, subject to fits, eats catnip and dispels the disease. If any of my readers have a sick cat, just give her some catnip herb, and observe the delight which she manifests in rolling on it, snuffing its aroma, and finally eating it. Naturalists say that the fox, rabbit, and many other animals, keep themselves from madness by the use of the medicinal plants with which their wild abodes are surrounded; and it is related of the grizzly bear of California, that, when he gets wounded, he gathers leaves from the bush called "grease-wood," and forces them tightly into the wound. If the animal had the intelligence (or rather the want of it) to call on an Allopathic physician, he would probably get a *mercurial plaster!*

Botanic physicians deserve censure for not being more particular in obtaining *good* herbs and roots. They have often earned an unfavorable reputation by their remissness, when fame would have otherwise been their reward. Herbs and roots gathered in the wrong season of the year are worthless. Two-thirds of those sold in Botanic stores are, on this account, but little better than chips. Then, too, medicinal plants should always be raised and gathered on their native soil. Fishbough very correctly says, that "the vegetation indigenous to any particular clime or locality always bears a relation to the temperature, soil, and moisture prevalent in that locality. The mountains of tropical regions, which rise from a realm of perpetual summer to an altitude of eternal snow, are clothed at their different elevations by different genera and species of plants, adapted to all the gradations of temperature, from the tropic to the arctic. An artificial transplantation of any of these vegetable forms is either fatal to the latter, or else causes in it a gradual change of constitution until it is fully adapted to its new condition." This change in constitution is a virtual change in medicinal properties. Those who cultivate, either by transplantation or sowing seed, any medicinal plant, in a soil not natural to it, fail to obtain the plant with its full and native properties. Consequently, all who raise in a garden herbs, &c., of every variety, for the market, contribute, in a degree, to the ill success of those physicians who purchase them. As stated in a preceding chapter, one great secret of my success is, that I gather myself, or by agents, the vegetable remedies I employ.

THERAPEUTIC ELECTRICITY.

Science has heaped wealth in the lap of Commerce—to the healing art she has been a meagre patron. The commercial man cordially receives her magnificent contributions; the medical devotee looks with jealous eye upon her beneficent discoveries. The swift gliding locomotive whistles by the storehouses of the merchant and the luxuriant fields of the planter; Calomel hobbles along on crutches, slow as the old post coach, before the doors of old school practitioners. A few bold spirits have preferred professional martyrdom to old fogy despotism. To such the public is indebted for what little advancement has been made in the healing art in this country. Here a physician is not considered orthodox who does not keep a strait coat tail behind him. To look to the right or left for new agents to relieve the sufferings of mankind, discloses professional heresy punishable with wry faces and shrugged shoulders. Happily for suffering humanity, our transatlantic neighbors have been more tolerant and given to investigation. Hence it is that the therapeutic value of the electrical discoveries of Galvani, Farraday, Cross and others, have been tested in the universities and hospitals in England, France and Germany.

Galvanism, Electro-magnetism and other forms of electricity are now extensively employed in the best institutions of the old world, and according to the testimony of Farraday, Golding Bird, Donnovan, Le Roy d'Eliolle, Cross, Palaprat, Smee, Matteucci, and other distinguished medical writers, with the most flattering results.

If my theory, as given in Chapter 1st, is correct, regarding the important part which electricity performs in the animal economy, it does not require facts or arguments to prove the value of electricity as an auxiliary agent in the treatment of disease. The fact is rendered self-evident. It will be remembered that I there assume and give facts to prove that the same agent (electricity) which the Almighty employs to move and regulate the sublime planetary world, is used by the mind to move the feet, arms, limbs, and perform the various functions of the animal mechanism.

The only plausible objection to this theory which I have met with, is given by Dr. Ure, who says that *electricity* will pass through r erves which are almost severed and divided, and produce contractions in the muscles over which they are distributed, while the *nervous forces*

will cease to pass through and perform any muscular motion when the nerves are thus lacerated.

To one who has failed to discover the almost omnipotent power and instinctive wisdom of the mind, this objection would appear decisive. But my reply is that *animal electricity is controlled by the mind to which it belongs, while chemical or other electricity is controlled by the will of the operator who employs it.* In other words, animal electricity is governed in its distribution through the system by the intelligent mind whose seat is in the brain, and who *voluntarily withdraws it from any nerve which may be disabled, lest the wounded or enfeebled nerve be entirely destroyed by the continued performance of its legitimate function while in a diseased or lacerated condition.* The mind constitutes what is called the *vis medicatrix naturæ*, or healing power in any animate body, by which, when diseased, the system is assisted to recover. It is the "family doctor" of the organs, over which it presides. Consequently, notwithstanding the mind has not the power to resist electricity artificially applied to any disabled nerve, by an operator, it can and *does* control its *own* electricity, and will not allow it to traverse a wounded nerve. Nor can this peculiar power of the mind be overcome by the *will* in such a case, any more than the will can arrest the action of the involuntary organs, which are under the control of the immortal principle or mind of the individual; and who can stop the pulsations of the heart by an effort of the will?

The perfect control which the mind has over its own electrical agent is again exhibited when business or family troubles or bereavements overtake an individual. The brain, stimulated to painful activity, consumes more than its due proportion of the nervo-electric fluid, and the mind withdraws enough from the stomach and vital organs to supply the demands of its most important dependent. In consequence of this physiological "panic," the heart, liver, stomach, &c., (corresponding to the merchants) fail, and the brain (bank) takes care of itself. In diseases induced by mental depression, we therefore find electricity valuable as an assistant, although, in consequence of the blood derangements entailed thereby, insufficient unless supported by nutritive and purifying vegetable remedies.

It is the interruption or partial withdrawal of the nervo-electric circulation, which causes what we term "nervous diseases;" and there are more affections of this character than were ever dreamed of in the Allopathic philosophy. There is often an inharmonious action

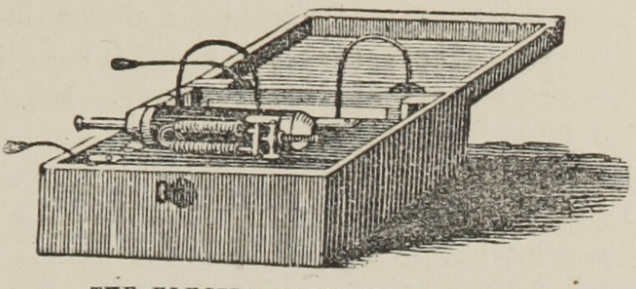
of the nervous forces in lung, liver, heart and kidney diseases. All these organs perform their appropriate offices under the stimulus of electricity. For instance—the lungs are not expanded and contracted by the inhalation and exhalation of air, but the diaphragm is thrown downward, and the air vesicles opened by the nervo-electric forces acting on the muscles controlling the former, and on the little muscular fibres and tissues composing the latter. By this electric movement, air of necessity rushes in to fill the vacuum; when the same forces contract them, exhalation necessarily follows. In diseased lungs and shortness of breath, there is frequently an interruption of the nervo-electric circulation, and hence the necessity of electrical remedies of some sort, in addition to internal medical treatment, in the cure of many cases of pulmonary disease.

The same remark holds good in respect to many disorders of all the vital organs. In dyspepsia, the interruption of a free passage of nervo-electricity through the pneumo-gastric nerve leading to the stomach is not unfrequently the principal cause. Cut the pneumo-gastric nerve in the neck of any animal, and the process of digestion ceases at once—apply the galvanic battery to the end leading to the stomach, and it is immediately resumed. The further this subject is investigated, the clearer the reader will see the value of electricity in the treatment of disease. "Water," it has been beautifully remarked, "is valuable as a medical agent, but its efficiency consists, not in the element itself, but in its subservience as a handmaid of electricity. Electricity is the queen of medicine: water merely a pool in which she bathes her feet." The author of this quotation is, however, a little sanguine, and makes electricity the queen instead of duchess.

Golding Bird, who has devoted much time to the investigation and application of electricity, says: "Conscientiously convinced that the agent in question is a no less energetic than valuable remedy in the treatment of disease, I feel most anxious to press its employment upon the practical physician, and to urge him to have recourse to it as a rational but fallible remedy, and not to *regard it as one either expected or capable of effecting impossibilities.*" The same writer adds that "electricity has been by no means fairly treated as a therapeutic agent, for it has either been exclusively referred to when all other remedies have failed,—in fact, often exclusively, or nearly so, in hopeless cases,—or its administration has been carelessly directed, and the mandate, 'Let the patient be electrified,' merely

given, without reference to the manner, form or mode of the remedy being for an instant taken into consideration."

Fig. 24.



THE ELECTRO-MAGNETIC MACHINE.

The reputation of electricity has suffered by its bungling application in the hands of inexperienced operators. As the effect must depend upon the form and mode of application, it is obvious that no one should apply it without definite instructions, unless he is acquainted with the science of electricity and has some knowledge of anatomy.

I have observed with regret the infatuation some men exhibit after witnessing its beneficial effects in one or two cases. Having cured themselves, or perhaps a neighbor, with electricity, the conceit at once overcomes them that they are *natural* physicians, and that that agent alone is capable of healing every ill to which the flesh is heir, while perhaps they are "natural ninnies," tampering with the sublime phenomena of an omnipotent and mysterious element.

Such operators, unschooled in physiology and the science of *materia medica*, have done much mischief with electrical machines, often applying them when there is no occasion, and with a power too intense for even a person in health to endure. Some parts of the human system are more sensitive than others, and while a powerful current is necessary to affect some organs, a weak and almost imperceptible one is required to have a beneficial effect on others.

Cleveland, in treating on Galvanism as a remedial agent, very sensibly remarks: "In making use of galvanism as a therapeutic agent, it should not be relied on to the exclusion of all other treatment; neither should a cure of the disease for which it is applied, be anticipated in a miraculously short space of time. Disease in any organ produces a change in the condition and structure of the organ diseased, and time must be allowed for the process of absorption and deposition necessary to bring the organ back to its normal condition. Galvanism, when properly applied, will be found of great value in hastening these processes; yet it will not do to apply it with such power as to *destroy* the organ from which we wish to

remove the abnormal accumulations, or even to carry the action of that organ beyond the condition of *health*."

I meet with very few diseases which can be radically cured with electricity. Nervous affections almost invariably inflict injury on the vital organs and blood, which is not conciliated by the correction of the nervous circulation merely. Here recourse must be had to mild medication.

Cleansing the system of mercury by electricity, and inducing a good nervous circulation, in but very few instances restore to permanent health a person who has for years been suffering from the baneful effects of mineral poisons. True, the original *cause* is removed but the *effects*, through long neglect, have become diseases in themselves, and can only be entirely eradicated by medical treatment.

It is idle prattle to talk about making the lame walk by the administration of an electro-chemical bath. There are undoubtedly some instances upon which to base such exaggerations, but he who promises such results does positive injury, by discouraging the patient eight times in ten. The promises of a physician are carefully noted down in the mental diary of an invalid, and if a promise fails in its fulfilment despondency follows. It is enough to say that a skillfully prepared electro-chemical bath will expel mineral poisons; this is a great achievement, and opens the avenues of health to thousands who are suffering from the effects of old school malpractice. The instrument which I invented for cleansing the human system of mineral deposits, has produced, in many cases, results which, if related, would appear almost incredible, but I will not indiscrimi nately promise such results in the numerous cases which present themselves. I will only guarantee, with its application, the removal of every vestige of mercury, lead or other metalic poison, lurking in the system of the patient. But after this is effected it is an easy thing, with proper vegetable treatment, to relieve the patient of every relic of disease.

In all disorders involving the nervous system, electricity is an excellent substitute for popular anodynes. It has been the general custom of the medical profession to resort to stupefying narcotics to allay nervous irritability, which unquestionably produce temporary relief, but, as certainly, ultimate injury. I may truly say that I have always found electricity to be eminently a *nerve medicine*, yield ing timely relief and no unwelcome reactory results.

Convinced of its anodyne and nerve-regulating powers, I set myself at work in the spring of 1856 to see if I could not devise means for imparting an electric property to vegetable medicines, so as to enable me to give my patients at a distance, not possessing electrical apparatus, the advantages of electrical treatment. My experiments happily proved successful, and the magneto-electric property which I am enabled to impart to medicines, assimilates most charmingly with the nervous fluids, regulating their circulation, assuaging pain, and invigorating the whole nervous system from the brain and spine through all the nervous ramifications, while at the same time the original properties of the compounds are retained, and work thoroughly in the blood, casting out impurities, and regulating the action of the secreting organs. In many cases the magnetic property of medicines thus prepared, is far more beneficial than that derived from the direct application of the electro-magnetic machine, by the most skillful operator. With this valuable assistant I have successfully treated, during the past year, over fifteen hundred invalids, at a distance, laboring under difficult chronic diseases, whose faces I have never seen.

In injuries resulting from accident, electricity, skillfully applied, often cures without the aid of other remedies. The Christian Age relates an interesting case of a French officer, who, while making a reconnoisance near Sebastopol, during the hostilities between Russia and the allied powers of England, France and Turkey, was knocked down by the wind of a cannon ball, the shock of which was so severe as to cause paralysis of his tongue, so that he could neither move it nor speak. Obtaining leave of absence, he returned to Marseilles, and placed himself under electrical treatment. After a few applications he could move his tongue with more facility, and, at length, after an unusually powerful shock, his speech was fully restored to him. I might give several instances of nearly equal interest which have occurred in my own practice, exhibiting the curative power of electricity in difficulties arising from accidental causes, but this one will suffice. With a few brief quotations from celebrated writers on therapeutic electricity, who testify to its value as an adjunctive remedial agent, I will conclude this essay:

"Electricity," (says Matteucci,) "is the only irritant which can excite, at one time, sensation, and, at another, contraction, according to the direction in which it traverses a nerve."

"Says Golding Bird, "It is the only direct emmenagogue which the experience of our profession has furnished. I do not think I

have ever known it fail to excite menstruation, where the uterus was capable of performing this office."

Dr. Philips remarks that in cases "where there is a failure in the secreting power of the liver, or a defective action of the gall tubes, I have repeatedly seen from galvanism, the same effect on the biliary system which arises from calomel; a copious bilious discharge from the bowels, coming on a few hours after the employment of galvanism."

"The beneficial effects of galvanism," says Sturgeon, "in asthma and bilious complaints, have several times come under my notice."

"Mr. Cole, house-surgeon to the Worcester Infirmary," according to the Dublin Medical Journal, "informed Dr. Philips that no other means employed there have been equally efficacious in relieving asthma, as galvanism."

The same paper observes that "Dr. Marcus reports several instances of the successful application of galvanism in the great hospital of Bamberg. One was a case of paralysis of the arm, in which a complete cure was effected. Another was one of violent headache after a remittent fever, which could not be subdued by any medical treatment."

"The same reason," (says Smee) "for which electricity is valuable in amenorrhœa, might lead us to expect that it would tend to rectify the state of barrenness in the female; for, by causing it to act directly upon the uterus, it is calculated to increase the supply of blood, and thus remedy the deficit." I might here remark that I have been successful in curing several cases of barrenness, of many years standing, by the application of electricity, aided by other remedies.

"One of the most important and curious of the physiological properties of the galvanic influence," says M. Donavan, "is its power over the peristaltic motion of the intestinal canal, and the consequent evacuation of the fæces. The power over the peristaltic motion, denied by Volta, was, I believe, first observed by Grapengiesser; but the resulting effects were discovered by M. Le Roy d'Eliolle."

"Costiveness in the bowels," says Sturgeon, "however obstinately it may resist the usual remedies, very soon yields to the galvanic treatment; and by a similar process, constipations generally may readily be vanquished."

"In disease of the eye," says Donavan, "the application of galvanism has been of the greatest service; there are many cases of cure on record."

The experience of many others might be added, equally commendatory of the therapeutic power of electricity; but as my object in making these quotations is merely to show what many eminent physicians, *of the old school*, across the Atlantic. think of it. these are sufficient.

WATER.

In all ages of the world, and in all nations, civilized and barbarous, water has ever been held in high estimation as a remedial agent. Hippocrates, Pindar, Thales, Virgil, Pliny, Galen, Charlemagne, Hahnemann, Priesnitz, Wesley, and all distinguished philosophers, physicians and theologians, ancient and modern, have extolled its virtues. It was Priesnitz who made it a "one-cure-all." He was the first to open a "Water Cure." Priesnitz was great, but Priesnitz was an *enthusiast.* Still his enthusiasm was the result of extraordinary success, compared with the medical exploits of the Allopathic profession with which his rural abode was surrounded. His Hydropathy cured thousands—hundreds managed to survive the barbarities of Allopathy. He killed a few—Allopathy slaughtered daily more than Priesnitz healed. The zeal of a military chieftain heightens with the number he slays; that of a medical practitioner with the number he keeps alive. Is it strange that Priesnitz was an enthusiast?

Yet, the establishment of the school called Hydropathy was an error. Water is *not* an infallible remedy, and less so in the hands of the disciples of Priesnitz than in those of the great founder himself. The latter was naturally gifted with peculiar skill in the application of water, which characteristic exhibited itself in the juvenility of the son of the Graefenberg farmer. But a medical education would have materially modified his "one-ideaism." Priesnitz did not possess that. Had he explored the green fields and forests of nature, as well as laved in her limpid waters, he would have been less exclusive in his choice of remedies, and his practice and that of his imitators, would have been more uniformly successful. Many hydropathic physicians are beginning to see what their prototype, in his blind enthusiasm, failed to perceive, and already mild medication and therapeutic electricity are being introduced in water-cure establishments to some extent.

While I do not deny the contracting and relaxing influences of water, according to its temperature, and the beneficial effects of each

of these in appropriate cases, I maintain that the real philosophy of "water-cure" is based on electrical principles. Water possesses a great amount of electricity. *If the blood of an individual contains its natural supply of iron, it attracts the electricity from the water, thereby rendering the body of the invalid in an electrically positive condition compared with the atmosphere. As soon, then, as the application has been made, an active radiation of electricity from the system takes place which accelerates the escape of effete matter, and renders the pores, skin and other organs more active.* It is therefore diametrically wrong to resort to water in the treatment of invalids with thin blood. Did hydropathists, generally, understand this philosophy, "water-cure" would not prove so often *water-kill.* My theory is indirectly supported by that of Priesnitz. According to Claridge, he held:

1st. "That by the hydropathic treatment, the bad juices are brought to and discharged by, the skin."

2d. "That a new circulation is given to the diseased or inactive organs, and better juices infused into them."

3d. "That all the functions of the body are brought into a normal state, not by operating upon any particular function, but upon the whole."

Now when we consider that whatever moves has a motive power, and that "better juices" cannot enter, or "bad juices" depart from the system, without some active agent to move them, my theory is not only rendered plausible, but probable. Thus, when the electricity of the water enters the body, water must necessarily go with it, because its relations are such with that element that it forms a part of it; and in this way better juices are infused. When the application of water ceases, the body being electrified by that fluid and rendered strongly positive, compared with the surrounding atmosphere, active electrical radiation ensues, carrying with it the "bad juices" which nature, in its instinctive wisdom, is ever ready to dispose of when opportunity is presented.

The great amount of electricity possessed by water has been demonstrated by Prof. Faraday, and is now generally admitted by chemists. His experiments show that the quantity of electricity set free by the decomposition of ten drops of water is actually greater than exists in the most vivid flash of lightning.

In bloodless patients, tepid and hot baths are injurious, because the blood does not possess the attractive property or iron to draw in

the electricity of the water, while its temperature relaxes the tissues and leaves the system open to the ingress and progress of disease. It is safe to say that a majority of invalids suffering with debility, nervousness, consumption and predisposition to apoplexy, should not receive full hydropathic treatment. In many cases of these descriptions it should not be administered at all, and in most only sparingly and with great discrimination.

Satisfied of the virtues of water as an *auxiliary* agent, I have resorted to it extensively in my practice, and, by exercising the most careful discrimination, with uniform success. Simple and abundant as this remedy is, it is something which cannot be trifled with. Many a good man and woman has unwittingly committed suicide with water. Hydropathy is not as popular to-day as it was ten years ago, on this account. It is a great pity that mankind is disposed to abuse and misuse almost every good thing.

"The universal application of water," says Prof Cook, "may be safely called in question. The assertion that it is equally efficacious in any and every form of disease is so at variance with past experience in single remedies, that it has induced the greater portion of practitioners to discard it at once. The success of hydropaths is undoubtedly great; but it is well known that a prominent feature in their institutions is a rigid adherence to hygiene. Wholesome diet, fresh air, exercise, mental relaxation, etc., which, of themselves, have a very great effect in restoring the patient, are more strictly enjoined by them than by any other school; and as most practitioners are too inattentive to these matters, the hydropaths have the advantage on this point. Besides, without any disparagement to water-cures, it must be remembered that those cases in which water fails are not reported, any more than the failures of other schools. Many cases have occurred under my own observation, in which hydropathy, as applied in one of the best establishments in this State, had failed, but which subsequently yielded, and were cured by botanical remedies. This goes strongly to convince me that it is not universally applicable."

"In union there is strength," is a political proverb of universal application. The Botanics, Hydropaths and Electropaths should coalesce, under the name of the Utilitarian practice. Such a coalition could not fail to defeat disease in every aspect which it presents itself. By a discriminate application of one or all, according to the indications of a case, many valuable lives might be daily saved which

are now lost in consequence of bigoted medical "one-ideaism." I have assiduously pursued all these systems in my practice, and would rather abandon my profession than to discontinue any one of them, although I must candidly confess that I would rather give up Hydropathy than vegetable medication and therapeutic electricity, were I obliged to remove one plank from my medical platform. If forced to drop one, the choice would rest between water and electricity, and I am thoroughly convinced that the latter can be made far more conducive to the requirements of the invalid than the former. My attention is wholly devoted to the treatment of chronic diseases, and in such my experience demonstrates that electricity can be made more available. In the treatment of acute disease, particularly fevers, water may be, and, without doubt is, preferable.

MEDICATED INHALATION.

Having found this system of treating pulmonary diseases a valuable *assistant* in my practice, I should not close this chapter on remedies without, at least, an allusion to it. I have heard much said of curing lung and bronchial diseases by medicated inhalation. Allow me to make the bold assertion that a disease of the pulmonary organs was never *radically cured* by medicated inhalation alone.

In support of this view, I have only to invite the attention of the reader to a consideration of the causes which lead to pulmonary and bronchial complaints. It is well known that an abscess under the arm, tubercles on the skin, and ulcers on the limbs, denote an impure condition of the blood, from which they all arise. Is it not, then, self-evident that any of these difficulties located in the delicate membranes of the respiratory organs give evidence of and spring from the same cause? Is there an Æsculapian wiseacre who can command enough sophism to seemingly disprove this?

The blood is not impartial in the distribution of its impurities, but invariably sends them to that part of the system which has the least power to resist them. Hence, persons having a scrofulous or canker humor in the blood, and at the same time a predisposition to weak lungs, the worst form of ulcerous or tuberculous consumption is in time developed. The question then arises, will medicated inhalation cleanse the blood of its impurities? If not, how can a radical cure be effected?

There are other forms of consumption, such as those induced by amenorrhœa, thin blood, solidification of the lungs, etc. The first,

of course, is peculiar only to females. Will inhalation remove the cause from which springs the effect? The second arises from general debility, and a diseased action of the liver and kidneys. Will inhalation arouse the lethargic functions of the system, and restore to the blood its strength and nutrition? The third either grows out of one of the different forms of consumption first considered, or else from a weakness of the nerve or electric force, which expands and contracts the air vesicles and moves the diaphragm. The medicated vapors inhaled must therefore possess miraculous powers in the restoration of the tone of the vascular and nervous system, or a cure cannot be effected.

Consumptive invalids, who resort to inhalation alone for relief, as well as physicians who practice on that system, lose sight of one important fact—i. e., *consumption of the lungs and bronchitis are only the* EFFECTS *of other derangements of the system.*

It is unnecessary to occupy space with an argument to show how certainly a convalescent consumptive must relapse when *effects* are treated and *causes* left undisturbed. If this essay should happen to meet the eye of any one who *thinks* he has been cured of consumption or bronchitis by inhalation, let me assure him that either his physician was mistaken in the diagnosis of his disease, or his old complaint still lurks in his system, ready at any favorable time, when exposure occurs, to return with redoubled virulence.

I prescribe inhaling remedies in pulmonary and bronchial difficulties, for the same reason I do washes and ointments in the management of cutaneous diseases. Local applications are often necessary, while the slow but sure work of purification is going on internally; but to rely on them exclusively, is presumptuous, to say the least. I often find it necessary to summon Electropathy to my aid in battling the hydra-headed disease—consumption. I *always* prescribe invigorating and purifying blood medicines in addition to medicated inhalation, and should as soon think of dipping out the Croton river without cutting off its tributaries, as to attempt to cure consumption without them.

The *successful* physician does not ride "one hobby." One-ideaism in medical practice is perfectly incompatible with uniform success. Then, too, different constitutions require different remedies. A "one-cure-all" is an impossibility. One hat will not fit every body's head—one coat every body's back, nor one circumscribed medical system every body's disease. The medical profession generally must

mount a more comprehensive platform. Let us have a Utilitarian School, in which all approved systems shall be united, and in which all remedial agents shall be weighed in the scale of utility, and admitted or rejected, according to their merits or demerits. The world is full of "pathies," not one of which is sufficient in itself to meet the exigencies of diseased mankind.

CHAPTER IV.

Doctors "Jacks at all Trades."

THERE can be no greater folly in a physician than to attempt, within the brief period of his mundane existence, to acquire skill in the treatment of *all* diseases to which mankind is subject. A large majority of the members of the medical profession are like the versatile mechanic, who is said to be a "jack at all trades and good in none." Any man who tasks his ingenuity by trying to unite in himself the house-carpenter, the joiner, the cabinet-maker, the carver, the pump-maker, the ship-carpenter and chair-maker, may generally be set down as a man of extensive pretensions and meagre executive abilities. The professional man who assumes to combine in himself the politician, the pedagogue, the editor, the pettifogger, the domine, etc., may possibly exhibit some little tact in all, but he will as surely excel in none. So with the physician who would be a skillful surgeon, an accomplished accoucheur and a successful doctor, in diseases both acute and chronic; he divides his attention to such a degree as to render him unskillful in the performance of the duties of either.

There ought at least to be *three* distinct branches in the medical profession. The surgeon, the physician in acute and the physician in chronic diseases. These are three different vocations, as dissimilar as house building, cabinet making and ship building. Surely surgery is totally unlike prescribing for the sick, and every reader must perceive the striking difference between an acute and a chronic disease. In an electrical point of view the two latter are perfect antipodes, acute diseases arising from a *positive*, and chronic diseases from a *negative*, condition of the system. Thus acute diseases are characterized by external heat, while chronic diseases are almost invariably attended with external coldness. To be successful, the treatment of each must be perfectly unlike, because they arise from entirely dissimilar conditions of the system.

When an acute disease takes the chronic form it is the result of *reaction*, not of *continuation*, as many suppose. I am aware that it

derives its name from the latter, chronic disease signifying, according to the lexicographer, one which is inveterate or of long duration, in distinction from an acute disease, which speedily terminates. But what I mean to say is, that a chronic disease following an acute attack is not a continuation of the latter, but an opposite disease, resulting from a reaction in the system. Frequently chronic diseases are preceded by no acute attack, the condition of the system favoring the development arising from hereditary predisposition, from exposures to atmospheric changes or to dampness, acting upon diseased blood or nervous disturbances.

Now, why should the physician be a jack at all trades any more than the mechanic, the lawyer, the school-teacher or merchant. Look at the various departments in mercantile pursuits. The jeweler does not traffic in dry goods, nor the dry goods merchant in hardware, nor the grocer in watches, nor the furniture dealer in tin-ware, nor the crockery merchant in sugar. Occasionally these branches are united in sparsely settled villages, and in such localities a physician might be excused for playing the surgeon and doctor in acute diseases, but a person residing in a small place suffering with a chronic complaint can avail himself of a city physician who devotes his entire attention to such disorders, and the village doctor should not tamper with this class of diseases if he desires to be successful and to do injury to no one.

In large towns there is not a shadow of an excuse for a physician to practice all branches of his profession, to the manifest detriment of a large portion of his patrons in most cases, and the injury of all in many. Every physician knows or ought to know in what class of diseases he is most successful and in the treatment of which his mental capacities and acquirements best qualify him, and to this particular class he should devote his undivided attention, and not, like a patent medicine, proclaim himself an infallible cure for every disease.

With such a classification as I propose, the man who wants a limb amputated would go to the surgeon whose daily experience qua ifies him to do his work skillfully; one with a fever would send for a doctor whose experience is daily ripened in his exclusive attendance upon the calls of sufferers with acute diseases; one with consumption, or other lingering disease, would call upon a physician whose attention is solely given to the treatment of chronic disorders, in the constant management of which he is daily acquiring additional skill.

In trying to cover the whole ground, a physician cannot possibly acquire superior skill before his locks are hoary and his energies paralyzed with age, and then, to use a common expression, "he is too lazy" to put to active use the acquirements which long years of study and experience have bestowed on him. How many, too, the old man has killed in preparing himself for skill and eminence, which he cannot bequeath to any younger relative or friend.

What nonsense then for men to attempt to grasp knowledge and skill in all branches of the healing art, blundering along through years of unproficiency, dodging from the operating chair of a surgeon to the sick bed of a feverish patient, and from the accouchment bed to an examination of, and prescription for, a chronic disease of the lungs, liver, kidneys, stomach or something else.

So far as I am concerned, I wish it distinctly understood that I have nothing to do with surgery or acute diseases, my whole study and practice being solely devoted to complaints of a chronic nature. In these I claim to be proficient, and stand ready to compare the results of my practice with that of any *ten* physicians, put together, who essay to treat all classes of disease.

CHAPTER V.

The Curability of Chronic Diseases and their Successful Treatment.

In this chapter the author will briefly advert to those diseases which commonly take on the chronic form, and to which his professional labors have been exclusively devoted. Many of the diseases hereinafter mentioned have been pronounced incurable by the medical faculty, whose "jack at all trade" propensities have prevented them from acquiring sufficient knowledge of their pathology, to treat them with success.

It is not expected that one man can know every thing, and consequently it is not surprising that the physician who may be successful in fever and other diseases of an acute nature, may be certain death to every consumptive or other invalid with a chronic disease who may apply to him for aid. A physician is criminally culpable who takes in charge a case which his past experience proves he cannot cure, or one which he pronounces incurable. An invalid should always remember that when a physician says a disease is incurable, he bases the assertion on his own experience. Therefore, if a doctor tells any one of my readers that he or she has a complaint which cannot be cured—only "patched up"—shun him as you would a dose of mercury, and apply to some honest and skillful physician who thinks he can cure you.

CONSUMPTION

Of the Lungs has been put down by a majority of physicians as an incurable disease. So any one might, with considerable propriety, suppose from the published statistics, which exhibit the astounding fact that one-fourth of all the deaths daily occurring in North America, France and England, when no wide-spread epidemic prevails, are produced by diseases of the lungs. But I boldly affirm that this extensive mortality among consumptives is greatly owing to the ignorance of physicians, particularly those of the old school, in the treatment of pulmonary complaints, which are vaguely understood by far the largest share of the medical profession on both continents.

Now, without wasting time and space with an investigation of old fogy theories, as held by a majority of medical writers, I assert that tubercles in the lungs are an *inverted eruption*, or in other words, consist in the presence of humors in the delicate membrane lining the air vesicles, instead of the external skin. This view is sustained by the experience of hundreds who have been my patients with tuberculous difficulties, and whose pulmonary attacks dated with the disappearance of humors or ulcers from the cuticle During the past year, I had one case whose lung trouble commenced immediately after a suppurating ulcer on the knee had been healed up; two others who were taken with consumptive symptoms as soon as salt rheum, with which they had been for years troubled, struck in; five more, whose lungs became affected immediately on the disappearance of a humor on the chest. In all these, their family physicians had pronounced their diseases tuberculous consumption. Before effecting a cure in two of these cases, the cutaneous difficulty reappeared, and as soon as it did so, the lungs were instantly relieved.

Many persons, it is true, have tuberculous lungs who have never had a blotch or pimple on the skin. In these cases the humors in the blood are predisposed to attack the mucous membrane rather than the cuticle. Many invalids think their blood pure, because they have ever been free from any external signs of humor. Such persons, if affected with blood impurities, have the most to fear from tubercles and ulcers in the lungs, because of the persistency of the blood to deposit its impurities on the internal linings.

It is held by many that the cause of this disease is an abortive or perverted nutrition tubercle being produced instead of true tissue, and that the faulty nutrition, which results in tubercle, is caused by a deficiency of oily substances! On the strength of this presumption, Dr. Hughes Bennett, some years ago, introduced cod liver oil as a remedy. If there is nothing better to sustain the correctness of this theory than the results of the remedy employed, no argument is required to exhibit its fallacy. Cod liver oil has been extensively resorted to by the medical profession in this country and Europe for the past ten or fifteen years, and with what success the public is too well aware to make statistics necessary. That oleaginous food and remedies are good, provided the patient is not dyspeptic as well as consumptive, there can be no doubt, because they furnish nutriment to the failing adipose tissue. But that cod liver oil leads all other oleaginous remedies, facts thus far fail to demonstrate.

A good story is related by the Lavaca Herald of a German residing in York City, Penn., who recently, while suffering with a pulmonary attack, sent for one of the village doctors. In a short time the doctor called on him, prescribed two bottles of cod-liver oil, and receiving his fee of $8, was told by the German, who disliked the size of the bill, that he need not come again. The German, who, by the by, had not heard the doctor's prescription very well, supposed he could get the oil and treat himself. The doctor saw no more of his patient for some time; but one day, riding past the residence of the German, he was pleased to see him out in the garden digging lustily. The case seemed such a proof of the virtues of cod liver that he stopped to make more particular inquiries about it. "You seem to be getting well," said he to the German. "Yaw, I ish vell." "You took as much oil as I told you," queried the doctor. "Oh, yah, I have used more as four gallons of the dog-liver oil." "The what?" queried the astonished doctor. "De dog-liver oil dat you said I shall take. I have killed most every fat little dog I could catch, and the dog liver oil has cured me. It is a great medicine, dat dog-liver oil!" The doctor had nothing to say, but rode quickly away, and noted in his memorandum book that consumption might be as readily cured with dog-liver as cod-liver oil. He might also have added in his diary that lamp oil is as good as cod liver oil. While in New Bedford, (from which port a great number of whaling vessels are annually fitted out) some years ago, I was informed by some of the captains (they are all captains there!) that immense quantities of pure sperm oil were annually supplied to druggists throughout the United States for the cod liver oil trade!

Without resorting to any obnoxious oils like those just mentioned, any consumptive patient can obtain all the oleaginous matter necessary to supply the waste of his system, by eating those articles of wholesome food like roast and boiled beef, and boiled mutton, while his medication should be such as to deprive his blood of its impurities.

Dyspepsia is a very common companion of diseased lungs, and in such cases cod liver oil, or even fat meats, are loathsome to the stomach. Dr. Pereira remarks that "fixed oil or fat is more difficult of digestion and more obnoxious to the stomach than any other alimentary principle." "Indeed," adds he, "in some more or less obvious or concealed form, I believe it will be found the offending ingredient in nine-tenths of the dishes which disturb weak stomachs."

Here, then, cod liver oil not only ceases to be a remedy, but becomes an injurious medicine. What are cod liver oil doctors going to do in such an extremity?

Two-thirds of the consumptives who apply to me for relief have a complication of diseases, including dyspepsia; still, I cure them, and, too, after they have been pretty nearly greased to death by other doctors. Do you ask how I do it? I reply, by cleansing the blood, meanwhile resorting to such *local* remedies as the nature of cases demand, and impressing on patients the necessity of air and exercise.

Fresh air is an indispensable aid in curing consumption. "It is wonderful," remarks Dr. Hall, "how afraid consumptive people are of fresh air, the very thing that would cure them, the only obstacle to a cure being that they do not get enough of it; and yet what infinite pains they take to avoid breathing it, especially if it is cold, when it is known that the colder the air is the purer it must be; yet if people cannot get to a hot climate, they will make an artificial one, and imprison themselves for a whole winter in a warm room, with a temperature not varying ten degrees in six months; all such people die, and yet we follow in their footsteps. If I were seriously ill of consumption, I would live out of doors day and night, except it was raining or mid-winter, then I would sleep in an unplastered log-house."

It is quite common for the faculty to recommend consumptive invalids to go South, after they have made some good round fees out of them! Probably this is because they want to get them off their list of patients. They get tired of hearing them say—"I'm no better, doctor." Cold air is just as good for consumptives as warm, provided it is *dry*. This is the important consideration. There is almost invariably an excess of mucus in lung diseases, which causes profuse expectoration. A dry and negative atmosphere excites active electrical radiation from the system, which carries off the internal moisture, rendering the mucous membrane less relaxed and the mucous secretions less copious. I would sooner go to Maine than to Florida if I had tuberculous lungs, although I would advise patients to go where they please, only taking care to avoid damp localities.

Change of scene and climate is good for consumption, but the South is no better than many northern climates. Some parts of Wisconsin are said to have a superior climate for lung diseases. I have been told that horses with heaves soon recover when driven to the central part of that state. The theory that tropical climates

favor the recovery of pulmonary invalids, is nearly exploded. The soil of Key West is enriched with the bones of deceased consumptives.

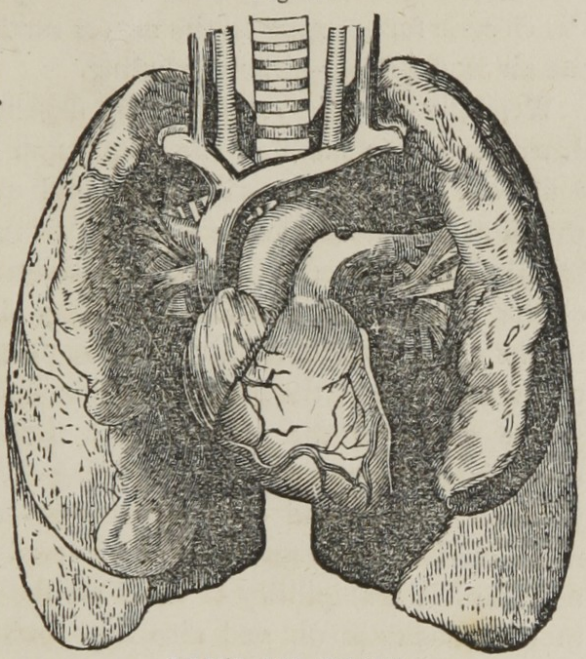
Even when tubercles in the lungs have so far progressed as to induce profuse bleeding, with proper treatment, the patient may generally be restored. Men often survive the severest accidents to the lungs, and live to a good old age. Who has not heard of the hale old Indian chief, O'Brian Skadogh, who received a bayonet wound in the right lung during the revolutionary war, while fighting under General Lafayette? At the present writing he is a strong, erect and lofty man of 104 years! General Shields, it will be remembered, received a severe wound in one of his lungs in the Mexican war, and entirely recovered If such lacerations can be survived when nature is attacked without warning, there is certainly every chance to cure bleeding lungs, gradually induced by disease, when nature is watching the affected parts and assisting every good remedy employed for mending a breach.

It is not a little curious that the pulmonary artery and vein, when approached by tubercles, contract and sometimes fill up with a fibrous substance, so as to prevent or stop hemorrhage. But when the bayonet, the sword or the bullet suddenly pierces any part of the lungs, nature for the moment is overpowered, and it is almost surprising how she ever recovers herself in season to heal the wounded part. When, therefore, nature exhibits such miraculous power to save lacerated lungs, let not the consumptive despond because, perchance, he raises blood. My success in treating pulmonary hemorrhage, produced either by tubercle or suppressed menstruation, has established the curableness of this disease beyond a doubt.

The entire destruction of one lung by tubercles or ulceration need not excite serious apprehension if the invalid is so situated as to be able to avail himself of superior medical skill. Persons often live to a good old age with only one lung. I have observed in cases of this kind which I have treated, that, after the progress of the disease has been stopped and the tubercles of the remaining lung removed, the latter gradually expands and sometimes almost fills the cavity created by the one which has decayed or dried up. I have now in my mind one case, in particular, illustrative of this remark; a lady, whose case was given up as hopeless by a score or more of physicians, but who has been kindly spared to her husband and children through the instrumentality of my treatment. In her case

the left lung had been entirely consumed, and the destructive disease had made considerable inroad on her right lung. The last examination which I had the pleasure of making showed that the right lung had so expanded as to fill nearly one half the cavity occasioned by the destruction of the left. The reason of this is obvious. The right lung having to perform the same amount of labor intended for two, the air vesicles by degrees enlarged, and with their expansion the lobes extended their increased dimensions into the vacant chamber of the left chest.

Fig. 25.



LUNGS AND HEART.

Accounts are given in the records of some of the French hospitals, of old people who have died of other than pulmonary diseases, and whose chests, on being opened, exhibited the fact that they had lived many years with only one lung. Healed cavities have also been found in the lungs of such subjects, showing that either nature or the physician had cured them of consumption.

The right lung having three lobes, while the left has only two, as exhibited in Fig. 25, renders recovery more probable in cases having consumption in the left lung, although I have cured cases in which the right was nearly or quite destroyed. But the patient who loses the latter is decidedly in a more precarious condition, and the prospects of a cure are less flattering, because the blood is insufficiently electrified by the smaller quantity of air received by the left lung.

Cheerfulness and freedom from mental excitement are essential to the recovery of a consumptive patient. This fact becomes apparent when the philosophy of respiration is explained. It is held by all medical writers whose books I have read, that respiration is wholly produced by the upward and downward motion of the diaphragm, which divides the stomach from the lungs. This is only true in part. Besides the movements of the diaphragm, I am convinced by experi-

ments, that the air vesicles permeated as they are by minute nerves, have a contractive and expansive power in themselves, so that when the diaphragm is in any way disabled or prevented from performing its functions freely, the lungs can in a measure supply themselves with air. The unprofessional reader must understand that the lungs are not expanded by the air entering into them. The diaphragm falls and the air vesicles are opened by the same electric force which is employed by the brain in producing the pulsations of the heart. A vacuum created and the air rushes in—this is the act of inhaling. The diaphragm contracted and drawn up, and the vesicles closed by the electric force acting on the nerves ramifying through these organs, the air is expelled—this is exhaling.

Were the human system wholly dependent upon the upward and downward movement of the diaphragm for respiration, ladies who compress their chests with stays and other close fitting garments would be unable to breathe at all. It is true that such foolish people breathe but little, and that the air penetrates only the upper portion of the lungs. But what little air they do inhale is chiefly obtained by the expansion of the air vesicles, nearly or quite independent of the movements of the diaphragm which becomes literally paralyzed.

The action of the nervo-electric fluids on the nerves ramifying through the respiratory organs, being the motive power which keeps them in motion, and the brain being the reservoir from which the nervo-electric fluids are derived, the reader can readily perceive how necessary is tranquillity of mind for the promotion of convalescence in the consumptive, and also how pulmonary difficulties may be induced by grief and trouble.

Partial paralysis of the lungs may occur when the mind is excessively harrassed. I have had many cases of this kind, and have found electricity of the greatest value in treating it. Electricity is also good to open up a communication between the brain and respiratory organs, when humors of the blood have collected about the nerves connecting the two, and almost intercepted the motive power. Where there are interruptions of this kind, electricity makes up in quantity what it lacks in intensity. Vital electricity is undoubtedly more intense than any which can be artificially produced; but as quantity can be obtained to any desirable extent by various electrical contrivances, it often surpasses intensity in effectiveness.

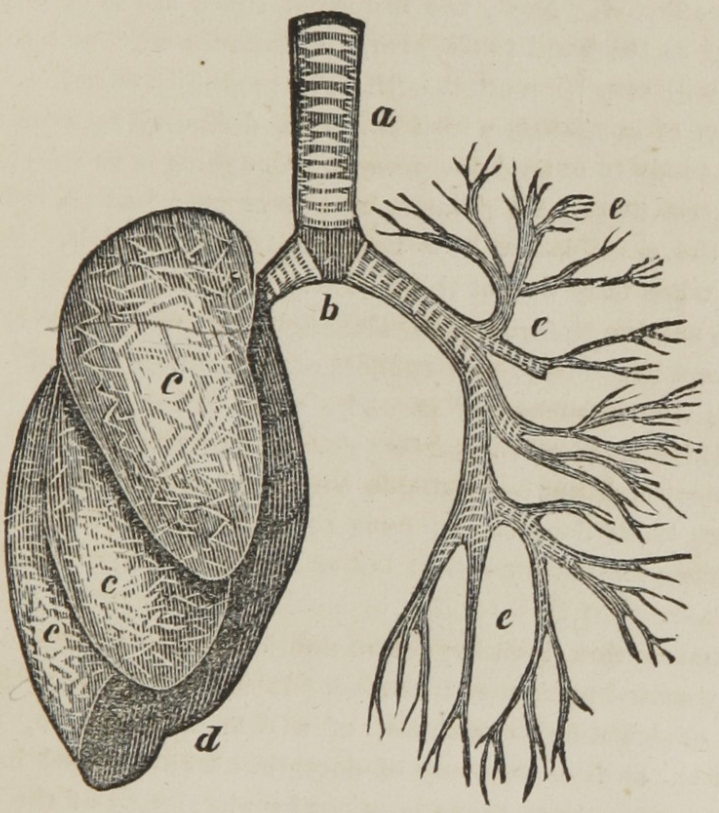
With the advancement which has already been made in the treat ment of consumption of the lungs, no one suffering with this disease

should for a moment entertain the idea that his or her case is a hopeless one. No invalid, however dangerously affected with tubercle, ulcer, or other diseases of the lungs, would think of relinquishing hope if once permitted to converse with hundreds whom I have cured. (For treatment see page 146.)

CHRONIC BRONCHITIS

Is often an obstinate disease in the hands of those physicians who have had little experience in its treatment, and who have learned little of its nature and origin. The first cause of this disease always lies

Fig. 26.



THE BRONCHIAL TUBES AND RIGHT LUNG.

a, the windpipe—*b*, its division into bronchial tubes—*c e e*, their ramifications in the left lung, which has only two lobes—*c c c*, the three lobes of the right lung.

in impure blood, and is developed by a common cold, catarrh or fever. In the acute form of the disease the cough is usually dry, showing a preponderance of the positive fluids, but when it becomes chronic, excessive expectoration ensues, evincing an entire inversion of the disease and a preponderance of the negative, alkaline fluids

For this reason the same medicines which may be remedies in acute Bronchitis, may be useless or injurious in the chronic form of the disease.

Bronchitis, unless cured in season, often leads to diseases of the lungs. As will be seen in Fig. 26, the bronchial tubes are extensively distributed in the lungs, for the purpose of conducting the air to their vesicles, and when inflammation exists in the former it is perfectly natural for it to extend to the latter. Every person has doubtless noticed how inflammation in the hand, produced by sores or accidental causes, will frequently communicate to the arm and gradually extend towards the shoulder, till the whole arm becomes affected. Now, the bronchial tubes are as closely allied to the lungs as the hand to the arm, and inflammation or humor affecting one will very soon affect both unless speedily cured.

The act of coughing, which can with difficulty be avoided by the patient, tends to extend the disease. Coughing is an effort of nature to ease irritation. All persons who have ever had an itching eruption of the skin, know how natural it is to scratch. People will scratch when they do not think of it. It seems to be an involuntary effort to subdue the irritation, although it more frequently makes it worse, and the humor and redness of the cuticle spreads over more surface in consequence of it. The same in coughing; the mucous membrane instead of the surface skin being irritable, and the seat of annoyance being unapproachable with the hands or fingers, a sudden discharge of air from the lungs is resorted to, the friction of which administers temporary relief, but as surely increases the latitude of the disease. For this reason, bronchitis should never be neglected. It is consumption in embryo, and many times as obstinate to cure as a deeply seated pulmonary disease. It is not long since that I cured a case of bleeding bronchitis, of a desperate nature, which had resisted the skill of an army of doctors. I have cured hundreds of obstinate cases, given up as hopeless by physicians of the old school, who generally resort to some pernicious local treatment, which, in the majority of cases, produces an aggravation of the difficulty.

There is nothing better calculated to make bronchitis perpetual and obstinate than the habit of bundling up the throat. By this practice the throat is rendered tender and sensitive, and susceptible to colds on the least exposure. When a boy, I was constantly afflicted with this disease, and falling into the same error that most people do who are troubled with the complaint, I never stepped out of doors with-

out winding a great woolen comforter two or three times around my neck. One doctor after another was applied to by my parents, one dosing me with calomel and another swabbing my throat with nitrate of silver (!) until I was nearly doctored into my grave. As I became older, and began to exercise my own judgment, I resorted to simpler remedies, of my own invention, with partial relief; still continuing, however, the foolish practice of enveloping my neck in woolen. But at the age of about fourteen, I determined to make my neck tough, like my face, and not only throw off woolen but also cravat, and turn down my collar on a level with my collar-bone. Soon every vestige of the disease departed, and I have never had a bronchial attack since, though I have sufficiently backslided to resume the neck-cloth.

No one in the habit of bundling the throat can, at all times, avoid exposure when the neck is not guarded. The atmosphere indoors is sometimes as cold as that out, and he who envelopes his throat to his ears in furs or woolen, on stepping out, must keep them on after returning, or a cold is the result.

Neck-cloths in winter should, of course, be discarded gradually, and the neck bathed every morning in cold water. Exposed to the air, the throat becomes no more sensitive than the face or hands, and who, with any frequency, take cold in the latter? Let me not be understood, however, to say that the abandonment of neck-cloths will effect a *cure* in many cases of bronchitis, for, as before stated, the disease originates in an impure condition of the blood, and that must be thoroughly cleansed to effect a radical cure. The exposure of the neck tends to remove *effects* but not *causes*, and must only be regarded as an aid in the treatment of difficult bronchitis. [For treatment see page 146.]

CHRONIC LARYNGITIS.

This disease has sometimes been called "Clergymen's Sore Throat," in consequence of its prevalence among ministers of the gospel. While clergymen appear more subject to it than most others, it is nevertheless a common disease among members of the legal profession, public singers, school teachers, lecturers, auctioneers and others who are obliged to exercise their vocal organs to a considerable extent.

Laryngitis is a disease of the blood, as much as consumption of the lungs, bronchitis, and cutaneous eruptions. The blood, loaded with

impurities, is ever ready to deposit them where there is irritation, or hereditary weakness. Hence, in those having weak lungs, the humors go to the air vesicles—in those susceptible to colds and coughs, to the bronchial tubes—in those exercising the vocal organs to a great degree, to the larynx. This disease is characterized with hoarseness, weakness of voice, dry cough, and sometimes with pains and soreness about the throat.

In talking, public speaking and singing, the air, expelled with such vehemence, has a frictional effect upon the mucous membrane, the same as rubbing the finger on the cuticle produces friction of the skin. This friction produces heat,—the heat attracts the humorous properties of the blood,—the presence of these produce irritation,—irritation induces inflammation,—and inflammation often causes ulceration.

Unless timely cured, laryngitis usually ultimates in consumption. The inflammation and perhaps ulceration of the mucous membrane in the throat, creep insidiously down the air passages into the lungs, and continue their ravages in the delicate linings of those organs.

Laryngitis sometimes occurs in children, induced by attacks of erysipelas, measles, small pox, canker, or other blood diseases. From whatever immediate cause the disease may arise, it should be skillfully treated, and not trusted to the care of cauterizing doctors who treat the body as if it were responsible for its disorders, and as if they expected to punish disease out of the system. Mild and nutritive constitutional treatment must be adopted the same as in consumption. I have met with a great number of cases of this disease in my practice, and have ever found them ready to yield to common-sense remedies. Local applications, I make bold to assert, never *cured* a case of this disease. (For treatment, see page 146.)

ASTHMA

Has generally been regarded incurable by doctors of all schools, and the results attending the treatment of the complaint, strikingly corroborate the opinion they hold. Incorrect views concerning the true pathology of the disease are the foundation of their ill success in treating it. "To know a disease is more than half its cure"

Asthma is of two kinds: humid or catarrhal and dry or spasmodic. In the former there is usually an excessive secretion of mucus and expectoration; in the latter none. *In the first form the muscular*

fibres of the bronchia and air vesicles are relaxed, and do not contract; in the last they are contracted and refuse dilation. Hence expiration is difficult in one case and inspiration in the other, both of which forms produce the same result, viz: difficult breathing.

In humid asthma the invalid is in a slightly negative condition compared with the atmosphere, in consequence of which the fluids migrate to the mucous membrane; in dry asthma, in a condition too positive, by which electrical radiation and the movement of the fluids to the surface, is too excessive, (See page 23). The two forms are consequently antipodes, and a climate which is congenial to one is painful to the other. A damp and excessively electrical atmosphere, for a person troubled with humid, catarrhal asthma, augments the severity of his complaint, while one troubled with the dry form finds his difficulty less troublesome if not entirely relieved, in damp, rainy weather or in a climate generally humid. On the contrary an invalid with humid or catarrhal asthma, is seldom affected in dry weather or in a bracing atmosphere, and removal to a climate peculiarly dry, often proves a cure. In fact humid and dry asthma are two distinct diseases, as unlike as typhoid fever and consumption, and require entirely different treatment. The notions of one patient that a dry atmosphere suits him best and of another that a damp air seems more congenial to his system, have been generally charged to the imagination of the sufferers, by the doctors, who tell them they are nervous and whimsical. With these incorrect views they treat one form of the disease with the same remedies they employ for the other. It is not strange, then, that asthma is regarded as incurable by old school practitioners.

Asthma invariably results from constitutional disturbances, by which there is either too little or too much electricity generated in the system; in the first instance, producing an excess of the alkaline fluids by a partial stoppage of electrical radiation; and, in the last, producing dryness of the mucous membrane lining the respiratory apparatus, by an unhealthful augmentation of the natural electrical radiation of the fluids. It is plain, therefore, that to effect a cure, the patient must either seek a climate congenial to his abnormal condition, or have such medical treatment as will change it, and render it healthfully conformable to the atmosphere in which he lives. The diet of asthmatic invalids should also be carefully looked to. In humid asthma, a stimulating animal diet should be resorted to; in dry, a light vegetable diet.

During a long practice, and particularly the past three years, I have been remarkably successful in curing asthma, although I candidly confess that I have met with a few cases which baffled my skill; perhaps as many as one in ten. In the treatment of those in which I have been unsuccessful, I have had usually to contend with old age and serious complications. It is useless to deny that asthma of forty or fifty years standing, with the patient on the wrong side of sixty, is a difficult disease to cure. But equally so is any disease with the same disadvantages. If the patient be young, or not passed the meridian of life, a cure can almost invariably be effected. [For treatment see page 146.]

CHRONIC CATARRH

Usually affects the head, fauces and bronchial tubes. It is invariably caused by humorous or inflammatory blood, by which the mucous membrane is made sore or inflamed, producing a copious effusion of viscid matter. If it be produced by scrofula in the blood, it is almost certain to end in consumption, unless speedily cured, because it is impossible to entirely prevent the matter from running down the bronchia into the air vesicles; and such is the excoriating or scalding property of the matter, its contact with the delicate lining of the air cells at once causes irritation, and invites the humorous properties of the blood to deposit therein tubercles and ulcers. Catarrh almost always attends consumption, and frequently leads to it.

As in humid asthma, a catarrhal invalid feels best in dry weather, because active electrical radiation decreases the quantity of the mucous secretions; but as the disease originates in an impure state of the blood, a dry atmosphere will not cure it. To eradicate the *cause*, the blood must be thoroughly cleansed—to remove the effect, local treatment is generally necessary. Catarrh should not be neglected, as it is apt to lead to fatal pulmonary complaints. It is easily cured in its early stages, and not very difficult if of long standing. [For treatment see page 146.]

SCROFULA

Is regarded by many physicians as an incurable disease, and many of the victims of it settle down into the same belief, after having been drugged by a score or more of doctors of diplomatic and charlatanical schools, all to no advantage. Seldom am I applied to by a

scrofulous invalid who has not been an extensive patron of medical men, and whose confidence in the curability of the disease and the skill of physicians has been nearly exhausted by repeated trials of different systems. Under the old school treatment, he is the victim of antiquated dispensatory prescriptions; under the new school, a victim, too often, of absurd experiments. But in justice to the medical men of the new school it should be said, that when cures occur they are the authors of them. I never knew of a case of scrofula being cured by Allopathic treatment, but have met many in which the disease had been made more troublesome and obstinate thereby. Salivation by mercury is almost universally attended with injurious results, and the use of iodine, alkalies, acids, lime water, &c., has proved futile in eradicating the disease, though these prescriptions sometimes act beneficially.

Fig. 27.

THE BODY COVERED WITH SCROFULA

Scrofula is a disease of the blood, and glandular swellings of the neck, goitre, swelled and ulcerated joints, tumefaction, ulceration, tubercles, opthalmy, offensive purulent discharges from the ear, salt rheum, and sometimes spinal diseases, are its manifestations. A most remarkable instance of scrofulous tumefaction was recently given in the Rochester papers, as occurring in Ithica. The sufferer was an orphan boy by the name of Northrop, thirteen or fourteen years of age. He had been subject to tenderness and disease of the hip-joint, which, when he arrived at the age of two years, resulted in extensive tumefaction. Three years later an abscess formed, and finally the disease caused the dislocation of the hip-joint. For four months the patient had been unable to move in bed; abscesses formed in the abdomen, through which the fecal contents of his intestines were discharged, and his nervous sensitiveness was such that he would allow no one to touch him, or make an investigation, and careless walking on the floor caused him to cry out with

pain. Finally there projected from the right limb, which had been long swollen, a stem, on the inner side, at the edge of the gastrocnemius muscle, rising at right angles with it, more than seven inches in length, with a flower, squarely set upon it, resembling the China Aster. Subsequently, a stem was seen rising at right angles with the limb, at about the height of three inches, crowned with buds resembling those of the orange. On being exposed to the light, the flower expanded, and assumed the color of a beautiful greyish purple. The flowers were composed of a fleshy substance, and were gradually drawn back again beneath the skin. While in blossom, the boy was relieved of pain.

Scrofula is a peculiar disease and is more various in its effects than any other. When it affects the cuticle, producing pustules and ulcers, it not unfrequently spreads over the whole body, as represented in Fig. 27, rendering the patient loathsome to his friends and himself. When it attacks the mucous membrane, tuberculous consumption, dyspepsia, swelling of the bowels, etc., are the result. Deafness, blindness, crooked limbs, spinal deformity, protuberances of the breast bones, cancer and nervous debility, may, and often do, result from scrofula in the blood. And when any one of these difficulties is produced, all treatment which does not act directly upon the impurities of the vascular fluid, to neutralize and cast them out, will prove abortive, and dishearten the patient. Nor can ingredients be compounded in any one medicine so as to eradicate a scrofulous humor, which may appropriately be compared to the hydra spoken of in fabulous history as a monster having many heads, any one of which being cut off was immediately succeeded by another. The disease seems to be a combination of all other bad humors, and as such requires various blood remedies to be taken at intervals, in order to attack the enemy in front, flank and rear.

In late years I have found no difficulty in successfully treating scrofula, and have cured hundreds of cases which had barely escaped with their lives from the hands of old school practitioners, and patent medicine manufacturers. It is usually the custom of scrofulous invalids to take to patent medicines when they have exhausted the skill of the "faculty," mistakenly supposing that any medicine prepared for the blood will be of service to them. But the "one cure all," may not only be inadequate to affect the disease, but unadapted to the temperament, (see page 58,) in which case injury instead of benefit is received. In the treatment of no disease is it

more necessary to consult the temperament of the patient than in scrofula.

The writings of medical men are singularly conflicting in regard to the atmosphere best suited to scrofulous persons. Many assume that scrofula is more common in mountainous countries, because goitre and other external manifestations of the disease are more frequently met with than in warmer and damper regions. Others maintain the opposite opinion, and cite in illustration, the greater frequency of tuberculous consumption in warm and changeable climates. Now, so far as the *prevalence* of scrofula is concerned, I do not believe that there is much difference between a cold and dry and a warm and changeable climate, for in the latter we can find enough consumptives and others affected with internal scrofulous deposits to offset those in the former, who have the external manifestations of the same disease. But, I contend, there is a decided *choice* between the two, for while a warm, damp and changeable climate, in which there is always a preponderance of electricity, the electrical radiations from the system are sluggish, predisposing the humors to locate internally on the delicate mucous membrane of the head, throat, lungs, stomach, &c., a mountainous, dry and negative atmosphere, by accelerating the electrical radiations, predisposes the disease to locate externally, (see page 23). Now who would not rather have goitre on the neck, an ulcer on the limb or salt rheum on the hands than have an internal tumor, ulcers in the lungs or humors in the stomach? The false theories of medical writers concerning this disease and the climate best adapted to it, are owing to their ignorance of the philosophy of insensible perspiration, or electrical radiation. A dry, uniform climate, whether hot or cold, is best suited to prevent the more dangerous development of scrofula.

In regard to diet, let me say first and emphatically, avoid pork as you would carrion, (see page 9). The word scrofula is derived from *scrofa*,—a swine; because this animal is much subject to the disorder. Beef and mutton are as good or better than vegetables, if the animals are not fattened in the stall; but stall fed meat of any kind is liable to be affected with the disease, and is consequently particularly unwholesome for scrofulous invalids. The free use of spring and mineral waters is good, as they assist in cleansing the lymphatic system. Excitement of mind should always be avoided. (For treatment, see page 146.)

CHRONIC RHEUMATISM

Is the antipode of acute rheumatism, being the negative, while the acute is the positive form of the disease. Still, both have their origin in an inflamed and impure state of the blood, as is evinced by the fact that an inflammatory crust forms on blood taken from a rheumatic patient. The immediate cause of a rheumatic attack is a nervous disturbance of the system, usually induced by an obstruction of the perspiration or radiation. This may be occasioned by sudden changes of weather, sleeping in damp linen, sitting in damp rooms, getting wet, and coming in contact with cold draughts of air when the body is overheated.

The curability of chronic rheumatism, if judged from an Allopathic stand-point, might well be questioned, for the old school doctors have been in a "rough and tumble fight" with that disease for years, and thus far the latter has kept the top hold. This cannot fail to be the case until the doctors throw aside the dispensatory weapons, such as mercury, opium, colchicum, etc., and enter the arena with such weapons as a correct knowledge of the pathology of the disease, and cultivated common sense dictate. Originating, as it does, in impure blood, and induced by a disturbance of the nervous elements of the system, the course to be pursued is manifestly to administer such remedies as will purify the former and restore harmony of action to the latter.

With electrical, water, and vegetable blood treatment, I have found no chronic disease more yielding than chronic rheumatism. Although it requires time, it is an easy disease to manage, and when once cured by the means I suggest, its return upon one who has had it, is no more likely than its attack upon one who has never been a victim to its painful symptoms. I have annually hundreds of cases of it in my practice, and even those sufferers who are considerably advanced in life, find the means I employ adequate to eradicate the disease. During the past year I had the pleasure of curing several obstinate cases, which had successively tried Allopathy, Homeopathy and Thomsonian treatment, and spent years at different Water Cures without receiving more than temporary relief.

Chronic rheumatism is most difficult when combined with scrofula. In this case there is a constant tendency to a deposition in the joints of a kind of matter which hardens, and becomes bone-like, rendering them stiff and immovable. Doubtless all persons have observed how

hard and stiff the skin becomes when affected with that form of scrofula called salt-rheum. It is this same bony property of scrofulous blood which, in rheumatism, is attracted to the inflamed parts, producing hardness and stiffness. So prevalent is scrofula becoming, that a majority of those having chronic rheumatism, appear to be more or less predisposed to these symptoms. Rheumatic invalids affected in this way should lose no time in uncertain experiments, but resort to such skillful treatment as will be effectual in clearing out both the scrofulous matter and the causes of rheumatism. No local applications are sufficient to do this. Many erroneously suppose that when they obtain a liniment or ointment which soothes pain, the disease is in a fair way to be removed, while, perhaps, it is constantly progressing, notwithstanding its *voice*—pain—is hushed with external anodynes. It is like covering up a fire with ashes, instead of throwing on water. Buried in ashes we do not see the progress of the destructive element, but it steadily smoulders until it again bursts out with more violence than at first. So with rheumatism, particularly of a scrofulous nature; we may assuage the pain while the disease augments its power in the system. It is common to hear rheumatic invalids say they have used this and that doctor's liniment or oil—that relief was for a time obtained—but that they have successively "worn them out." A cross child may be cajoled with one plaything, but it must soon have another, or its doating mother is deafened with "squalls." So with rheumatism; it may for a few days or weeks stop crying or paining, through the application of one liniment, but it soon calls for a change, and finally it resists all such remedies, and attacks the sufferer more terribly and obstinately than ever before.

Let it not be supposed, however, that I disapprove of external and local applications; my injunction is—do not *rely* on them. They are useful and frequently necessary, while the work of nervous regulation and blood purification is progressing internally. As an *aid*, they are not to be neglected, but as a *remedy* they should be avoided.

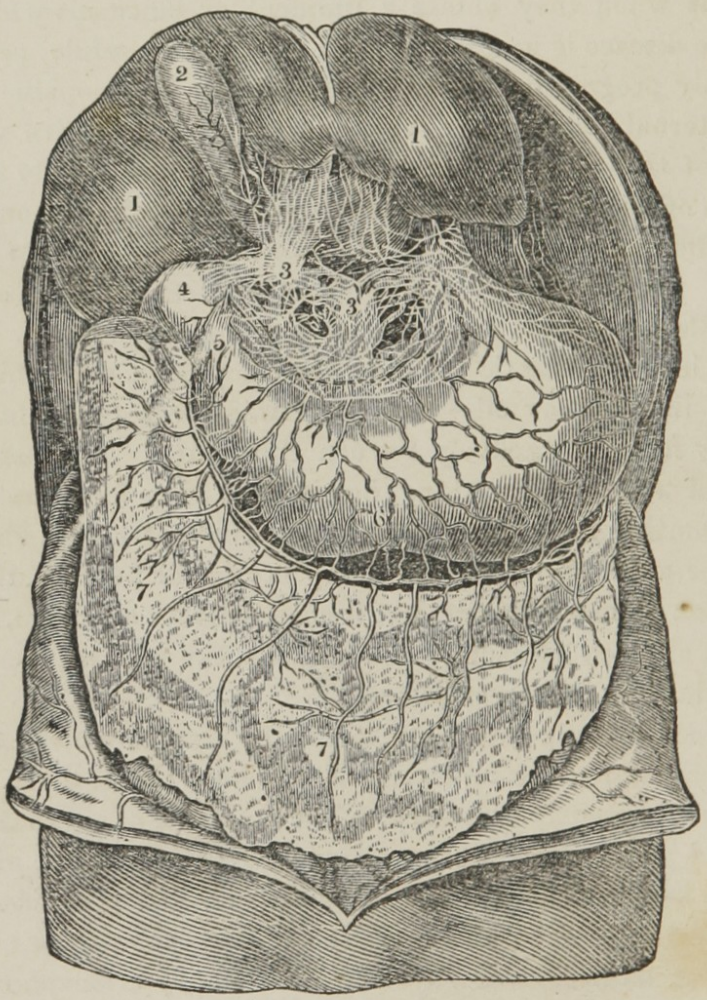
A careful regard to air, exercise and diet, should be observed by the sufferer with chronic rheumatism. A dry atmosphere is of the utmost importance, and dry stove heat is far preferable to the damp atmosphere out of doors on a rainy day. In dry weather, out of door exercise is of the utmost importance, and if the invalid is so badly affected as to preclude the possibility of walking, carriage riding should be resorted to. Animal diet is better than vegetables and

fish, because it excites, in a greater degree, active electrical radiation. Pork should be eaten by no one, and should be particularly avoided by an invalid. Beef, mutton, lamb, and venison, are best adapted to the condition of the patient. [For treatment see page [146.]

DYSPEPSIA

May be readily cured, if understood by the physician. Unfortunately, its pathology is little known to the medical profession. My theory is, that it is invariably a blood or nervous disease. When the

Fig. 28.



NERVES OF THE STOMACH.

former, the mucous membrane is affected with inflammation or humor, which prevents the healthy secretion of the gastric juice, and renders the stomach sensitive in the extreme. The food goes through more of a rotting than digesting process, producing heartburn, con-

stipation, flatulency, nausea, and heat and soreness in the stomach. When a nervous disease, it results from a want of nervous or electric circulation from the nervous reservoir (the brain) through the nerves leading to the stomach and liver. Fig. 28 shows how extensively the stomach and digestive apparatus is permeated with nerves. The liver (1) is turned up to exhibit the anterior surface of the stomach; also the gall bladder (2). The organic nerves are marked 3, 3, while the pyloric extremity of the stomach and the contracted portion of the pylorus are indicated by the figures 4 and 5; 7, 7, 7, mark the omentum. Without a liberal distribution of the nervo-electric element through this net work of nerves, the process of digestion goes on sluggishly, and, as in cases of humor in the stomach, the food decays rather than digests, producing some or all of the foregoing symptoms, with the addition of heart palpitation, chilliness, paleness, low spirits, disturbed sleep and languor. This form of the disease is more common with people who lead a life of mental activity, such as professional men and accountants. Grief and anxiety will also often induce it, these conditions of mind, like excessive thinking, having a tendency to consume in the brain that supply of nervo-electricity which should be furnished to the stomach and liver

To cure dyspepsia the cause must first be ascertained. If it results from impure blood, such a system of medication must be adopted as will effectually expel the humors from the vascular fluid, and the diet must be left entirely to the patient, who should select such articles of food as seem to give him the least uneasiness. If it grows out of deficiency in the supply of nervo-electricity from the brain, the patient should give his mind repose by a temporary abandonment of his professional pursuits, and the adoption of muscular exercise in the open air, an animal diet, and the use of such medicine as will restore the nervous system to its wonted vigor.

"Hunger cure" never cured dyspepsia. By keeping nutritious food out of the stomach, or partaking sparingly of a Graham diet, the stomach will become quiet and less troublesome; in other words, you can tame a diseased stomach, as you can a savage animal, by starvation; but as soon as the patient returns to solid food his stomach will rebel again. I have often been applied to by dyspeptics who have been through a course of regular hydropathic treatment, (which includes the "hunger cure.") They had left hydropathic institutions with the supposition that they were well. But a return to their customary diet brought back all their troublesome symptoms,

and they were again on the sick list. By adopting one of the two courses indicated in the preceding paragraph, I have never failed in effecting for such sufferers, *radical cures*. (For treatment, see page 146.)

PILES

Have ever been considered a somewhat difficult disease to cure by the medical profession generally, though I have met with few cases in my practice which have not yielded to proper treatment. Their symptoms have been correctly described as follows: "Small tumors on the verge of the anus or a number of varicose veins surrounding it; itching, weight, tension and a sense of bearing down or pungent pain in the fundament, or perineum, more especially on going to stool; pains in the back or loins; vertigo; headache; discharge of blood from within the anus; frequent desire to go to stool; varicose or enlarged veins; hard tumors, sometimes indolent or painful; excoriation or erythema about the anus." The disease may be attended with one, part, or sometimes all of the above symptoms. Piles are of two kinds—varicose and tumorous. The former is produced by a distention or enlargement of the veins in or about the verge of the anus, usually arising from constipation, and the latter from humors in the blood. Both may be strictly regarded as blood or nervous diseases, because constipation is the offspring of vascular or nervous derangements, and tumors, of impure blood. Consequently to cure piles of either description, the physician must go back to first causes.

Tumorous or humorous piles are by far the most common, and occur in people of all ages, though seldom in children under fifteen years of age. The exciting causes of these are numerous. Anything which tends to irritate the lining of the anus, is liable to attract the humorous properties of the blood to that locality. Many people are extremely careless what they use to cleanse the parts after stool. This evil is so exceedingly prevalent, particularly in farming countries, I must be excused for adverting to it. Nothing is more common than to find in the "little-house" of a farm-yard, a huge pile of corn cobs, for the purpose indicated. Now, to frictionize the external skin with a harsh instrument of this kind would be sufficient to produce eruptions or sores upon any one at all affected with blood impurities, but, applied to the delicate membrane of the anus, no one addicted to the practice can escape having piles, unless his blood is remark

ably pure. The leaves of plants are often used with like results. The leaves of almost all descriptions of vegetation are more or less bearded or coated with a kind of fuz, and when brought in contact with the mucous membrane, cause irritation. The softest paper should always be used, particularly by those subject to piles, and no one should make use of anything coarser than newspaper. These hints are valuable, and should not be treated with indifference. Many serious diseases result from trifling causes, and it is the duty of medical writers to point them out to their readers. A cob, a leaf, or piece of brown paper may bring on an attack of piles, and the piles may in time develop fistula. This latter disease often commences with the piles, and is many times very difficult to cure. A surgical operation is often found necessary to remove fistula, though in its first stages it can usually be cured with constitutional and local remedies. (For treatment see page 146.)

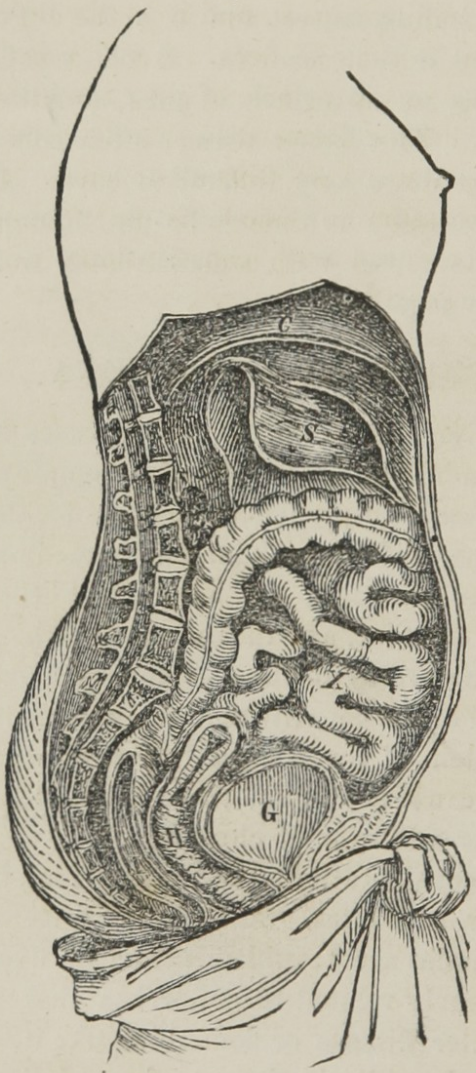
CHRONIC DISEASES OF THE WOMB AND VAGINA

Are among the most common, disagreeable and painful diseases to which females are subject. Bad habits in dress, sedentary employment, stimulating food, sexual excess, and pernicious customs for the prevention of conception, are among their most common immediate causes, and various poisonous drug remedies, supporters, and other ingenious and injurious devices of doctors, are the means by which they are perpetuated. If treated according to the dictation of sound medical judgment, with due regard to the constitution, temperament, and general conditions of the system of the patient, together with careful reference to the producing cause or causes, these diseases are as easily cured as any others in the catalogue of chronics.

Of the class of diseases under consideration, the most prevalent with young and old is leucorrhœa or whites. A large majority of unmarried as well as married females are troubled with this disagreeable complaint, which is so nearly related to gonorrhea that in its most aggravated forms, the latter disease or something like it, is frequently communicated to the male while in the act of copulation. Cases have occurred in which the matrimonial happiness of husbands and wives has been seriously jeopardized, through the effect of this disease, one or both suspecting the fidelity of the other. Some years ago, while practicing in a New England city, I was called upon by a very respectable lady, who, having an acrimonious leucorrhœa, was painfully suspicious that her husband had been untrue to her. So

similar in all respects, were her symptoms to those attending gonorrhea, I was more than half inclined, in my own mind, to acquiesce in the lady's belief. But the next day I was called upon by her husband, in a wretched state of mind, entertaining the same suspicion towards his wife, he being ignorant that she had consulted me regarding the same matter. The circumstances were such that I was forced to believe them both honest, for neither of them had gone so far as to communicate their suspicions to each other, and the manner of both was too indicative of their real feelings to admit of the supposition that either of them was attempting to deceive me. At this stage of the affair I thought it expedient to inform him of his wife's visit, and the unhappiness she was suffering under the same belief. The denouement was at once surprising and satisfactory, and what had threatened to end in mutual unhappiness and perhaps separation, resulted in the confirmation of confidence in the minds of both parties. The lady and gentleman placed themselves under my treatment, and were entirely cured.

Fig. 29.



NATURAL POSITION OF THE WOMB.
H, the vagina, and above it the uterus; G, the bladder; and I, the rectum.

Leucorrhœa consists of a disagreeable discharge of puriform matter from the vagina, generally of a whitish color, and, if permitted to go on, is liable to produce a whole train of uterine disorders. Falling of the womb, barrenness, miscarriage, sexual disinclination, and painful and excessive menstruation, are among the most common results of the disease.

Prolapsus or falling of the womb, which is characterized by a sense of weight or pressure in the vagina, pains and numbness in the limbs and loins, as just remarked, often grows out of neglected

leucorrhœa, and frequently arises from tight dressing and other immediate causes mentioned in the introduction. Although most common to married ladies, single females are not exempt from it. If correct statistics could be obtained of the prevalence of this disease they would astonish the reader. By looking at the following illustrations, the reader can see how displacements may occur. The top of the womb may sometimes fall forward upon the bladder; sometimes backward upon the rectum; sometimes to the sides, and often directly down into the front passage. Fig. 30 represents the top of the uterus tipped back against the rectum. Fig. 31, the top of the uterus fallen forward on the bladder; *a* the womb, *b* the bladder, *c* the rectum. All of these false positions of the uterus are painful and frequently distressing, leading to pulmonary and other dangerous diseases. Life, to ladies thus affected, is a burthen, and married life a curse rather than a blessing. To cure prolapsus various utero-abdominal supporters with pessaries have been invented, more for the purpose of making money than doing good. These mechanical means are irritating to the womb and vagina, which are so delicately organized and permeated with sensitive nerves, that constant contact with any wood or metal contrivance used to support the parts can only give temporary relief and ultimate injury. They should be dispensed with entirely, and the disease should be treated locally and constitutionally, as the common sense of the skillful physician naturally suggests.

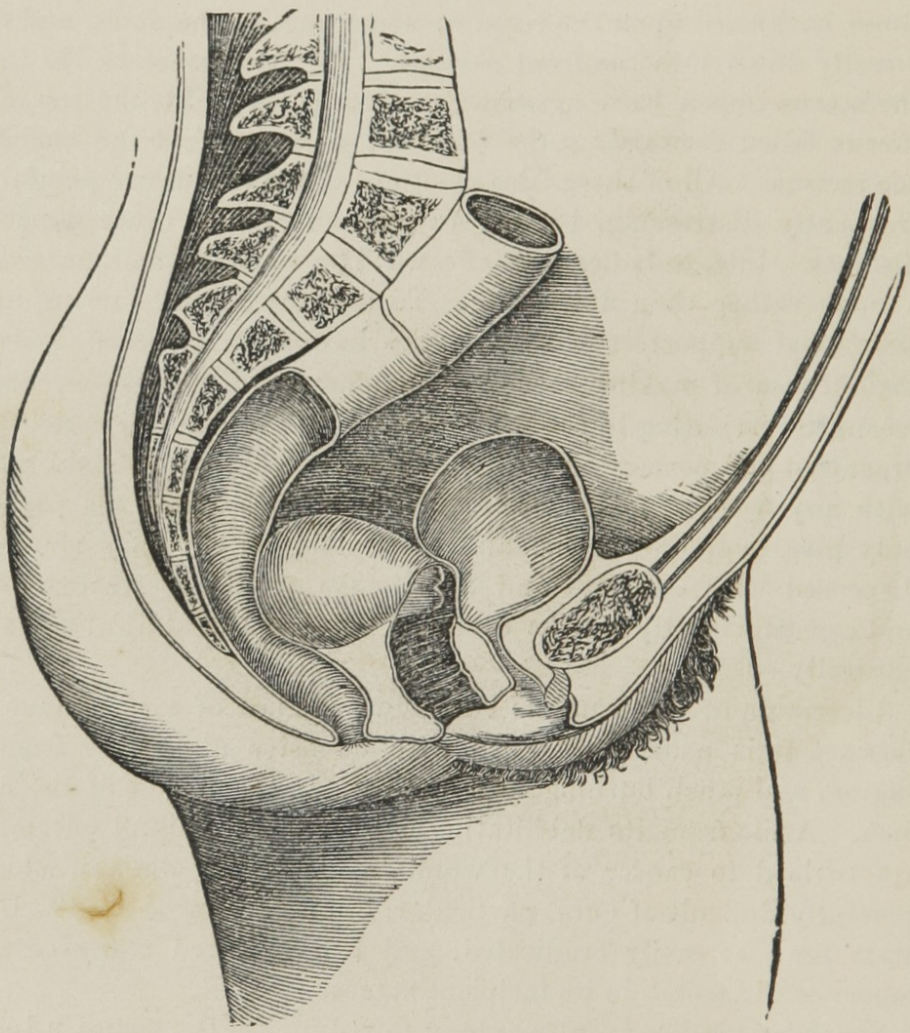
Ulceration of the womb is common to ladies of a scrofulous diathesis. It is usually attended with offensive discharges from the vagina, and much burning heat and pain in the region of the abdomen. Aside from its debilitating, offensive and painful effects, it is apt to lead to cancer of the womb, a distressing disease, which is generally difficult of cure, particularly in its advanced stages. Ulceration may be easily eradicated, and I have cured many cases of cancer of the womb in its incipient stages.

Scrofulous ladies are also subject to polypus of the womb, a tumorous growth which often attains an incredible size and sometimes leads ignorant practitioners to believe the sufferer pregnant. The reluctance of ladies to submit to private examinations and the destitution of diagnostic skill in the medical profession lead to some mischievous blunders in the treatment of female diseases.

It was owing to the palpable ignorance of those who were considered the first physicians of England that Lady Flora Hastings,

a maid of honor to Queen Victoria, was driven in disgrace from the court. She was supposed to be *enciente*, and being a single lady, for her to become a mother would have had a most prejudicial effect upon the character of the court. The most notable matrons and physicians in the kingdom were summoned to make an examination and their decision was confirmatory of the terrible suspicion. The

Fig. 30.

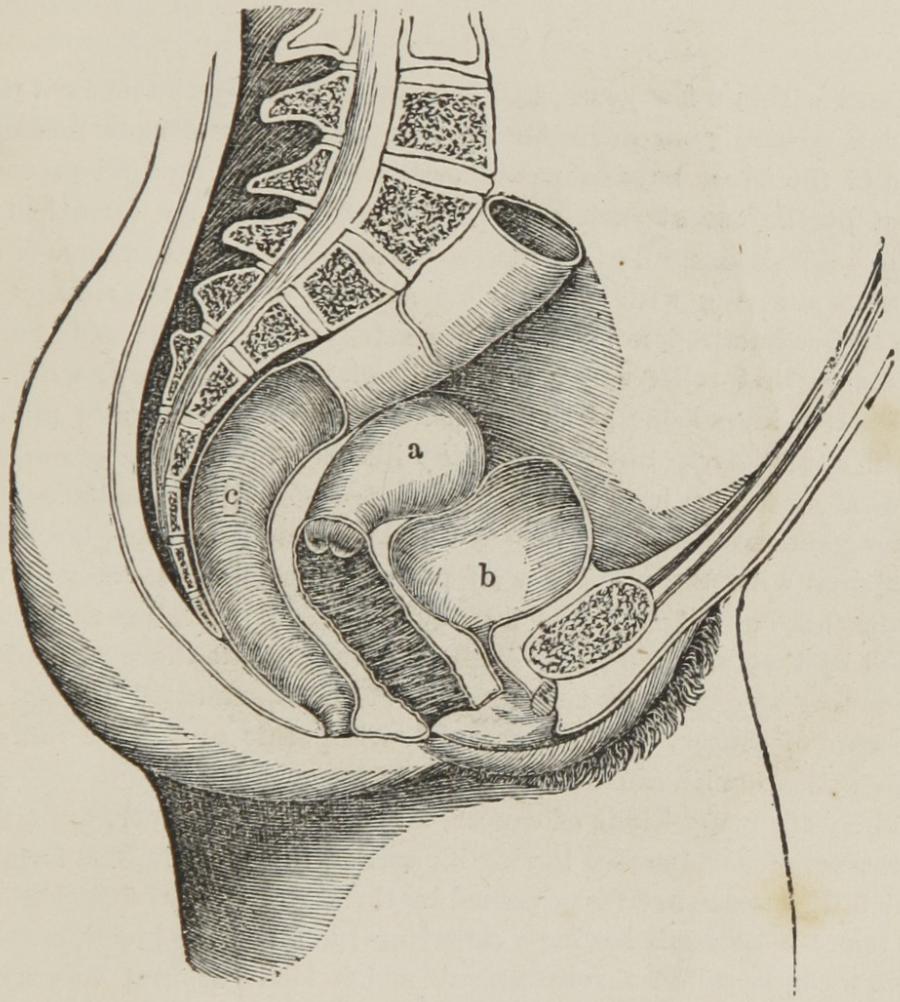


THE WOMB FALLEN BACKWARD AGAINST THE RECTUM.

broken hearted lady soon after died of *dropsy* of the womb, which had deceived her medical examiners! Greater medical stupidity cannot be conceived of! Had her physicians possessed that skill which they should have possessed to wisely discharge the responsible duties of their profession, the disease of the lady would have been readily detected, and her life and reputation saved. I was once

called upon by a lady with polypi in the womb who had been pronounced pregnant by two or three physicians. Had her disease been permitted to run on until a period when time could have disclosed the mistake, she would have become hopelessly incurable. A thorough examination satisfied me at once as to the true nature of her disease, and she was radically cured under my treatment. I have

Fig. 31.



THE WOMB FALLEN FORWARD ON THE BLADDER.

seldom found it necessary to have recourse to private examinations to ascertain the real character of a uterine difficulty, and in those cases wherein it has been considered safer that they should be made I have in every instance found my preconceived opinion correct.

With a correct understanding of the nature of a womb or vaginal disease, it can in almost all cases, except cancer, be readily cured with appropriate treatment, and even cancer of the womb is often

curable. Local treatment alone for leucorrhœa, falling of the womb, ulceration, dropsy, polypus or cancer will never effect a permanent cure. Although tight dressing, sexual excess, &c., as enumerated, are the immediate or *exciting* causes, the real origin of all these difficulties is traceable to weak or impure blood, and constitutional treatment is necessary in addition to local, to give permanent convalescence to the patient. (For treatment see page 146.)

CANCER,

Until within a few years, had been considered by the medical profession generally an incurable disease, although the rude medicine men of the forest have ever exhibited masterly skill in its management by the use of such remedies as are abundantly furnished in their wild abodes. Ten or fifteen years ago, it was common to see invalids suffering with this terrible disease, making pilgrimages of one to five hundred miles, to Indian settlements, for the purpose of obtaining that relief which only the unlettered red man, with his instinctive knowledge of the medicinal virtues of roots and plants, could administer. Since then many liberal minded members of the medical profession have become acquainted with the valuable secrets so long and exclusively known to the aborigines, and still but a few compared with the number who practice medicine, because of the Allopathic opposition to the introduction of all remedies not originated by them or their predecessors. Hence, while those who adopt the means suggested by the intuition of the uneducated Indian, for the cure of cancer, generally succeed, Allopathic professors murder their patients with caustic or the knife.

There are many kinds of cancer, all of which, however, are manifestations of *one* disease, having its seat in the blood. The form in which it presents itself is governed by the idiosyncrasy of the patient. Of many individuals having a cancerous humor in the blood, one will have what is called a rose cancer, which looks at first very like a rose-bud, and, as it enlarges, opens and expands like a rose. This generally attacks the womb, vagina, and nose, but may locate in any other part of the system. It is very painful, and sometimes grows to an immense size. Another will have a spider cancer, which takes its name from its close resemblance to a spider, its roots sprangling out like the legs of this insect. Another, a fissure cancer, a dry crack or cut in appearance, which hardens the flesh around it, and increases by deepening its cavity and rendering inflexible the muscles

and glands near it. Another may have a bone cancer, which is surrounded with hard rings, and discharges an odorous and offensive matter. It eats away the flesh rapidly, and in its advanced stages is incurable. Another, a wolf cancer, which is so named because of its devouring character. When very small it eats away the flesh rapidly, and is attended with excruciating pain. Another will be attacked with sleepy cancer, which consists of a growing tumor, attended with little or no pain till it becomes very large, when all at once its victim becomes an intense sufferer. When it has so far progressed as to cause the patient much pain, it is difficult of cure. Another will be likely to have a scaly or bleeding cancer, the former an itching, burning, scaly sore, which eventually becomes ulcerous, and the latter a red and fiery tumor, attended with bleeding and violent pain. Thus, the same disease manifests itself differently in different persons.

Cancerous humor, without doubt, often arises from venereal taint; also, from scrofula and canker. Whenever a person becomes aware that he possesses such an impurity in the blood, he should lose no time in having skillful treatment for its extinguishment. I have cured hundreds of cases of cancer, in all stages of development, by a resort to those remedies which have rendered the medical men of the forest so eminently successful; but the farther advanced the disease, the more difficult becomes the cure, and no one affected with it should waste time in doubtful experiments, and indulge himself in the happy belief that the skillful physician can arrest the disease in its last stages, if other remedies fail. This cannot always be accomplished. Still, in a great majority of cases of cancer, the disease may be cured if the invalid avails himself of the proper treatment, even after it has become quite formidable. No one should submit to a surgical operation until all other means prove abortive, for if the patient happens to survive the painful ordeal, the cancer may start again in the same or another locality. (For treatment see page 146.)

SPINAL DISEASES

Are curable or incurable, according to their nature and the age of the patient. They are almost invariably caused by an impure or weak state of the blood. Scrofula, one of the worst forms of blood disease, is the most frequent cause of weak or deformed spines. It is apt to attack the spongy texture of the vertebræ, and induce suppuration which soon destroys the fine net work of muscles sustain-

ing the ingenious structure. In speaking of this form of the disease, Dr. Syme remarks as follows: "When the pus ceases to be confined near the bone, and begins to drain away from it, the patient generally experiences great relief from his complaints. The pain becomes very much lessened, and the use of his limbs is often, in some measure, or altogether regained. But this amendment is usually accompanied by a serious change to the worse in another respect, since the vertebral column is apt to bend under its superincumbent weight when weakened by the destruction of bone and intervertebral cartilage, which attends the suppuration. The curvature in this case takes place forward, and being confined to a small extent of the spine, causes an acute projection behind, so that one or more of the spinous processes appear to be dislocated backward. This change of shape does not take place either when the extent of the disease is small in proportion to the size of the bones in which it is seated, or when it is so great that the patient is constantly confined to the horizontal posture; but the latter circumstances are comparatively rare in proportion to those which favor the occurrence of curvature. The surface of the abscesses either heals with approximation and consolidation of its parietes, the vertebræ concerned appearing as if run into one mass, or a state of caries remains, and gradually wears out the patient's strength." Spinal disease of this nature is often curable in children, but is a difficult and almost hopeless complaint in those of adult age. The treatment must be such as will cast out the scrofulous humors, and only in this way can the progress of the disease be arrested. An invalid thus affected, even far advanced in life, may be greatly relieved, and have his days upon earth lengthened by the use of such remedies as will purify and nourish his blood.

Fig. 32.

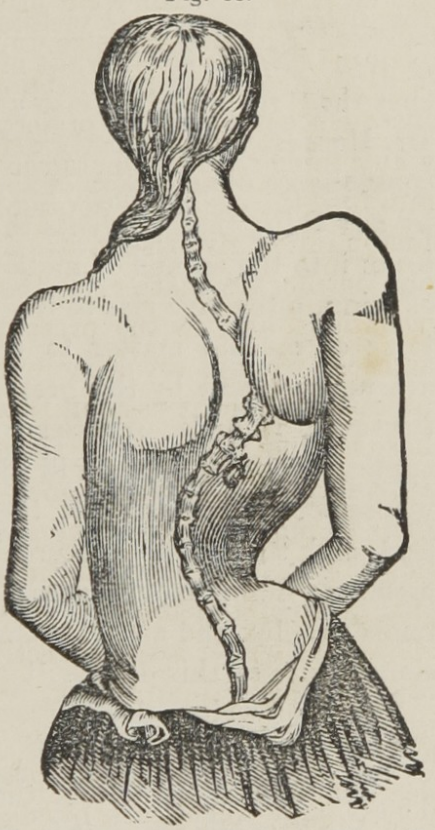
NATURAL SHAPE OF THE VERTEBRAL COLUMN.

Spinal curvature often arises from weak and innutritious blood, or, as is more commonly expressed, from general debility. When the muscles which maintain the vertebræ in their natural position become weak and relaxed, because of a want of proper nourishment from the blood, curvature is likely to result. The position of the spine, in double curvature, is represented in Fig. 33. Here the spine

bends both to the right and the left, throwing up the right shoulder and hip and depressing those of the left. I have frequently cured cases of this kind by electrical, mechanical and medicinal remedies; and it is only by a union and skillful application and administration of these that a cure can be effected.

Notwithstanding curvature originates in an impure or debilitated state of the blood, as before remarked, an immediate cause is usually traceable. In scrofulous cases, I have already shown that suppuration destroys the props which sustain the vertebræ and sometimes the vertebræ themselves. But in such cases as arise from weak blood or debility, bad positions in sitting, standing or lying are the active or immediate causes. Lounging in a half horizontal position with the entire weight resting on the elbow, is bad for weak spines. By a frequent repetition of such a position by weakly and delicate persons, the spine will lose its natural form, and become curved. Many young ladies exhibit this deformity by a depression of one shoulder and an upward projection of the other. When discovered by themselves, corsets, shoulder braces and other mechanical means are resorted to, to conceal the deformity, and although they frequently succeed in this, their muscular system becomes still more relaxed in consequence of artificial support, so that when divested of these things the spine exhibits far greater distortion. No mechanical remedy should be used in these cases, unless accompanied with such medical and electrical treatment as will restore the system to its wonted strength, for it is useless to endeavor to remedy effects so long as causes remain, and in spinal deformity it is worse than useless. If produced by scrofula, that humor must be eradicated before a cure can be permanently effected; if by debility, the blood must be increased in quantity and quality.

Fig. 33.



DOUBLE CURVATURE.

(For treatment see page 146.)

PARALYSIS.

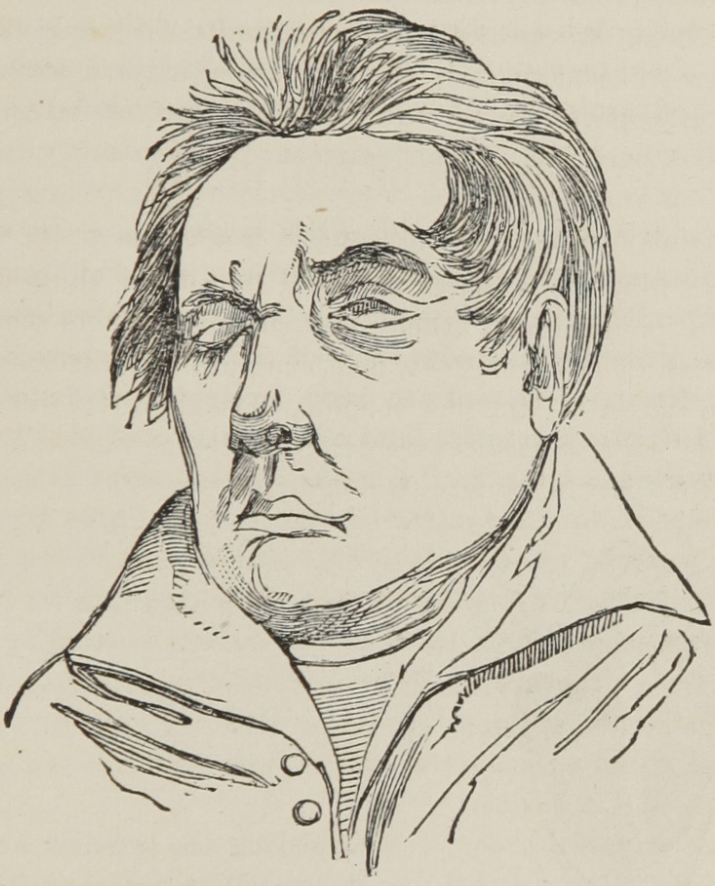
This common disease has been robbed of half its terrors by recent discoveries in therapeutic electricity. Not many years ago, a person attacked with it felt that he was a doomed cripple for life, unless nature could prove itself sufficient to overcome the disease and restore to the affected or obstructed nerves harmony of action. The remedies of Allopathic practitioners never have and cannot now cure paralysis, but in the hands of a skillful electrician and physician, this disease becomes as yielding as most other forms of chronic complaints. Nor is it for want of a proper knowledge of its pathology that the "regulars" are so uniformly unsuccessful in its treatment. Dr. Hooper very correctly defines it as follows: "It may arise in consequence of an attack of apoplexy. It may likewise be occasioned by any thing that prevents the flow of the nervous power from the brain into the organs of motion; hence tumors, over distention, and effusion, often give rise to it. It may also be occasioned by translations of morbid matter to the head, by the suppression of usual evacuations, and by the pressure made on the nerves by uxations, fractures, wounds, or other external injuries. The long continued application of sedatives will likewise produce palsy, as we find those, whose occupations subject them to the constant handling of white lead, and those who are much exposed to the poisonous fumes of metals or minerals, are very apt to be attacked with it. Whatever tends to relax and enervate the system, may likewise prove an occasional cause of this disease."

The same writer also correctly describes the symptoms preceding and occurring with an attack. "Palsy usually comes on with a sudden and immediate loss of the motion and sensibility of the parts; but, in a few instances, it is preceded by a numbness, coldness, and paleness, and sometimes by slight convulsive twitches. When the head is much affected, the eye and mouth are drawn on one side, the memory and judgment are much impaired, and the speech is indistinct and incoherent. If the disease affects the extremities, and has been of long duration, it not only produces a loss of motion and sensibility, but likewise a considerable flacidity and wasting away in the muscles of the parts affected."

Notwithstanding the pathology of the disease is generally understood by all experienced practitioners, only those who have deeply investigated the science of electricity in its application to diseases of

the human system, are at all successful in curing it. Many of the prescriptions of old school practitioners tend to perpetuate and produce rather than relieve it. Cupping, blistering, and the administration of nux vomica, opium, etc., are often attended with injurious results.

Fig. 34.



PARALYSIS OF THE FACIAL NERVE.

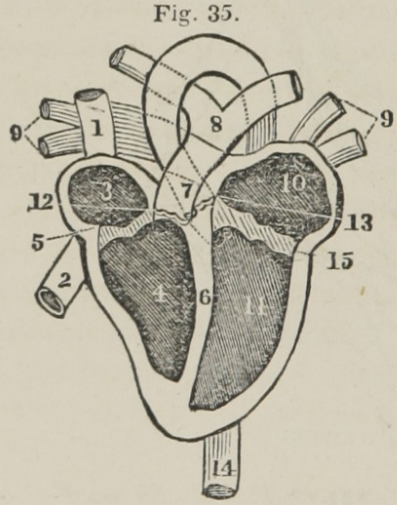
There are four species of paralysis, viz: "*Paralysis partialis*, partial or palsy of some particular muscle; *Paralysis hemiplegica*, palsy of one side longitudinally; *Paralysis paraplegica*, palsy of one half of the body, taken transversely, as both legs and thighs; *Paralysis venenata*, from the sedative effects of poison;" all of which may be permanently cured in their early stages, and frequently when far advanced. In young people, paralysis of many years standing may in a majority of cases be removed by proper treatment. Many invalids suffering with this disease lose confidence in the curative powers of electricity by a misapplication of the element. No definite rule can be laid down for the use of an electrical or electro-

magnetic machine, which will apply successfully to all, because the application must be varied in time and direction of current with the peculiarities of different cases. Beside, paralysis may be, and often is, produced by humors or tumors gathering around or pressing against the nerve or nerves, and in these instances the blood must be treated with skillful medication at the same time electricity is being administered. A little nice discrimination, with a proper understanding of appropriate remedies, is sufficient to overcome almost every case of paralysis. (For treatment see page 146.)

DISEASES OF THE HEART

Are fearfully on the increase, and it is well for those who either have or are predisposed to them, that the edict of old school practitioners—"can't be cured,"—is fast being proved fallacious, by not a few of the doctors of the new school, whose deep researches in physiology and *materia medica* are daily developing new and successful remedies for these heretofore fatal complaints.

Fig. 35.



THE HEART, ITS CHAMBERS, ETC.

1, The superior vena cava; 2, the inferior vena cava; 3, the right auricle; 4, the right ventricle; 5, the situation of the tricuspid valves; 6, the partition between the two ventricles; 7, the pulmonary artery; 8, the point where it separates and enters the right and left pulmonary artery for the corresponding lungs; 9, the four pulmonary veins bringing the blood into the left auricle; 10, the left auricle; 11, left ventricle; 12, location of mitral valve; 13, location of sigmoid valves of the aorta; 14, the position of the sigmoid valves of the pulmonary artery.

Considering the peculiar and delicate machinery of the Heart, as illustrated in Fig. 36, it is wonderful that this organ is not more frequently affected in some way, especially when we bear in mind the recklessness with which mankind violate nature's laws. In consequence of these violations, however, the Heart is *becoming* a common seat of disease, and in late years twenty-five per cent. of all the invalids who have presented themselves in my office for medical examination, have been affected more or less in this locality.

It is common for old school doctors to deceive their patients when there are indications of heart disease, by telling them that no such complaint exists, and perhaps this course is well enough so long as they pronounce it, ir all its forms, incurable, for it certainly is not

well for a person so afflicted to know the true nature of his ailment, if he is at the same time assured by his medical adviser that it is one which defies medical skill. Still, I should not neglect to remark that many nervous people imagine they have this disease when there is no trace of it; and they often suffer more than those who experience the reality. Such persons are nervously diseased, and, unless cured, are apt to bring on, by their imaginings, some serious difficulty. I have examined hundreds of invalids who supposed they had a heart disease, when there was not the least cause for the supposition, and many others in which the complaint consisted of only a slight inflammation of the pericardium—the sack surrounding the heart.

There are many forms of heart disease, such as rheumatism, dropsy, enlargement, softening, fattening, ulceration, cancer, tubercles, tumefaction, etc., all of which I positively assert can be cured in their early stages, and in a majority of cases when considerably advanced. My remedies are vegetable medication, electricity, water, air, light, cheerfulness and moderation in eating and drinking. All stimulating drinks, notwithstanding they afford temporary relief, are exceedingly injurious, and should be strictly avoided. The stomach should never be overloaded, though the selection of food may safely be left with the invalid. Cheerful company, freedom from excitement, avoidance of crowded assemblages, good air and sunlight, all assist the skillful practitioner in curing the disease. I have cured hundreds of difficult cases after they had been through the hands of from one to thirty different physicians unbenefitted. (For treatment see page 146.)

CHRONIC DISEASES

Of the liver, kidneys, bladder, bowels, eyes, ears, etc., and also, Dropsy, Gravel, Diabetes, Barrenness, Impotency, Seminal Emissions, Fits, Nervous Debility, Neuralgia, Gout, Itch, Fistula, Hernia, and all cutaneous diseases, of whatever character, are generally curable in the hands of a thorough and skillful practitioner who employs vegetable, electrical, hydropathic and mechanical remedies. I am daily treating these diseases with scarcely a failure, and while I admit there is a time when every body must die, I believe, yea, know, that thousands are dying monthly with old complaints, whose lives might be prolonged for years to make relatives and friends happy, if they could but have the treatment of skillful physicians who devote

their whole time, study and practice, to chronic diseases. (For the treatment of the foregoing complaints, see "Important to the Invalid Reader.")

IMPORTANT TO THE INVALID READER.

I had contemplated giving in this work full prescriptions and recipes for the cure of the various diseases on which it treats. But the variety of temperament which exists in the human family seems to render such a course entirely impracticable. Difference in form, size, and complexion, indicate difference in temperament, and difference in temperament indicates difference in constitutional peculiarities. (See page 58.) In my practice I am governed by the law of temperaments, and adapt my medical treatment as much to individuals as to diseases. Therefore, should I give any good general remedies, they would not apply in a majority of cases, and my reputation as a physician would fall to a level with that of other doctors, who, if they have a *dozen* patients with the same disease, treat them alike, regardless of the differences existing in their temperaments and constitutions.

In the treatment of disease, physician and patient seem generally to forget the trite proverb—"what is one man's cure is another's poison"—and it is a matter of surprise that so many sick people recover as do, when the treatment of disease is so commonly based on the "hit or miss" principle. But this subject having been pretty fully discussed in a preceding chapter, in which patent medicines are overhauled, I will not dwell upon it here. Suffice it to say, that in my practice I have never given internal remedies without particular reference to temperament as well as disease, and I am consequently reluctant to risk my popularity by laying down in these pages any set of recipes for making medicines, the administration of which, to be successful, must be governed by a proper understanding of the law of temperaments.

After much reflection, I have hit upon a plan which I think will give general satisfaction to the purchasers of this work, and one which I *know* will prove more beneficial to the suffering invalid, whose time is too precious to waste in uncertain experiments. It is this: every owner of a copy of this book, having a difficult chronic disease, requiring internal medicines, will be furnished, on application in person or by letter, with prescriptions and advice, skillfully adapted to his or her temperament as well as disease, for the nominal

sum of one dollar, which cannot more than compensate me for time and labor in studying into the physical peculiarities and complaints of each applicant. To aid those who desire to consult me, I have prepared the following

LIST OF QUESTIONS,

Which will materially aid invalids in describing symptoms. 1st. What the color of your hair and eyes, and what the complexion? 2d. Were your parents long or short lived, and does there appear to be any hereditary disease in your family? 3d. Do you feel any dizzy sensations in the head—any pains, neuralgic or otherwise, in front, back or sides of head, or headache—do you suspect catarrh? 4th. Are you troubled with weak or inflamed eyes, or any other disease of those organs? 5th. Is your hearing good—any roaring in the ears —discharges from ears—excess of wax or dryness—ear-ache? 6th. Is the tongue coated, if so, is it yellow; is it vividly red on the tip and edge, or down the centre or over the whole surface; is it white and velvety; is it red at the lips, becoming brown dry and glazed; is it black? 7th. Have you any tickling in the throat—any soreness— any tubercles, ulcers or canker? 8th. Have you any external sores, or pimples or tumors on the neck? 9th. Are you hoarse — voice weak? 10th. Have you any tenderness, or soreness about the lungs? 11th. Do you cough, and if so, when most, morning or night—is it a dry, hacking cough or loose—constantly a little or very severe by fits? 12th. Do you raise much, and if so, what color—is it mixed with blood—will it rise or sink in water—is it salt, fresh or sweet to the taste? 13th. Are you troubled with hard or rapid beating or palpitation of the heart—pains in or about the region of the heart—soreness on pressing on the left chest over the heart—stoppage of the heart—giddiness of the head—blind staggers—sleeplessness—frightful dreams? 14th. Is your appetite good—any soreness of stomach—wind in stomach—trembling feeling in stomach—sourness of stomach—nausea in the stomach—empty or all gone feeling in stomach? 15th. Are your bowels loose or costive—are they bloated —are they sore on pressure? 16th. Is there any enlargement of the right side—any pain in right or left sides? 17th. If a female, are you married or single—are you troubled with leucorrhœa or whites —have you a bearing down feeling in the region of the womb or abdomen—are your courses regular, painful, too slight or too profuse—if married, have you had any children—are they healthy?

18th. Do you have weakness or pain in the lower part of the back—is your water high colored—is it thick or limpid—does it scald—is it bloody—has it sediment—is the sediment red or white—have you had any venereal disease? 19th. Have you ever had any external eruption—erysipelas, tumors, ulcers, abscesses or cancer? 20th. Are you subject to fits? 21st. Have you any trouble of mind—grief for the loss of friends—matrimonial unhappiness—jealousy—doubts or distress of mind on religious subjects? 22d. Do you reside in a dry, bracing atmosphere, or in one which is damp and foggy—on high or low ground? 23d. What are your habits—do you use ardent spirits—tobacco—tea and coffee—opium—are you regular to bed—how many hours do you take for sleep—what time do you rise—do you use much animal food—much vegetable—do you bathe, if so, how often—is the water you use hard or soft—well, spring, lake or brook water? 24th. What is your sex—height—weight—how much do you measure round the chest just under the arms—what the measure around the arm, about midway between the elbow and shoulder—what the measure around the right thigh—what around the calf of the right limb?

Answers to the above questions will enable me to judge nearly if not quite as correctly of the nature and extent of a disease, as a personal examination. Many questions pertaining to complexion, height, weight, measure, &c., may appear at first sight trifling, but they are of the *first importance*, because on answers to these I must depend in forming my opinion of the *temperament* of one whom I am not permitted to see. Therefore, no invalid who wishes me to send unerring prescriptions and advice, should pass over them in describing his or her case. All letters addressed to the author, at Saratoga Springs, N. Y., will receive prompt and candid attention. All professional communications and consultations will also be treated with the strictest confidence.

CHAPTER VI.

Saratoga Springs as a Resort for Invalids.

When God created the earth, He made more than one Eden; perhaps not all so beautiful as the one Adam first opened his eyes upon, for Sacred History tells us that the Creator was then well pleased with His "noblest work"—man, and placed him in the garden of the world. But Bible Eden was a garden for the *perfect* man—before disease had marked his majestic brow; it contained neither medicinal waters nor doctors, for it had need of none. Hence, what was a paradise for primitive man could not be for his posterity. The Eden of to-day must not only possess physical beauty, but elements and advantages for the restoration of health. Such an Eden is our Saratoga; may we call it "Paradise Regained?"

It is not claiming too much to say that Saratoga is the most favored spot on earth as a retreat for invalids. Besides its delightful promenades and pleasure grounds, overshadowed with the luxuriant foliage of beautiful trees, its salubrious air, its commodious and well regulated hotels and bath-houses, it has a great variety of mineral springs, celebrated throughout the world for their superior medicinal qualities, and from whose sparkling fountains many a wan cheek has received those fair proportions and glowing tints which alone characterize a person in health.

I may be thought inconsistent in thus extolling mineral waters by those who have read my essay on "Vegetable Medicines." I there denounce mineral medication; but every rule has its exceptions, and I cannot but make an exception in favor of these remedies, "distilled, as they are, from the bowels of the earth by the hand of Omnipotence."

They are the preparation of no human chemist, nor can the most astute pharmaceutist imitate them. The experiment has often been tried, but as well might the artificial flower maker essay to manufacture a natural rosebud, with its rich colors and delightful fragrance, as for the chemist to attempt to prepare an imitation of Empire or Congress Water, which can at all compare in palatable pungency and medicinal virtue with the bubbling fluid which escapes from the fis-

sures of the Saratoga rocks. The most perfect analysis cannot so far detect the ingredients and their proportions as to enable the chemist to produce even a tolerable imitation. Imitations are manufactured and sold, often to the manifest injury of consumers. But the best of them neither have the beneficial effect or palatable taste peculiar to the natural waters. Dr. North remarked that "were these medicines of nature as disagreeable to the taste as the productions of the apothecary, they could never have gained such celebrity. It is the happy combination of acidulous and saline properties in these cooling beverages that adapts them to the taste of the debilitated invalid. It is this which causes many thousands, who are confined by disease at home, to long for a place by the side of these gushing fountains, that they may slake their urgent thirst. It is this, combined with the vivid remembrance of returning health, which brings multitudes here from season to season."

As near as analysis can determine, the Springs of Saratoga are only impregnated with those mineral substances which enter largely into the composition of the blood, flesh, muscle and bone of the human system. *Quicksilver, or mercury, does not exist in the geological formation of the State of New York*, and therefore the invigorating waters, gushing out of its fractured rocks, cannot be poisoned or in the least impregnated with that destructive mineral.

Chloride of sodium, or common salt, is one of the principal ingredients of the Saratoga Spring waters, and its hygienic value may be readily perceived when it is remembered that this mineral forms sixty per cent. of the ash of the blood. "The offices of salt in the system," remarks Prof. Youmans, "are of the first importance. It increases the solubility of albuminous matters. Dissolved in the liquids of the alimentary canal, it carries with it their important principles, preserves them fluid through the chyle and blood, then parting from them as they become fixed in the tissues, returns to perform the same round again. By decomposition in presence of water, common salt yields an acid and an alkali, hydrochloric acid and soda. This separation is effected in the system, indeed there is no other source for the hydrochloric acid of stomach digestion. The considerable quantity of soda in the bile and pancreatic juice, which serve for intestinal digestion, as well as the soda of the alkaline blood, are chiefly derived from common salt. A portion comes directly from the food, but by no means sufficient for the wants of the body."

Soda, lime, magnesia, iron, and other important ingredients of the mineral waters of Saratoga, are all represented in the human structure, and are necessary to the health and existence of the animal organism. Hence, I may, with reason, claim that these harmless minerals, compounded in the laboratory of nature, and sent bubbling up from the bosom of mother-earth, are unlike mineral nostrums concocted in the laboratories of doctors and chemists, and may be resorted to with advantage by the valetudinarian. The late Dr. Jas. Johnson remarked that "mineral waters contain, in all probability, many agents which we *cannot imitate by artificial combinations.* This is proved by daily observation. Thus, the saline aperient mineral waters will produce ten times more effect than the identical materials artificially dissolved and mixed. The same is true with respect to the Chalybeate Springs. A grain of iron in them is more tonic than twenty grains exhibited according to the pharmacopœia" Nature is ever perfect in all her works, and science will never be able to surpass her either as chemist or artist.

Certain precautions are necessary to be observed by invalids visiting the Springs, and I should not neglect to mention them in this place. The mineral fountains here are numerous. They are known by the names of the Empire, the Congress, the Putnam, the Iodine, the Pavilion, the Magnesia, the Union, the High-rock, the Columbian, and Hamilton, all of which differ somewhat in their mineral properties. It is a wise provision of Nature that they do, else they could not meet the wants of different constitutions and diseases. But this very feature, so valuable in a therapeutic point of view, may prove injurious, rather than beneficial, unless the invalid is guided by medical knowledge or advice in the selection of the fountain adapted to his or her individual case. A visitor is never troubled to find advisers at the Springs to direct him as to the waters most appropriate (?) to his physical wants. Every one who is interrogated assumes to know. The result is, oftentimes, an invalid resorts to a spring which is entirely unsuited to his disease and temperamental peculiarities—drinks its waters immoderately—gets sick and leaves the village, with the supposition that he can derive no benefit from their use. In this way much harm is done both to the reputation of our valuable mineral waters and to the invalid.

No person out of health, coming here, should commence drinking the waters of any spring, without first consulting a skillful physician, competent alike to judge of temperament and disease. Some of the

fountains are more tonic, some more laxative, some more diuretic and others more alterative in their effects upon the system. A careful adaptation of these waters to each individual case by a discriminating physician, is imperatively necessary to insure benefit. Think not that I say this for the purpose of gaining fees for advice from visitors, *for I never charge for such advice.* Whatever may be the custom of other physicians, my office is always open to inquirers, and I am happy at all times to direct visitors in this important matter, without compensation of any kind. Prof. Emmons remarks that it is "impossible to lay down all rules for the use of this (Empire) or any other spring waters of Saratoga, there is so much individuality in each case,—so much that requires the special attention and the special direction of a physician, that in almost any case advice will be required."

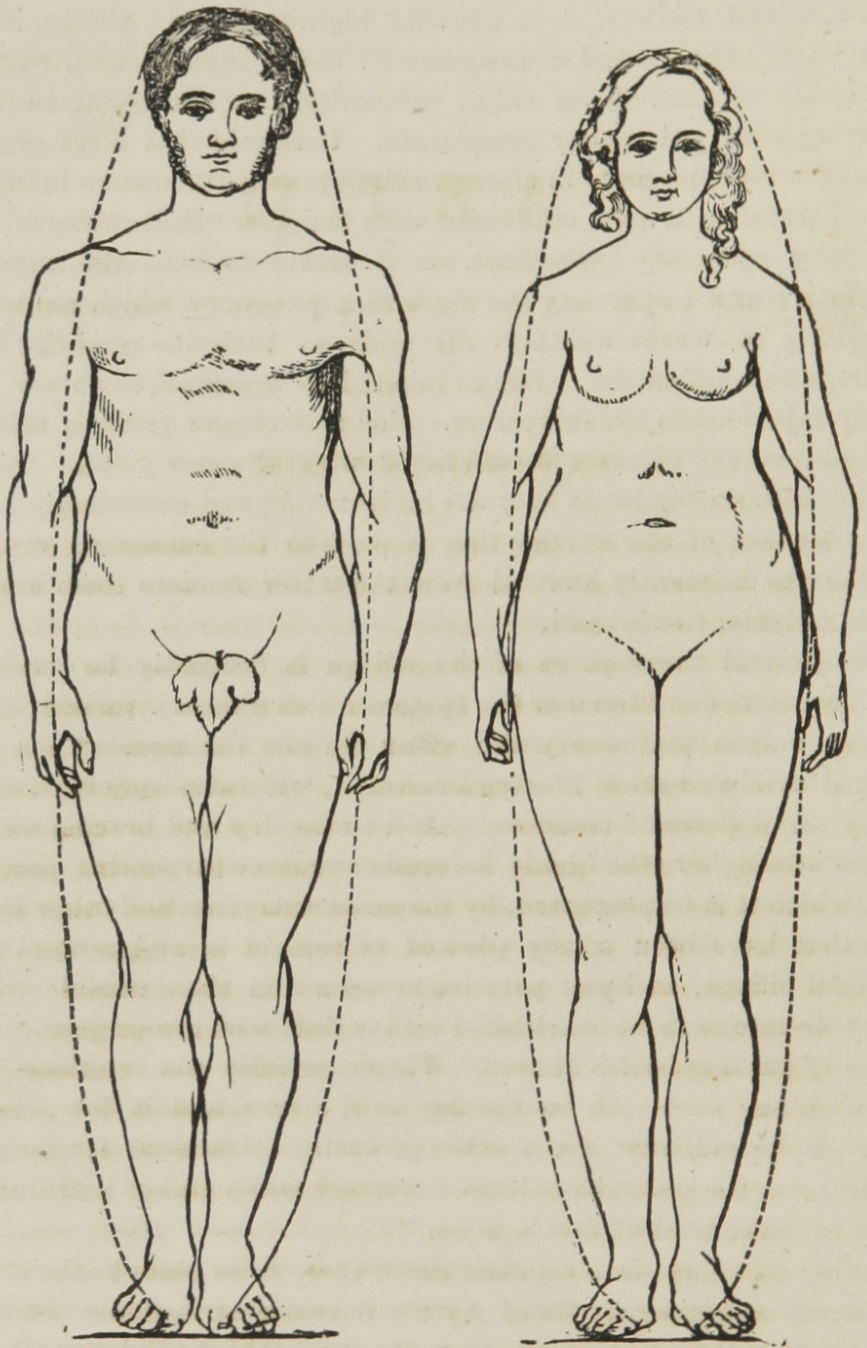
Drinking immoderately of the waters is a common habit with visitors at the Springs. Their logic is that if one glass will effect a certain amount of benefit in the system, sixteen or twenty will effect just so many times as much. Suppose this same principle is applied to other things. If one moderate sized beef steak will strengthen and nourish my system, a whole quarter of beef is better; if one overcoat will make me feel comfortable on a cold day, a clothing store full of these garments put on will make me feel more comfortable; if my minister delights me with a sermon one hour long I shall be more delighted to hear him all day; if I am pleased to receive a visit for a week or two from an acquaintance, I shall be better pleased to have him stay through the whole season, &c. Now this principle is more dangerous applied to medication than anything else. One pill may have an excellent effect upon the stomach and bowels, while a box full of them might prove fatal. So with the waters of our springs. They possess active properties, and should not be trifled with. If four or five glasses of the water, taken in the morning before breakfast, will not move the bowels, recourse should be had to a good vegetable cathartic—not to a blue pill, as recommended by many. There is no necessity of using any mercurial preparation for the purpose of assisting the action of the water. Those who have a propensity that way should read my essay on vegetable medicines.

Consumptives visiting the springs should not tarry too long around the fountains. These are located in a valley, the atmosphere of which is more or less affected with the carbonic acid gas escaping from the waters of the springs. This gas is much heavier than com-

mon air, and while it does not rise high enough to vitiate, in the least degree, the general atmosphere of the village, it does, without doubt, render that of the valley particularly unwholesome to those suffering with pulmonary complaints. It is said that a cat or dog, held for a few moments in close proximity with the waters in one of these fountains, is soon suffocated with the gas. Still carbonic acid is a very necessary ingredient, as it serves to hold the minerals in solution and imparts to the fluid that pungency which renders it refreshing in warm weather. It adds to both its qualities as a beverage and a medicine. But to inhale it is beneficial to no one, and highly injurious to consumptives. For this reason persons affected with pulmonary diseases should avoid mineral water baths. To the invalid with strong lungs they are invigorating and exceedingly beneficial, because of the activity they impart to the cutaneous vessels; but the gas constantly emitted from the water renders them hurtful to the consumptive invalid.

The general atmosphere of the village is decidedly favorable to those negative conditions of the system which almost invariably exist in and induce pulmonary and other chronic diseases. "The soil being alluvial and sandy," says Dr. North, "the atmosphere contains a very small share of moisture. Add to the dry and bracing nature of this atmosphere the highly balsamic or rather turpentine qualities with which it is impregnated, by the numerous pines and other forest trees that have been wisely allowed to remain in and around this beautiful village, and you perceive at once that these considerations are by no means to be overlooked by invalids who are projecting the means of gaining health abroad. They especially concern those who reside on our seaboard, on the banks of rivers, and in low, clayey soils. Independently of the other powerful attractions for invalids at Saratoga, the pure and balsamic atmosphere should of itself induce many to make trial of the location."

Taking all things into consideration, there is no place in the old or new world so eminently fitted, by the liberal contributions of nature and art, to restore to convalescence the enervated invalid and give to the man of average health an additional hold on life, as Saratoga Springs. Both European and American writers of wide observation, who have visited the watering places of both continents, concur in this opinion, and every season adds fresh testimony corroborative of the same from the tongues and pens of numerous visitors.



MALE. FEMALE.

"So God created man in His own image; in the image of God created He him; male and female created He them. And God blessed them, and God said unto them, Be fruitful, and multiply, and replenish the earth, and subdue it." [Gen. 1, 27, 28.]

PART II.

MARRIAGE AND SEXUAL PHILOSOPHY.

INTRODUCTION.

Such is the influence of marriage on the health, happiness and longevity of the human family, every medical writer who does not put forth an effort for the improvement of the institution, is guilty of an omission which reflects discredit upon his faithfulness as a physician and physiological instructor. However antagonistic, eccentric, conservative or radical may be the various opinions of medical men, each should boldly express his sentiments, throw them into the crystal palace of practical literature, and let their merits or demerits be passed upon by the great awarding committee—*public opinion*. There is nothing more glaringly palpable than the fact that there is an enormous defect in the present system of marriage, the remedying of which has been sadly neglected in the physiological "dark ages" from which the civilized world is but slowly emerging.

Says Mrs. Jameson, in her "Winter Studies and Summer Rambles in Canada"—"In conversing with a prelate and the missionaries on the spiritual and moral condition of his diocese, and these newly settled regions in general, I learned many things which interested me much; and there was one thing discussed which especially surprised me. It was said that *two-thirds of the misery which came under the immediate notice of a popular clergyman, and to which he was called to minister, arose from the infelicity of the conjugal relations;* there was no question here of open immorality and discord, but simply of *infelicity and unfitness*. The same thing has been brought before me in *every country, every society*, in which I have been a sojourner and an observer; but I did not look to find it *so broadly placed before me here in America*, where the state of morals, as regards the two sexes, is comparatively pure; where the marriages

are early, where conditions are equal, where the means of subsistence are abundant, where the women are much petted and considered by the men." By this we see that matrimonial unhappiness is so almost universal as not to escape the notice of clergymen, whose profession affords less facilities for ascertaining the true conjugal condition of all classes of people, religious and irreligious, than that of the physician. But it is not necessary in this place to adduce facts and arguments to prove that the world is full of connubial infelicity. There is no community in which there does not exist indubitable evidences of it. What we want is a remedy.

Many bold spirits, who have tasted the bitterest dregs of matrimonial infelicity, are ready and restlessly impatient to overthrow entirely the sacred institution of marriage, and inaugurate a system of omnigamy, leaving the sexes without legal restraint, and to the dictates of their own individual impulses in the gratification of their amative desires, and the perpetuation of the race. Others are as zealously advocating lenient divorce laws; so lenient, indeed, as to allow men and women to marry and divorce at pleasure, until a congenial companionship can be formed. Such a system is obviously more omnigamic than monogamic, and even if expedient (which, in the present condition of public morals, I deny,) could not receive the sanction of this conservative age. Others, still, there are, who, while they deplore the wide-spread wretchedness existing in matrimonial life, and perhaps experience its bitterness in a slight or great degree, occupy neutral ground, feeling an undefinable reverence for the present system, and still ready to adopt any new one which may be suggested, compatible with religion and social good order. And there is yet another class, more fortunate than the rest, who have accidentally formed a happy matrimonial alliance, or something approaching thereto, a majority of whom advocate rigid divorce laws, and egotistically imagine that all the matrimonial unhappiness in the world is only the result of recklessness on the part of those entering into the contract of marriage. They consider parties to such alliances deserving of all the misery they have brought upon themselves, and selfishly fold their conservative arms, only to move them in defence of existing laws or the enactment of still stricter ones. Such men, however well versed in law and theology, are seldom physiologists, and are unwilling to open their eyes upon the disastrous effects which unhappy marriages are entailing upon the human race, by producing progeny and progeny's progeny, sour in temper, unbal

anced in mind, and sickly in body. They are surprised at the increase of crime and the decrease of longevity, and wisely attribute the causes to every other than the real ones. The thought never strikes them that if marriage could only be properly regulated, we might hope, after a season, to rid the country of rogues by the prison and gallows, and that, so long as law allows such incongruous unions to take place between the sexes, we shall ever have need of iron bars and hempen rope.

Between this extreme and the first one mentioned, I shall guide my bark of reform, having, as I conceive, discovered the true plan for securing happy marriages, without resorting to the experimental system proposed by those reformers who think men and women should have the privilege of marrying and divorcing at pleasure, until the congenial counterpart is found. To the unfolding of this plan, and the investigation of subjects interesting and useful to both married and single, Part Second will be devoted.

CHAPTER I.

Marriage, as it is, in Barbarism and Civilization.

BEFORE offering any suggestions upon the necessity of reformatory measures for the regulation of marriage, it will be both interesting and improving to look at the institution of marriage as it actually exists in the world, and contrast the customs of barbarous countries with those which enjoy the advantages of civilization. Let us first take a "bird's-eye glimpse" of

MARRIAGE IN THE OLD WORLD.

In Asiatic Russia, the Calmuck Tartar seizes the woman of his choice, carries her off on horseback, and if successful in keeping her over night, she becomes his wife. The Tungoose Tartars try races on horse-back for their wives. The lady has a good start, and if her pursuer overtakes her, she must become his wife. The ladies are distinguished for their equestrian accomplishments, and are seldom caught unless they desire to be. "Among the Crim Tartars," remarks Goodrich, "courtship and marriage are encumbered with ceremonies. The parties seldom see each other till the ceremony, and the contract is made with the heads of the tribe. At the period of the wedding, the villages near are feasted for several days. The bride is bound to show every symptom of reluctance. There is a contest between the matrons and girls for her possession. The priest asks the bride if she consents, and on the affirmative, blesses the couple in the name of the prophet and retires. There is great ceremony and cavalcade when the bride is carried to her future home. She is conveyed in a close carriage, under the care of her brothers, while the bridegroom takes a humble station in the procession, dressed in his worst apparel and badly mounted. A fine horse is led for him by a friend, who receives from the mother of the bride a present of value, as a shawl."

Among the Siberians, of one tribe, it is said "the wife pulls off her husband's boots, as a sign of her obedience." In another, "the bride's father presents the bridegroom with a whip, with which he

is instructed to discipline her as often as he finds occasion." In another, "the bride is carried on a mat at night to the bridegroom, with the exclamation 'There, wolf, take thy lamb!'"

The Chinese purchase their wives, but a "celestial" is allowed but one by law. To bring home an additional one subjects the offender to eighty blows of the bamboo. Many prefer this punishment to monogamy, and suffer its repeated infliction in order to gratify their polygamic propensities. The secondary wives, however, are said to have no rights whatsoever. They are entirely at the mercy of their "liege lords," who can treat them as they please, and put them away on the forfeiture of the purchase money. A celestial is forbidden to marry during the period set apart for mourning the death of father or mother. He is also forbidden to marry a person bearing the same name as himself, or a musician, or an actor of any kind, or a widow whose husband had distinguished himself, or one who has been convicted of any crime. The bamboo is the penalty attached to all violations of this law. Those in matrimony who cannot agree are allowed to separate. Divorces are also granted for the following causes: theft, a jealous temper, sterility, immorality, contempt of the husband's father or mother, propensity to slander and habitual ill health.

The Japanese, who somewhat resemble the Chinese, differ considerably in their customs. They maintain strictly the monogamic system of marriage, and the ladies are educated with as much care as the men. "Marriage is performed in the temple. The bride lights a torch at the altar, and the bridegroom another at hers, which constitutes the ceremony."

It is said that the "married women of Japan enjoy the excluse privilege of dyeing their teeth, which is done with a mixture of urine, filings of iron and sakee." "This compound," remarks a writer in Harper's "is neither pleasantly perfumed nor very wholesome. It is so corrosive that, on applying it to the teeth, it is necessary to protect the more delicate structure of the gums and lips, for the mere touch of the odious stuff to the flesh, burns it at once into a purple, gangrenous spot. In spite of the utmost care, the gums become tainted, and lose their ruddy color and vitality. We should think the practice was hardly conducive to connubial felicity, and it would naturally be inferred that all the kissing must be expended in the ecstasy of courtship. This compensation, however, is occasionally lost to the prospective bridegroom, for it is not

uncommon for some of the young ladies to inaugurate the habit of blacking the teeth on the popping of the question." Little is known of their divorce laws.

In the Birman empire, polygamy is prohibited, but a man may have as many concubines as he can comfortably support. Wives are sold into concubinage or prostitution on actions of debt, if the husband has not the means to liquidate.

A JAPANESE LADY.

In Hindostan, marriage takes place at eleven, or as soon after as the parties arrive at puberty, the arrangements for which are usually conducted by the parents, who, on the bride's side, expect and generally receive expensive presents as payment for the wife furnished.

In the west of Hindostan, on the coast of Malabar, women are allowed a plurality of husbands. A traveler remarks that "they are a martial people and possess a great deal of the spirit of knight errantry; insomuch that their tournaments frequently end in blood.

The husbands are not exactly tenants in common in regard to her favors. Each enjoys her attentions exclusively at appointed periods, according to her inclinations, and no one is allowed to enter her apartments while the arms of a copartner in domestic affairs are over the door. She resides at the domicil of her friends, and, when she becomes a mother, nominates a father in each case, and he is bound to maintain the child."

"In Thibet," remarks a writer, "one woman becomes the wife of a whole family of brothers; and this custom prevails in all classes of society. The oldest brother chooses the bride and consummates the family marriage. Travelers relate instances of five or six brothers living under one roof, in this manner, in great harmony." The women are active and industrious, and are said to "enjoy a higher consideration than in other oriental countries."

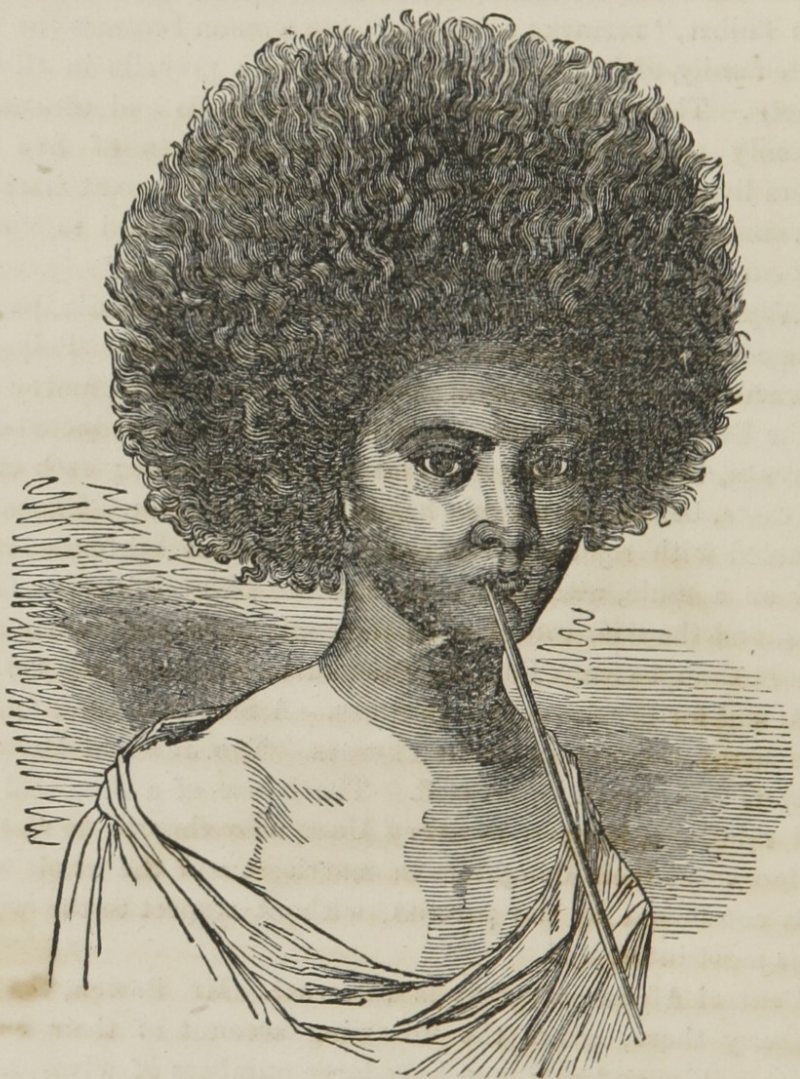
In Abyssinia, a kind of "free love" system prevails, parties in marriage coming together and separating at pleasure. Polygamy is also practiced, and the secular clergy are permitted to marry once.

In the Barbary States, marriage negotiations are conducted entirely by parents, the candidates for matrimony not seeing each other, in many cases, before the bargain has been agreed upon. The marriage is attended with rejoicing, and the "bride is carried home in a cage, placed on a mule, attended with music. Divorce is easy for both parties, and the wife can dissolve the contract if her husband curses her more than twice. For the first curse he must pay her eighty ducats, and for her second a rich dress. A man may have four wives and as many concubines as he chooses. The Jews in Barbary are numerous and much oppressed. The house of a Jew and all its sacred relations, is open to every Moor who chooses to violate it." The Moors sell their daughters in marriage, and the whole negotiation is conducted by the parents, without respect to the wishes of the one most interested.

In Central Africa polygamy is universal. Mr. Bowen, the Baptist missionary there, gives the following account of their customs: "Kings, nobles and rich men have large numbers of wives, and even the common people have two or three. No woman, therefore, pretty or ugly, is prevented from being married.

"Courtship is carried on by female relatives, and either sex has the right to propose. Betrothment is sealed by the payment of forty dollars, or thereabouts, by the expecting husband to the mother of the girl. Conventional modesty forbids her to speak to him or to see

him, if it can be avoided. Men have the pleasure of divorcing their wives; they labor for and support themselves, having no claim on their husband's property. If divorced for adultery, she or her relatives are obliged to pay the dowry settled on her. During the marriage, the woman has exclusive right to her earnings, and is sole owner of her property.



A CENTRAL AFRICAN.

"When the man dies, the eldest son inherits the house and all the wives, except his own mother. Yoruba women are not prolific, and barrenness is not uncommon, but is a disgrace."

Among the Krue people, according to the African Repository, "the price of a wife is usually three cows, a goat, a sheep, and a few arti-

cles of crockery-ware, or brass rods, the whole of which would scarcely exceed twenty dollars. The woman is always bargained away for life, and at the decease of her husband passes to his brother or some other connection, being deemed transferable property. If, however, she is ill-treated, she may return to her family; though to guard against this provision being abused, they are required to restore twice as much as they received for her. Each woman is the mistress of her own household, and is not liable to be interfered with by any of her co-wives."

In Western Africa, the marriage customs are equally peculiar. The king of Ashantee has three thousand three hundred and thirty-three wives, only a few hundred of whom are attached to the palace. When the wives of the king go out, they are escorted by an army of boys with whips, who cudgel every body they see in the streets, lest some one should happen to get a glimpse of the ladies. The Mahometans generally have four wives, while the non-professors frequently have a great number. It is against the law to praise another man's wife! "Conjugal disputes," says Goodrich, "are sometimes settled by the interference of *Mumbo Jumbo*, a mysterious personage, who seems to be in the interest of the husband;—his interposition is decisive. He is an incarnate bugbear, dressed in the barks of trees, and sometimes surmised to be the husband himself. Mumbo Jumbo comes at evening, and goes to the *Bentang* tree, where the whole village assembles, though the females are the least pleased, for no one knows to whom the visit is intended. At about midnight Mumbo fixes upon the offender, who is stripped, tied to a tree, and scourged."

In Dahomey, the king is allowed about *three thousand wives*, which are selected by him at an annual assemblage of all the girls in the kingdom. Polygamy is practiced also by his subjects, and adultery is punishable with death; still, a woman may leave her husband at any time and take another, and the husband is under no greater restraint to adhere to his wife. The women do the work and the men do the—"loafing."

In Congo, polygamy and promiscuity are indulged in to an unlimited extent.

Marriages among the Mandingoes are characterized with drinking, shouting, firing guns, and other boisterous demonstrations. "The bride is carried to the house of her husband, on the shoulders of an old woman, who walks all the way upon mats spread before her."

In Egypt, marriage contracts are made by the friends of the parties, who do not often see each other till the ceremony. The females are married at fifteen, and sometimes at an earlier age. Plurality of wives is both legal and fashionable, and the ladies are kept veiled and secluded, as in other Mahometan countries. They hide their faces and display their bosoms. It is considered great impudence to inquire of a husband regarding the health of his wives.

In New Holland, two of the front teeth of the female are knocked out before she is given to her lover. On her presentation, the latter throws a kangaroo skin over her shoulders, spits in her face, paints her with stripes of various colors, compels her to carry his bag of provisions to his hut. If she goes too slow to suit his liege lordship, he gives her a few kicks.

In the more civilized portions of the old world, are found both the monogamic and polygamic systems of marriage, and in the *customs* of the people the latter prevails to a greater extent than is guaranteed by their laws.

In England, the monogamic system of marriage, as in our own country, is professedly established by law, but public opinion tacitly sustains polygamy for husbands, as may be reasonably inferred from her new divorce law, which denies the wife a decree of divorce for adultery (unless incestuous) on the part of the husband, but entitles the husband to such a decree for adulterous acts of any kind on the part of the wife! As there are several noticeable features in this bill, I will copy a condensation of it as given in the Tribune:

"*First*: A wife deserted by her husband may, at any time after such desertion, apply for and obtain an order to protect against her husband, or his creditors, or any body claiming under him, any property she may acquire by her own industry, or which she may otherwise become possessed of, including, of course, gifts and inheritances. Such an order will give her the same power over the protected property as though she were unmarried, and will carry with it the right of suing and being sued, and making contracts in her own name; but it will not discharge the husband from his liability to be sued for necessaries furnished to his wife, nor even for torts committed by her. To bring this remedy within the reach of all who may need it, the power to grant such order is extended to the Metropolitan Police Magistrates, and in the country to Justices of

the Peace in petty sessions. Any party undertaking to seize or hold the property protected by such an order, is liable to a suit for its restoration with damages added of double its value.

AN ENGLISH LADY.

"*Second*: Desertion for two years and upward, adultery or cruelty (which latter must, however, be of a kind to excite apprehension of personal safety), affords ground for what is called in this act judicial separation, which differs from a divorce in this: first, that it may be

terminated at any time by the coming together of the parties, and secondly, that they cannot marry any body else. This remedy is open to the husband, but it is intended mainly for the wife, to whom, when it is granted on her application, a provision for her maintenance, technically called alimony, is to be assigned by the court payable by the husband, who is discharged by it from all legal liability for the wife, except that if he does not pay the alimony he may be sued for necessaries.—The Court granting these separations is authorized to make such provision as it may judge proper as to the custody and maintenance of the children. This remedy is also brought within convenient reach by the authority given to the Judges of Assize—the ordinary tribunal for the trial of jury cases—to entertain and act upon petitions for it.

"*Third:* We come now to a remedy, that of the dissolution of marriage, for which the act makes a new court, to be composed of the Lord Chancellor, the Chief Justice and the eldest puisne Judge of the three common law courts, and of the Judge of a new Court of Probate, established at this same session of Parliament. But, for all preliminary proceedings, the Judge of the Probate Court is to sit alone as Judge ordinary, and he is also to have concurrent jurisdiction as to the two preceding remedies.

"*The grounds of the dissolution of marriage are, on the part of the wife, simple adultery; but, on the part of the husband, the adultery must be incestuous (that is adultery with any woman, whom, if his wife were dead, he could not lawfully marry by reason of her being within the prohibited degrees of consanguinity or affinity) or accompanied with bigamy, whether this bigamy occurred within or without the British dominions*, or accompanied by cruelty such as would by itself entitle the wife to a judicial separation, or by desertion, without reasonable excuse, for two years and upward. Rape, and the crime against nature committed by the husband, are also grounds upon which the wife can obtain a divorce. But the Court must be satisfied not only of the fact of the adultery alleged, but also that the petitioner was not accessory to it, nor connived at it, nor has condoned, that is, pardoned it, and also that there is no collusion between the parties—in all which cases, the petition is to be dismissed; nor is the Court bound to pronounce a decree of divorce if it should be made to appear that the other party had also been guilty of adultery, or of unreasonable delay in presenting and prosecuting the petition, or of cruelty towards the other party, or of desertion

without reasonable excuse, or of such willful neglect or misconduct as has conduced to the adultery.

"The Court has the power in all cases, according to its discretion, to grant alimony to the wife, either by way of a round sum or an annual payment during her life, and to make interim orders, by way of alimony or otherwise. The latter power also extends to the Judges authorized to grant judicial separations.

"If the husband is the petitioner, he must make the alleged adulterer a co-respondent, unless excused from it by the Court. If the wife is the petitioner, it is in the discretion of the Court to require that the woman with whom the adultery is alleged should also be made a co-respondent. If the adultery is established, the Court is authorized to impose the whole or a part of the costs of the proceeding upon the adulterer. Either of the parties is entitled to insist on a trial by jury. The petitioner is liable to be examined under oath, at the discretion of the Court, but is not bound to answer any question tending to show that he or she has been guilty of adultery.

"*Fourth*: The husband, either in connection with a petition for a judicial separation, or a divorce, or by a distinct process, may claim damages against an adulterer, which damages, if recovered, shall be applied, at the discretion of the Court for the benefit of the children of the marriage, if any, or as a provision for the maintenance of the wife."

Although a decided improvement on its predecessor, this new law lacks the liberality which the spirit of the age demands, and indicates most strikingly the prerogative married men arrogate to themselves. Indeed, one of the members of Parliament, while the bill was under discussion, in substance remarked that if the law should be made equally binding on the husband, every gentleman in the House would soon become a "grass widower."

Marriages among the higher classes of English are governed by considerations of wealth and title, with little reference to love. The marriage of an aristocrat with a person in humble life, cannot be tolerated. All sorts of incongruous companionships are therefore formed in high circles. "Especially have English princesses," remarks a writer, "been unlucky in their matrimonial connections. More particularly is this true of princesses of the House of Hanover. To go back to Sophia, daughter of George the First, who married the first William Frederick of Prussia, she, poor thing, was almost daily beaten by her husband, a man whose brutality amounted almost to

insanity. Once she was nearly killed by him, with her daughter; and often was in imminent fear for her life. He denied her sometimes the common necessaries of life. She used to say, sarcastically, in her old age, that the only kind words he ever addressed to her were, 'Sophia, get up and see me die.'

"The eldest daughter of George the Second made a match only less unhappy. She was twenty-four before she was married at all; and then had to take the deformed Prince of Orange, because he was the only Protestant Prince in Europe of suitable age. Her father expostulated with her on the malformation of her proposed bridegroom. 'Were he a Dutch baboon,' she answered, tired out with her position at home, 'I would marry him.' It was the custom of that coarse age for a bride and groom, on the nuptial evening, to sit up in bed, in costly night dresses, to receive the compliments of their friends. On this occasion, as the royal family and nobility defiled past the Prince and Princess, who were magnificent in lace and Silver, the Queen, the bride's own mother, declared that when she looked at the bridegroom from behind, he seemed to have no head, and when she looked at him in front, she could not, for the life of her, tell where his legs were. Walpole or Henry, we forget which, records the anecdote. The Princess lived to regret her maiden condition at her father's Court, even with all the neglect that attended it.

"Another daughter of George the Second married the Landgrave of Hesse, the same who afterwards sold his soldiers to England, in order to assist in conquering these colonies. He was so brutal, that his wife, at last, had to desert him and seek refuge in her native country. A third married the King of Denmark, who abused her shamefully, openly insulting her in the presence of an unprincipled woman, who shared what he had of affection. She died, partly of a broken heart, partly of a cruel disease, at the early age of twenty-seven."

Among the lower classes more freedom is allowed by the social rules by which they are governed, and still the glitter of gold is frequently more captivating than the throbbings of a good heart, among these. Many a marriage is consummated where a purse is held by one or the other, which would hardly be contemplated in its absence.

Marriages in England, to be legal, must be solemnized by a clergyman of the established church, after the banns have been published or a license obtained from the primate.

The marriage laws of Ireland correspond in all essential particulars with those of England. In Scotland, however, there is less dif-

ficulty in "getting spliced," a simple declaration of the parties before a competent witness being sufficient to make the "twain one flesh." As in some of the States in this country, it is no trick to get the knot tied, but a mighty difficult one to get it untied. Gretna Green, located near the border of England, was famous at one time as a marrying place, and was resorted to extensively by English fugitives, who found a blacksmith ready to listen to all such declarations for a small fee.

A SPANISH LADY.

In Spain, little fidelity is known among married people. Jealousy never finds place in the Spanish breast, and the "liberty of married women has no limit except their own discretion," which, owing to

an ardent temperament, interposes but a feeble restraint. Marriages are generally arranged by the friends or parents of the parties, and solemnized by the priests, whose powers in that country are despotic. Lord Byron, in describing the customs of the Spaniards, in a letter to his mother, from Cadiz, wrote as follows:

"I beg leave to observe that intrigue here is the business of life; when a woman marries she throws off all restraint, but I believe their conduct is chaste enough before. If you make a proposal which in England would bring a box on the ear from the meekest of virgins, to a Spanish girl, she thanks you for the honor you intend her, and replies, 'Wait till I am married, and I shall be too happy.' This is literally and strictly true.

"The Spanish lady may have her cortejo as well as the Italian her cicisbeo. It is Spanish etiquette for gentlemen to make love to every woman with whom they have the opportunity, and a Spanish lady of rank has said that she would heartily despise the man who, having a proper opportunity, did not strenuously solicit every favor she could grant. Every Spanish woman reckons this as a tribute due to her charms; and, though she may be far from granting all the favors a man can ask, she is not the less affronted if he does not ask them." Yet the husbands of Spanish ladies, like those in all other countries, are under still less restraint than their wives.

In France, marriages among the higher classes are arranged by the parents or relatives of the parties, and generally solemnized by the priests. Separations are more common than divorces, "agreeing to disagree" being settled upon by the parties themselves. "The boudoir," remarks Goodrich, "is the sanctuary of a married dame, and the husband, who should enter it unbidden, would regard his power more than his character; he would bear the reproach of society, and be deemed a brute; for it is a great evil, in French society, that the unmarried females have too little freedom, and the married quite too much. The boudoir is a fit retreat for the graces, and other females of the mythology. Paintings, statues, vases, and flowers, nature and art combine to adorn it. It is the palace Armida, the bower of Calypso; but it breathes of Helicon less than of Paphos."

Marriages of convenience always have a decided tendency to make husband and wife discontented, and these being in the majority in the higher circles, it is not singular that in French society many liberties are taken and tolerated by both husband and wife. "In

France, Spain, Portugal, Italy and much the largest part of the continent of Europe," says Nichols, "marriages are arranged by the parents of at least one of the parties. A girl, educated in seclusion sees her intended but twice before he leads her to the hymeneal altar; once to be formally introduced, and once to sign the marriage contract. If he has suitable position it is enough; he may be old, ugly, repulsive; he has been chosen as her husband by those who ought to know what is best for her, and she accepts him with disgust because she must, or with indifference because she knows no better."

In Portugal the marriage customs do not differ much from those of Spain, except that ladies when married retain their maiden names. Females are more secluded than in Spain, but are quite as much given to intrigue and matrimonial infidelity.

The Swiss, who are noted for their free political institutions, while surrounded with despotism, cannot marry without the consent of the magistrates, whose permission or refusal is governed by the *fitness* of parties presenting themselves for marriage. It is required that there shall be adaptation between the parties, and this peculiar system of legalizing marriage results in happy families and hardy children. "At Geneva," says Goodrich, "the mode of life is extremely social. The soirees are constant from November to Spring. These meetings resemble family assemblages, in their freedom from the constraints imposed by etiquette. A stranger is struck with the affectionate manner by which the women of all ages address each other. These come from the influence of certain "Sunday Societies," in which children meet at their parents' house, where they are left to themselves and have a light supper of fruit, pastry, &c. The friendships thus formed endure through life, and the youthful expressions of fondness are never dropped." Divorces are very uncommon. The front door of marriage is guarded more than the back, and those who enter are generally too well satisfied to wish to get out.

In Italy, it has been remarked "that marriage is not a bond, but the reverse." Before marriage a lady is the prisoner of a convent, or the parental mansion, and is not allowed the society of gentlemen; but after she has become the wife, she may also become the lover of from one to three more besides her husband.

Byron, in one of his letters from Venice said—"The general state of the morals here is much the same as in the Doges' time. A woman is virtuous, according to the code, who limits herself to her husband and one lover; those who have two, three or more, are a little wild;

but it is only those who are indiscriminately diffuse, or form a low connection, who are considered as overstepping the modesty of marriage. There is no convincing a woman here that she is in the smallest degree deviating from the rule of right, or the fitness of things, in having a lover. The great sin seems to lie in concealing it, or in

AN ITALIAN LADY.

having more than one—that is, unless such extension of the prerogative is understood and approved of by the prior claimant." The same author further says—"they marry for their parents and love for themselves," and that a "person's character is canvassed, not as

depending on their conduct to their husbands and wives, but to their mistress and lover." Still, remarks a noted historian, "a person may pass through Italy, or live there for years, and not once be shocked with such undisguised vice, as in one night will intrude upon him in an English city." Prostitution, as a trade, cannot flourish in such society. It is, of course, uncalled for, where infidelity among married ladies is so fashionably allowed, or where polygamy is legally tolerated.

In Greece, girls are kept in separate parts of the houses, in a state of seclusion, much the same as in Turkey. They are not permitted to enter society until after marriage, when the restriction is removed. Weddings there are celebrated with great eclat. A procession attends the bride to her future home, preceded by music and young girls, dressed in white, who strew the path with flowers.

In Prussia, parties contemplating marriage are required to announce the fact in the newspapers. Matrimony among the higher classes is contracted on the title and "specie basis," as in most European countries. Infidelities, if discovered, are not overlooked, and divorces are of frequent occurrence—to the number of two or three thousand a year.

The Russian nobility conduct their marriages much the same as other Europeans. The peasantry, however, according to popular authority, have peculiar customs. The suitor applies to the mother, saying, "Produce your merchandize, we have money for it." When the bargain is concluded, the bride, at the wedding, is crowned with a chaplet of *wormwood*. "Hops are thrown over her head, with the wish that she may prove as fruitful as the plant. Second marriages are tolerated, the third are considered scandalous, and the fourth absolutely unlawful." The wives of the lower classes of Russians are treated in a shameful manner, and their position is only one remove from that of a slave.

In Austria, Germany, Switzerland, Norway and Sweden, the monogamic system is the law, and practical polygamy the violation. In the country last named, a species of practical omnigamy, or "free love" prevails to a remarkable extent, though not under the sanction of law. Bayard Taylor wrote from Stockholm as follows:

"After speaking of the manners of Stockholm, I must not close this letter without saying a few words about its morals. It has been called the most licentious city in Europe, and I have no doubt with the most perfect justice. Vienna may surpass it in the amount of

conjugal infidelity, but certainly not in general incontinence. Very nearly half the registered births are illegitimate, to say nothing of illegitimate children born in wedlock. Of the servant-girls, shop-girls and seamstresses in the city, it is very safe to say that scarcely one out of a hundred is chaste, while, as rakish young Swedes have coolly informed me, a large proportion of girls of respectable parentage, belonging to the middle class, are not much better. The men, of course, are much worse than the women; even in Paris one sees fewer physical signs of excessive debauchery. Here the number of broken down young men, and blear-eyed, hoary sinners, is astonishing. I have never been in any place where licentiousness was so open and avowed—and yet, where the slang of a sham morality was so prevalent. There are no houses of prostitution in Stockholm, and the city would be scandalized at the idea of allowing such a thing. A few years ago two were established, and the fact was no sooner known than a virtuous mob arose and violently pulled them down. At the restaurants, young blades order their dinners of the female waiters with arms round their waists, while the old men place their hands unblushingly upon their bosoms. All the baths in Stockholm are attended by women (generally middle aged and hideous, I must confess,) who perform the usual scrubbing and shampooing with the greatest nonchalance. One does not wonder when he is told of young men who have past safely through the ordeals of Berlin and Paris, and have come at last to Stockholm to be ruined."

In Turkey the first marriage is contracted by the parents of children who are sometimes betrothed at the age of two or three years. When they arrive at adult age, the bride is carried in a procession to the house of the husband. But polygamy is the law of the Ottoman empire, and the husband is allowed to purchase as many more wives as he chooses. They purchase many girls of the Circassians, for which they pay from twenty to thirty dollars apiece for handsome ones. Once they were considered cheap at $500. The wives of a Turk are kept in what is termed a harem, a place gorgeously fitted up, and attended by eunuchs.

Formerly, a Turkish lady never left the harem without concealing her face behind a great number of veils. The war between Turkey and Russia has effected considerable change in this custom, and now only one thin veil is used, through which the eyes of strangers look on beauties whilom concealed from the gaze of foreigners. The ladies of Turkey are said to enjoy nearly as much liberty as the females of

Christian countries, where polygamy is not tolerated, and where ladies sell themselves to wealthy husbands. Turkish women bear more female than male children, a noticeable fact in all countries where the plurality system of marriage is maintained. A Turk can

A TURKISH LADY.

divorce a wife at pleasure, for if he have no real cause, he can make a false accusation, and sustain it by perjured witnesses which can be obtained without difficulty; but he is not permitted to take her back

again for the fourth time, unless, during the interval of the separation, she has been the wife of another man. Notwithstanding the little regard manifested for the marriage contract, death is the penalty for adultery.

With this cursory view of the matrimonial customs of the old world, we will now turn our eyes to our own continent, and see how we find

MARRIAGE IN THE NEW WORLD.

In South America, the marriage institutions of the people compare, at least, favorably with those of the semi-barbarous portions of the old world.

The Araucanians in the southern part of Chili, with a population of 400,000, believe that marriage is perpetual in this world and the world to come. Every man is allowed to have as many wives as his means will permit, the first being considered superior to the rest. The husband selects his partner for the night at the supper table, by requesting her to prepare his bed. Buying and selling wives is practiced to some degree. "Marriage is always celebrated with a show of violence, for even after consent is obtained, the bridegroom conceals himself on the road, seizes the bride, and carries her to his house." It is required that each wife shall present her husband with a fine cloak.

In Brazil, the civilized portion of its inhabitants maintain the monogamic system of marriage, and are said to be "exemplary in their domestic relations." It is not uncommon, however, to see an old man united with a young girl in marriage. Disparity in ages is considered no obstacle to a happy union. Among the uncivilized natives, polygamy is upheld, and ornaments are more profusely bestowed on the person than clothing, by both sexes, and yet they have a fair reputation for chastity. Adultery is punishable with death.

In Central America and Mexico, polygamy, monogamy and omnigamy are practiced, according to the respective conditions of their heterogeneous population. Only about one-fifth are white, and those are of Spanish origin, and imitate, in a measure, the customs of their ancestors. The marriages among this class are generally celebrated with some pomp, "and the fee for the priest, even from parties of the lowest rank," says Goodrich, "is not less than twenty-two dollars, and this in a country where the houses of the poor cost but

four dollars, where the price of labor is a quarter of a dollar a day, and where the church observances leave but 175 working days in each year!" The remaining population is divided between Mestizos, Mulattoes and Zamboes, many of whom are but a little above the savage, go naked and have no established forms of marriage. The Mestizos are the offspring of whites and Indians, and many of the females are said to be very beautiful. Those who do not associate with and imitate the customs of the whites, are omnigamic, and governed by their impulses.

A MESTIZOS GIRL.

In North America, the customs of the aborigines are interestingly daguerreotyped in a quotation from McIntosh's Book of Indians, which I find in "Marriage, its History and Philosophy," by L. N. Fowler. "They are," he says, "generally contented with one wife; but they sometimes take two, and seldom more than three. The women are under the direction of their fathers in the choice of a husband, and very seldom express a predilection for any particular person. Their courtship is short and simple. The lover makes a present generally of game, to the head of the family to which belongs the woman he fancies. Her guardian's approbation being obtained, an approbation which, if the suitor is an expert hunter, is seldom refused, he next makes a present to the woman, and her acceptance of this signifies her consent. The contract is immediately made and the match concluded. As soon as he chooses he is admitted to cohabitation; but the time of the consummation is always a secret to every one but themselves. All this is transacted without ceremony,

without even a feast. The husband generally carries his wife among his own relations, when he either returns to the tent which he formerly inhabited, or constructs a new one for their own use. They sometimes, but seldom, remain with the wife's relations. When the wife is removed, if the game be plentiful, he gives an entertainment to her relations. These contracts are binding no longer than both parties are willing. If they do not agree, they separate—the woman returns to her relations, and if they have any children she takes them along with her; but after they have children a separation very seldom takes place. If a woman be guilty of adultery, and her husband be unwilling to divorce her, he cuts her hair, which is the highest female disgrace. On the woman is devolved every domestic charge. She erects the tent, procures wood for the fire, manages the agricultural affairs, dresses the provisions, catches fish, and makes traps for small animals. The husband only employs himself in the chase.

"When a woman is with child, she works at her ordinary occupations, convinced that work is advantageous, both for herself and child; her labor is easy, and she may be seen on the day after her delivery, with her child at her back, avoiding none of her former employments. They suckle their children till they are at least two years of age. Their cradle was anciently a board, to which they laced their children, after having wrapped them in furs, to preserve them in heat. This is set down in a corner, or hung up in a tent, and without loosening it from its cradle, the mother often takes it on her back, and in that manner carries it about.

"Among the Indians, women cannot contract a second marriage without the consent of those on whom they depend, in virtue of the laws of widowhood. If they can find no husband for the widow she finds herself under no difficulties; if she has any sons to support her she may continue in a state of widowhood, without danger of ever wanting anything. If she is willing to marry again she may, and the man she marries becomes the father of her children; he enters into all the rights and obligations of the first husband.

"The husband does not weep for his wife, because, according to the savages, tears do not become men; but this is not general among all nations. The women weep for their husbands a year; they call him without ceasing, and fill their village with cries and lamentations, especially at the rising and setting of the sun, at noon, in some places; when they go out to work and when they return. Mothers do much the same for their children. The chiefs mourn only six months and may afterwards marry again.

"It appears that the Indians have their merriments on the marriage occasions, although their celebrations go off commonly without much ceremony. There are in all nations some considerable families, which cannot marry but among themselves, especially among the ALGONQUINS. In general, the stability of marriage is sacred in this country, and for the most part, they consider as a great disorder those agreements, which some persons make, to live together as long as they like, and to separate when they are tired of each other. A husband who should forsake his wife, without any lawful cause, must expect many insults from her relations; and a woman who should leave her husband without being forced to it by his ill conduct, would pass her time still worse.

"Among the Miamis, the husband has a right to cut off his wife's nose if she runs away from him; but among the Iroquois and Hurons they may part by consent. This is done without noise, and the parties thus separated may marry again. They cannot even conceive that there can be any crime in this. 'My wife and I cannot agree together,' said one of them to a missionary, who endeavored to make him comprehend the indecency of such a separation; 'my neighbor's case was the same, we changed wives and we were all happy; for nothing is more reasonable than to make each other happy, when it is so cheaply done without wronging anybody.' Nevertheless, this custom, as we have already observed, is looked upon as an abuse, and is not ancient, at least among the Indians."

"The Greenlanders," Fowler remarks, "pay some little regard to the affections in their matrimonial alliances. In the negotiations, the parents never, or rarely, interfere—the lover thinks but little of a dowry with his wife. If she will make a good, kind, affectionate and obedient *wife*, his highest anticipations are fully realized, and he has all he desires. About the time of the celebration of the nuptials, the bride pretends to be opposed to the marriage, runs away, screams and is finally taken home by force by the bridegroom, which constitutes the sum total of the marriage ceremony. Polygamy is occasionally practiced and divorce is exceedingly common."

In the United States and territories, which enjoy the most exalted position among the nations of the new world, all existing systems of marriage are more or less represented. In the States, the monogamic system only is recognized by law—pretty generally observed by wives—professedly so by nearly all husbands, and strictly so by many.

In no country in the world are greater immunities enjoyed by the people in the selection of conjugal companions, than in our own, and still, wealth, distinction and parental dictation, exert a mighty influence in match-making. Did the thought ever occur to the reader that daughters here are often times *sold* in marriage by their parents or themselves, just as truly as they are in many heathenish countries? Such is a lamentable fact, and one which has not failed to make an impression on the minds of many observers.

GREENLANDERS.

"The accursed term 'marriage of convenience,' fit only to be found in the mouths of an unfortunate or a libertine," says Dixon, "is now by no means too shocking to escape the lips of a fashionable mother, alarmed at her husband's prospective failure, and the consequent loss of her box at the opera. She must make profitable sale of her daughters, because she cannot influence her sons, or their wives when they get them. Whether the article be merchantable or not, a sale must be effected. The father is too often so immersed in business, that he is scarcely consulted; the family physician never;

or if he be, he is perhaps a time server, and looks forward to a profitable return for withholding the truth."

Continues the same writer—"Riches, when combined with a tolerably decent family genealogy, are an object of boundless ambition, and in New York take precedence of all other recommendations. From the clergyman to the market woman, all are equally blinded by it; neither dissipation, nor an empty head, are often drawbacks whether in man or woman; and alliances are every day contracted, where nothing but disgrace and mortification can reasonably be anticipated."

The almost invariable inquiry among friends, when a marriage takes place, is—"Has she done well?" which generally signifies has she married a house and lot, a good supply of pretty furniture, or a large amount in bank and rail-road stock, and a comfortable pile of money. This question is almost universally so regarded, so much so that the respondent, in reply, at once begins to tell either how rich or poor the husband is. If a wealthy position has been attained by the bride, parents and friends congratulate themselves on the success of the daughter, and the unanimous exclamation is—"She has done well." Young women in the highest circles often sell themselves to old men double or triple their age, or are so sold by parents, and do not seem to dream that they are bartering away their virginity and womanly charms for gold, the same virtually as the abandoned woman who walks the pavement in New York. True, there may be cases where mutual love exists in such unequal copartnerships, but these are manifestly rare exceptions.

On the other hand, a woman possessing wealth, though ugly in person or disposition, can always obtain a husband. Many young men at the outset stifle all love for ladies in humble life, however amiable in disposition and prepossessing in appearance they may be, with the avowed object of marrying a fortune.

When considerations of wealth have little or no influence, parents often interfere, to an unwarranted extent, in the marriage of their sons and daughters. My eye has this day fallen upon two instances illustrative of this remark. A Chicago paper says—"The village of Colchester, on the Chicago, Quincy and Burlington road, was the scene of a sad affair one day last week. A young lady of that place, the daughter of an estimable citizen, had for some time past received the addresses of a young man in opposition to the wishes of her parents. They remonstrated with her again and again, but to no

purpose. Finally, her father told her he would rather follow her to the grave than see her the wife of a man whom he regarded as unworthy of her. Shortly afterward the young lady was seized with an alarming illness, and in three hours more a corpse. Just before dying, and when she knew she was beyond the reach of remedy, she confessed to having procured and taken a large portion of arsenic. The unhappy father's alternative was presented to him sooner than he could have believed it possible."

A Cincinnati paper records the following: "A beautiful German girl was taken to the Commercial Hospital yesterday, a raving maniac; her reason completely overthrown by disappointment in love. It seems that she had been engaged to one of her countrymen for some months, and had fully expected to become his wife, when her father informed her last Saturday that she should not marry.

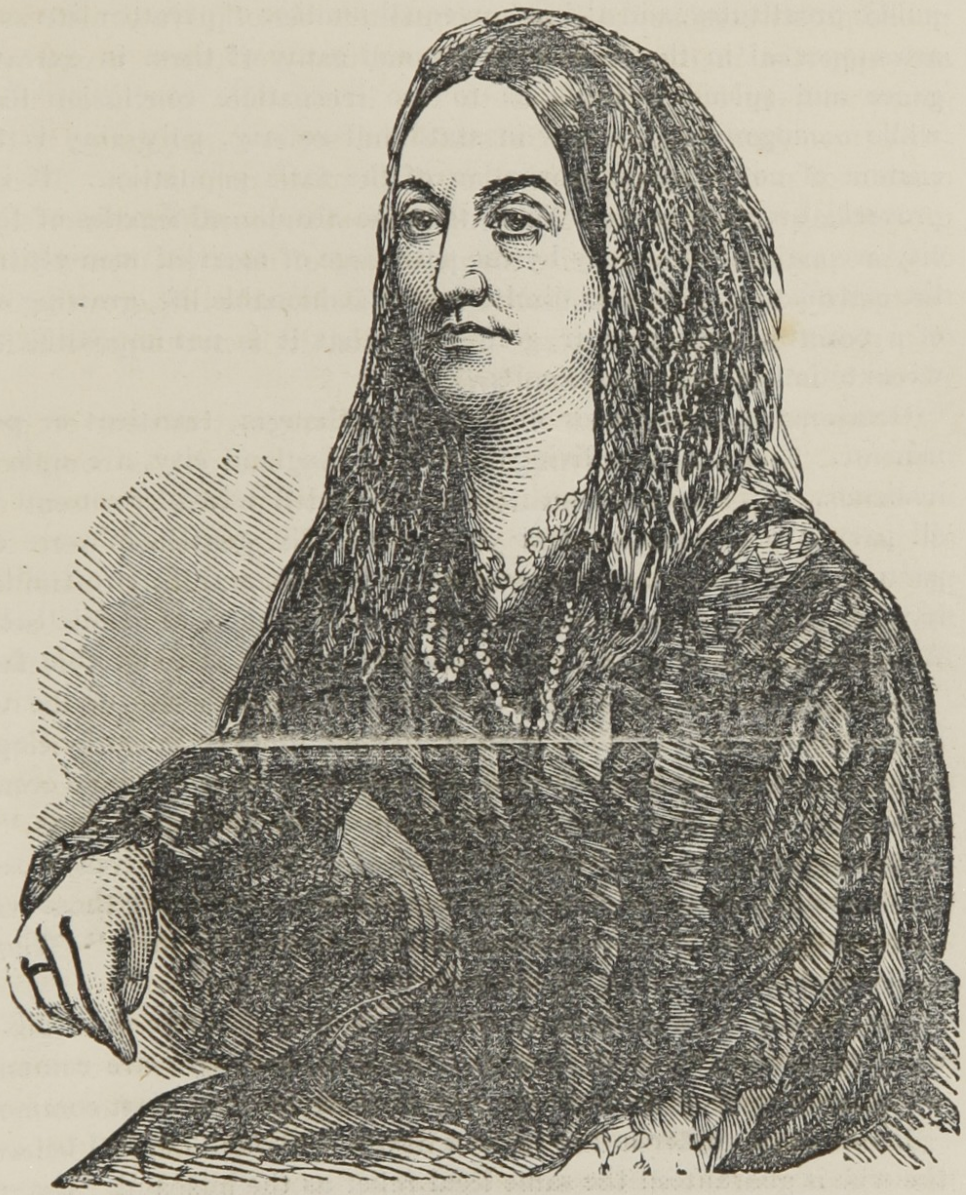
"Upon the announcement she fell, as if struck by lightning, to the floor, and it was with much difficulty she was restored to consciousness. She then began raving frightfully, and with cries and screams, and groans and tears, and lamentations, startled the whole neighborhood of Bremen street, where she resided. Nothing could be done to calm or appease her—she grew worse and worse, until it was determined to remove her to the Hospital.

"When there, she continued to rave, and would have died from exhaustion very soon, had not chloroform been administered to keep her quiet. It was found necessary, too, to bind her to the floor, else she would have taken her life, leaped out of the window, or done anything desperate. The physicians who saw her say they never beheld so violent a maniac.

"It is pitiable to observe this young and beautiful woman, just in the spring of life, suffering—and how intensely she must suffer—all the horrors of madness, because of a generous and absorbing passion, which might and should have been made her happiness on earth."

These are by no means isolated cases; the press teems with such sad recitals. Let me not be understood as disparaging parental counsel—only parental tyranny. Parents should always give good advice to children in matters pertaining to the selection of a conjugal companion, and at this point all interference or dictation on their part should stop. If the laws of physical and mental adaptation were more generally understood by them, and their positive interference in the selections of their sons and daughters based unselfishly on these rules, then might their prohibitions in all cases be regarded

as best for the interests of their children. But seldom are parents qualified to decide in this matter, all dictation on their part arising from their own likes or dislikes, as if their children were bound to love every body whom they love, and dislike all who are not prepos-



AN AMERICAN LADY.

sessing to them. This kind of interference oftener thwarts physical and mental adaptation than favors it, because love seldom springs up spontaneously between a youth and maiden, when there is mental and physical uncongeniality. For this reason parental interference,

ungoverned by phrenological and physiological knowledge, oftener prevents than effects the right kind of marriages.

American wives, with occasional exceptions, are faithful to their husbands, and many husbands, particularly in the rural districts, are faithful in return. But the fact that over *one hundred thousand* public prostitutes, and at least an equal number of private mistresses are supported in the United States, and many of them in extravagance and splendor, leads us to the irresistible conclusion that, while monogamy is the law in state and society, polygamy is the custom of not a small proportion of the male population. It is a proverbial remark in New York, that the abandoned females of that city are maintained chiefly by the patronage of married men visiting the metropolis. Singular disclosures in fashionable life, growing out of a recent notorious affair, go to show that it is not impossible for wives to imitate their husband's vices.

Occasionally cases occur of mutual exchanges, transient or permanent. There is now living in a New England city, a couple of husbands, in respectable position, who traded wives by consent of all parties concerned, several years ago. The gentlemen were copartners in business at the time of the exchange, and the two families have since lived on terms of friendship, with no desire to trade back! Although this may sound like a strange story, it is a veritable fact.

Transient exchanges are not uncommon among some of the too fast livers of large cities, but permanent ones, unless effected by elopement, when the bargain is all on one side, are certainly rare occurrences. "Lycurgus, the great legislator of the Lacedæmonians," it is said by a historian, "thought that freely imparting wives to each other was the best way of preventing jealousy, ridiculing those who thought the violation of their bed an insupportable injury." Those who exchange, are probably disciples of his theory.

The condition of American wives is various. Some are dolls—some companions—many drudges. Happy marriages are common—unhappy ones more common—tolerably happy ones most common.

Divorce laws differ in the various States, although in all, I believe, the wife is guaranteed the same legal relief as the husband. Several States grant divorces on the ground of cruelty, intemperance, willful absence, fraudulent contract, as well as adultery. A few limit the cause to the latter, and the erring party is debarred the privilege of marrying again—a provision which cuts off all probability and encouragement of a reformation on the part of the offending one.

The result of such one sided divorces is that the man or woman against whom the decree has been rendered, leads a life of licentiousness.

Some of the States punish adultery with imprisonment—others with fines—others not at all—and in every State a husband is leniently dealt with, who takes the life of the violator of his marriage bed.

Public opinion zealously upholds the monogamic system in this country, and society severely criticises any violation which obtains publicity. In defiance of this, however, omnigamy, or "free love," has its votaries. There are communities of this sort in Ohio, Wisconsin and Connecticut. These, of course, are the fungus growths of our liberal institutions, and have not the support of statutory law.

In the territory of Utah, under the sanction of Mormonism, we have polygamy. Brigham Young, the chief priest of that organization is said to have forty wives, and his elders and disciples are at liberty to have as many as they choose. I saw in one of the New Haven papers, a few years ago, a letter purporting to have been written by one of the wives of a mormon, to her sister in that city, in which the author enthusiastically endorsed the plurality system, expressed herself contented and happy with her situation, and added that no jealousy existed between herself and her co-wives. Her account of polygamic felicity materially conflicts with the testimony of travelers, who represent the condition of the Mormon women as degraded beyond description. In the present state of affairs in that territory, however, all reports should be received with some grains of allowance. The Mormons are fashionable, at least, in their matrimonial regulations, for it is claimed by an authoritative writer, that polygamy is tolerated by the laws and usages of four-fifths of the human race, and the facts given in this chapter are not such as to disprove his assertion. Divorces among the Mormons, I believe, are never granted without consent of the church.

The "Saints" boast of the absence of prostitution in Utah, and discourse sarcastically on the existence of this vice among the "Gentiles." They urge, and with facts to sustain them, that prostitution is common in all monogamic countries. The truthfulness of this accusation is seriously to be regretted, and it is the imperative duty of physiologists to make such suggestions for the amendment of our marriage laws as will ultimately root out prostitution, and

thereby sustain the integrity and utility of the monogamic system of marriage. I say physiologists, because the studies of these men better qualify them to point out measures which will conciliate and turn into a virtuous channel the sexual passions of mankind.

CHAPTER II.

Philosophy of Sexual Intercourse.

Some over fastidious readers, perchance, will question the propriety of a public presentation of my theory regarding the philosophy of sexual intercourse, but the necessity of the step will be perceived in subsequent chapters. Subjects of such vital importance must be discussed, and where so appropriately as in the pages of physiological works? Ignorance of the truths which will be herein presented, is the cause of secret vices, matrimonial discords and love elopements.

I have shown in the first part of this work, and particularly in Chapter 1st, that electricity permeates every atom of animate as well as inanimate matter, and that every organized being possesses within itself the requisite apparatus and elements for its generation and absorption. The office of this chapter will be to show that it is the source of sexual enjoyment.

To the pure in mind this dissertation will appear neither carnal or uninstructive, for no parts of the human system are more deserving the attention of philosophers, physiologists and the public at large, than those which perform the superior functions through which the Divine Creator establishes sexual love, and perpetuates the noblest work of his Almighty hand. In consequence of the silly fastidiousness which a false state of society has engendered, science has heretofore contributed nothing towards unfolding the philosophy of the action of these mysterious faculties, and knowing the prejudices which frequently arise against those who dare to meddle with the delicate subject, I have myself felt many misgivings in giving publicity to my views; but surrounded, as I am, with wrecks of humanity, cast away through the ruinous consequences of matrimonial infidelity, sexual excess and secret vices, I feel impelled to contribute what I can to avert these evils.

The warnings of physiologists to the young have thus far availed little, if anything, because good *reasons* have not been adduced to show that secret indulgences are more deleterious than natural gratifications of the amitive passion, while little has been written argu-

mentatively at all calculated to root out the vices of marriage. I shall not, therefore, withhold the results of my careful investigations, but give them plainly for the good of both married and single.

To the end that the unprofessional reader may fully comprehend what I am about to say, an important physiological fact should be mentioned, viz: *no organs of the body, except the brain, are so extensively permeated with nerves or electric conductors, as those embraced in the sexual parts.* Located in close proximity to the plexus, at the inferior terminus of the spinal column, they receive an extraordinary share of those curious little cords, which, by the aid of animal electricity, impart to the animal organization the sense of feeling. In the act of cohabitation, these sensitive nerves are exercised by electricity in three forms; and in masturbation by electricity in only one form. I will now proceed to explain each of these several forms, under their appropriate heads.

1st. INDIVIDUAL ELECTRICITY.

The fact that every animal body has within itself the requisite machinery for the generation of vital electricity, does not necessarily establish the conclusion that electricity is alike in capacity and quality in all persons. On the contrary, it would be preposterous to entertain such an idea for a moment, when we take into consideration the difference which exists in size, shape, solidity, activity, age and sex. The inference is irresistible, that people differ electrically as much as they do physically. This being a fact nearly or quite self-evident, it is apparent that two persons of different sex and temperament sustain the electrical conditions of positive and negative to each other, and that contact, if of sufficient duration, produces an equilibrium, unless the one possessing the greater amount, restrains it by the action of the will. Electricity, unless interrupted, seeks an equilibrium the same as water seeks a level. The mind, having control of its own agent, may sometimes retain it, and at others discharge it with an effect as perceptible as that produced by the discharge of a cannon ball.

The power of individual electricity is manifested by the magnetizer, who fastens a man's limb so that he cannot move it—his eyelids so that he cannot raise them, and his tongue so that he cannot speak. Probably every reader of these pages has witnessed the experiments of a mesmerizer, and marvelled at his peculiar powers—perhaps imagined, uncharitably, that he was leagued with the devil—

inwardly accused him of being, at least, a devout disciple of "His Satanic Majesty." Unfortunately for themselves, mesmeric operators, so far as I know, cannot philosophically account for the powers they possess, and hence superstitious people very naturally imagine they are under the direct patronage of that ubiquitous individual—"the evil one." But I flatter myself that I have discovered the secret.

It must be remembered that in an audience of two or three hundred, a mesmerizer seldom finds but fifteen or twenty whom he can affect. These, let it be understood, are in a condition relatively *negative* to the operator, who, by the effort of his will or sundry manipulations, imparts an overpowering quantity of his own individual electricity to them. Imparted to these subjects, the operator still retains the control of his own individual electrical element, and by a simple effort of the will makes them walk, stand still, hold up a hand, raise a limb, or perform any other motion he may desire. How do you raise your own hand? Simply by setting in motion a current of your vital electricity, which contracts one set of muscles on the top of the arm, and relaxes those which are under. Now, if you should practice yourself in the art of imparting to other persons, in a negative condition compared with your own system, a portion of your own electricity, sufficient, at least, to overpower theirs, you could soon become a mesmerizer, and make them, while under the influence of your electricity, raise an arm, hold it still, or produce any other motion that you can perform with your own limbs.

The psychologist possesses this power to a greater degree than the mesmerizer, for he can impart his electricity to the brain of a susceptible subject, and by exercising its various organs, produce any sort of mental hallucination he may invent.

"Should you aim to produce those effects of mind upon mind called 'psychological,'" says a writer, "it will not be necessary to go through the tedious process of the passes. If you can succeed in rendering the mind of your patient so fixed for several moments upon a coin or a spot on the wall, or any point—it matters not which, provided that he brings himself to the requisite degree of susceptibility—you will be able to slip your *influence* between his brain and his physical system, and so be able to control his sensations and perceptions. If it is desired that you make him believe himself an orator, musician, or monk, have in your mind a clear conception of the character, and make an effort to *impart* the impression."

Now, what is this *influence* but the nervo-electricity which the immortal principle of man employs to perform the various phenomena of animal life?

Mesmeric power is possessed to a wonderful extent by some persons, who can impart their nervo-electricity to inanimate matter, and make it exhibit the appearance of life for a few moments. I can never forget an experiment I once saw performed before I understood the philosophy of mesmerism. I was on a trip up Lake Michigan. A veteran vessel captain was a fellow-passenger—a jolly tar, full of good jokes and anecdote. I formed one of a social group, who gave him audience. I had a favorite hickory cane in my hand, and the old captain proposed to make it dance Yankee Doodle. The deck was cleared sufficiently to allow room for the incredible exploit, when the old necromancer (as we all thought him) made several rapid passes from the top to the extremity of the stick—then stood it off at a distance of three or four feet. He immediately commenced whistling and the cane commenced dancing—i. e., hopping up and down a distance of half to three quarters of an inch. It performed this motion only a few moments, however, not long enough for the captain to go through with his tune! His music was accompanied with a violent motion of the hand, which the cane imitated, in a measure, just so long as it remained charged with the old man's magnetism; when that left, as a matter of course the stick, in obedience to the laws of gravitation, fell. At each repetition of the experiment he stopped to manipulate the cane. It is not at all probable the old tar knew the philosophy of his feat, or for a moment imagined that he possessed the requisite qualities to make a good mesmerizer or psychologist. The oldest hieroglyphs indicate that the production of mesmeric phenomena were known to the ancient Egyptians long before any book was written. Perhaps their philosophy was understood, though it is doubtful.

The power of individual electricity is manifested in the successful public speaker, and distinguished military hero. "Every age," says a newspaper writer, "has exhibited manifestations of man's electric powers. Behold the generals of Greece and Rome! See that untutored enthusiasm which but a few words to the soldiers would create with manifestations of a magnetic power of man over man. Behold, too, in the force of Napoleon Bonaparte, an illustration of the same principle. Even a movement of his hand toward the enemy, when the conflict was doubtful, seemed to beget new energies.

'Take another class in a different field. Imagine yourself in the forum at Rome, listening to the soul-stirring eloquence of Cicero. Behold that living mass of minds swayed by his magnetic power as the bosom of the deep is tossed by the winds of heaven—made to heave and swell with agitation and commotion. See the more mild and pathetic and elevating appeals of his eloquence calming their troubled bosoms like the sun bursting from a storm-cloud and calming its fury.

"At the moment when his soul was inspired by its own energies and the inspiration of his theme, his whole system evolved an immense amount of electric force. He should say more in ten minutes in that condition than in an hour—yea, two hours, and sometimes four hours, in a negative state."

But we need not go beyond the limits of our own country, or to past ages for illustrations. We have had a Webster, a Calhoun, a Clay, an Adams, a Washington, a Taylor, and now have a Corwin, a Choate, a Crittenden, a Beecher, a Scott, all of whom give evidence of possessing electric power to an eminent degree. No man can distinguish himself as a public speaker, or a military chieftain, whose system has not the power to generate a large quantity of the electric element.

There are in the Christian ministry many distinguished sermonizers and writers, who can produce only an imperceptible effect on a congregation. Let such a man as Ned Forest, who is a well charged electric battery, take the productions of these men and enter the pulpit, out of place as he would be, the effect would be thrilling He would psychologise every auditor. Reichenbach, it is said, has demonstrated that the hands are constantly sending off streams of what he calls "odic force," and what I term animal electricity; also that the eyes are foci for this influence. "Odic force" is but another name for electric force, sublimated animal electricity being the element which constitutes it.

The power of individual electricity is manifested in the successful libertine. His presence, his gaze and his touch are magnetic. The innocent virgin and the reserved wife unconsciously fall victims to his singular powers. Aaron Burr was a distinguished illustration of this class. He could electrify and call into action the most latent passions of virtuous women; only those who possessed a powerful *will* to repel electrical influences, could resist his licentious advances. All great men may be successful libertines, by perverting their

electrical powers. The mental or phrenological organization of a man decides his electrical character. If his intellectual faculties predominate, he will employ his electric forces in the pursuit of honorable avocations and professions; if the intellectual and animal faculties are nearly equal in their developement, then will he make both a good and bad use of these forces, unless the brain is well balanced with the moral and religious organs; if the latter are small and the animal organs are larger or more active than the intellectual, then will the man use the subtle element generated in his system, in vicious pursuits. John Randolph's head was all before his ears, in consequence of which he had no disposition to use his electrical powers for licentious purposes. Many of his political compeers, however, presented very different phrenological organizations, which, in some instances, produced a marked and injurious influence upon their distinguished career.

RANDOLPH.

Again, the power of individual electricity is manifested in social life. We often meet with persons of both sexes, whose features and forms are not pretty, or their mental endowments striking, but still very attractive. We say of some lady, "She is very fascinating, but not at all handsome; there is something about her very agreeable, although she is far from being mentally or physically prepossessing." Now, what is this mysterious *something* but her individual electricity which she unconsciously uses in commanding the respect and admiration of her acquaintances? She, in fact, magnetizes every one she meets, and makes them admire something and they do not know exactly what. Others are repulsive at first sight. Their magnetic influence is unpleasant, and we dislike them without being able to give a definite reason. They cannot magnetize us into respect for them, and the electrical radiations from their bodies and minds are uncongenial to our feelings.

Finally, individual electricity is strongly manifested in the sexual embrace, when the magnetic forces in each are focalized and blended in the sensitive nerves which concentrate in the sexual organs. In a *congenial* embrace, the mind of each party summons all the avail-

able electric powers of his and her organization, and employs them to the fullest extent in exciting in each pleasurable emotions. The greater the dissimilarity in the nature of their individual electricities, the more satisfying is the effect. Hence, persons of similar physical organizations, whose electricities, in consequence, are of a similar nature, have not the power to gratify each other to the extent those have whose temperaments are unlike. Some persons are so dissimilar in their physical organizations that any contact, such as the shaking of hands, imparts to each a pleasurable magnetic effect. The reader should peruse with attention this essay on individual electricity, as it is the basis of some of the most important original theories and suggestions of Part II.

2d. CHEMICAL ELECTRICITY.

I term that chemical electricity which is produced by a galvanic battery, a voltaic pile, or the union of acids and alkalies. I have explained in Part I. that experiments have proved the fact that if an acid and alkaline solution be so placed that their union be effected through parieties of an animal membrane, or through any porous diaphragm, a *current* of electricity is evolved. Now, what is it that affords the *current?* simply the porous diaphragm; but what produces the *electricity* which forms the current? I reply the union of the acid and alkali. Then the interposition of the diaphragm is only to establish a medium for a definite current, while electricity is *produced* by the commingling of acids and alkalies, whether a porous diaphragm intervenes or not. This leads us to the conclusion that electricity is produced when tartaric acid is added to soda, the latter being an alkali, and that it is altogether probable the titillating effects of a glass of soda are produced by the electricity generated by the combination of a positive and negative fluid. I know the effervescent property is claimed to be produced by the liberation of carbonic acid; but Dr. Bird says, "*it is impossible that any two elements can be rent asunder without setting free a current of electricity.*" In the union of acid and alkali, the carbonic acid is "rent asunder" from the elements with which it was united; and may we not then attribute a part of the visible effect produced to the electricity generated?

Adm't that electricity is generated by the union of acid and alkali, and we find that chemical electricity is produced in the act of copulation It has been shown in the first chapter of this work, that the

whole extent of the mucous membrane, excepting the stomach and caecum, is bathed with an alkaline fluid. The vagina of the female is superabundantly supplied with this fluid. And also, that the external surface of the body is constantly exhaling an acid fluid. The penis of the male, except the glans-penis, exudes an acid fluid; and in the act of copulation, I am inclined to think the secretion of the alkaline fluid by the female, and the exudation of the acid fluid by the male, is greatly augmented. I have before adverted to the pleasing sensations produced in the mouth and on the palate in drinking a combination of an acid and alkali, called soda; now, what must be the effect produced on the sensitive and highly excited nerves in the sexual organs, when animal alkalies and acids are united? True, these fluids are not supplied in sufficient quantities to produce any marked effect; but still the electricity so generated adds to the excitement of the sexual organs, and the emotions induced. In order that the male may not be insensible to the influence of the chemical electricity generated during copulation, the male organ is supplied with a sensitive membraneous apex called the glans-penis, which not only serves this purpose well, but also constitutes an electric, as will be shown by-and-by. Our investigations thus far, therefore, indicate that individual and chemical electricities are employed in the act of copulation. Next we will consider

3d. FRICTIONAL ELECTRICITY.

This may be produced in various ways. The rubbing of a piece of glass, amber, or sealing wax, with a piece of flannel, silk, or fur, will so charge the former with electricity, that, when held near light bodies, they will be attracted and adhere to them! Many persons, by sliding the feet with rapidity over a Brussels carpet, can accumulate so much frictional electricity in their bodies, as to be able to light gas by snapping the fingers over the burner of a gas chandelier. I have a relative who frequently performs this interesting experiment. He can also administer quite a perceptible shock with electricity thus accumulated.

Frictional electricity may be produced by rubbing the hands together with rapidity, or by rubbing any part of the body. Every external part f the system may be, in a measure, electrically excited by rubbing; but no part of the animal organization is so susceptible to this influence as the glans-penis of the male and the clitoris of the

female. It is by the excitation of these organs that masturbation is performed—a vice which is daily ruining the health of thousands of young men and women. They think that the warnings of physiologists are only intended to frighten them—that occasional secret indulgence is no more injurious than sexual intercourse. To the victims of this vice let me say that, in the act of masturbation, only one form of electricity is employed, and that *is drawn from the nervous system* and returned with frightful loss. Nature designed that the generative organs should be acted upon by individual, chemical, and frictional electricities; you employ only the latter, and that is not *produced* but extracted from your nervous organizations. In a natural gratification of the passions, the electricity produced by the commingling of the animal acids and alkalies, coition and the interchange of individual electricity compensates the nervous systems of both sexes for any losses which would otherwise be sustained.

The pubes, I am disposed to think, are useful in perfecting the curious electrical machinery of the generative organs. Hair being a non-conductor of electricity, may aid in confining the element generated and exchanged during the act of coition, to the sensitive nerves; or, in other words, serve to isolate the external parts of the sexual organs. Every thing has been created and given its appropriate place for some wise purpose, and this may be the office of the pubes. Be this so, or not, the generative systems of both sexes are the very perfection of divine mechanism, admirably adapted to the purposes for which they were created. Ignorance of their philosophy and physiology has ever lead to their serious perversion, both by the married and unmarried. In this case, ignorance is not bliss nor wisdom folly. Mankind should learn to make good use of them, but knowledge so desirable cannot be obtained unless their philosophy is correctly understood. For this reason I have indited this chapter, which constitutes the corner stone of those which follow.

CHAPTER III.

Mental and Physical Adaptation in Marriage.

MANY reformers run wild on platonic love, and advocate platonic marriages, founded entirely on elevated mental affinity. Not a few philosophers, in all ages of the world, have taken the opposite extreme, and acknowledged the influence of no love in marriage except that of a passional nature. The middle of two extremes is almost invariably safe ground to stand upon, and the reformer who occupies this central position, generally exerts the greatest and best influence.

Observation teaches us that truly happy marriages cannot exist where only platonic love unites the sexes. Almost every community exhibits some marriages based on platonic love, but neither their offspring nor their constancy indicate that oneness of soul which characterizes those unions in which both physical and mental adaptation has been realized. Then, on the other hand, it is degrading to the human race, created in the image of God, and endowed with an immortal spark of divinity, to claim that love is but the exclusive offspring of passion, and that man and woman should marry under the single influence of that feeling which prompts the brute creation to mate and perpetuate its species. Human beings are animals and possess many inclinations in common with those of a lower type. Desires for food and sexual pleasures are shared by all animals—no less by man than by those over which the "lords of creation" rule supreme. But human beings are distinguished from the lower order of animals by intellectual and superior social endowments; consequently mental and social fitness should be considered as well as physical adaptation, in the marriage of men and women. Not, however, by any means, to the neglect of the latter any more than if man were not gifted with reason and elevated social faculties, for his animal desires are *not destroyed* by the presence of these crowning endowments.

Reciprocity in the sexual relation is *indispensable* to the contentment and happiness of husband and wife. O. S. Fowler, in a little

work entitled "Love and Parentage," has said some very excellent things, and to show the necessity of physical adaptation in marriage, I shall quote the following from his book, inasmuch as the opinions of the Messrs. Fowler, who have become celebrated as phrenologists, are generally regarded as orthodox.

Says Mr. Fowler—"RECIPROCITY is a constituent ingredient in its very nature. Without it neither can ever be happy in either love or wedlock. Its absence is misery to the ardor of the one, and repugnance to the coldness of the other. A cardinal law of both love and connubial bliss requires, that the more tender the affection of either, the more cordially should it be reciprocated by the other. This requisition is fundamental and absolute, and based in the physiological principle stated by St. Paul, that 'The man hath no' parental 'power over his own body, but of the woman; and the woman hath no power over her own body, but of the man.' Duality has already been shown to appertain to love and marriage. It does so because it appertains to parentage, the former two having the only terminus in the latter. Because parentage absolutely requires the joint participancy of two, a male and female, and allows only two to partake in the authorship of every single product of humanity, both of whom must necessarily thus partake together; therefore love, which is only an incipient and preparatory stage of parentage, must be reciprocal between two opposite sexes. Both must LOVE EACH OTHER, in order that both may participate with each other in this parental copartnership. As both must participate *together* in this repast of love, in order to render it productive, so both must cordially love each other as a preparation for this repast. The absence of this reciprocity in love, renders it insipid and painful, for the same reason that the parental function is abortive unless participated in by two conjointly."

The same writer continues—"The exalted pleasure appertaining to this parental function constitutes the one essential embodiment of love, as well as the principal object and ingredient in marriage. Its anticipation embodies the chief incentive of the former, and the main motive of the latter. What other motive does or should prompt either? Nothing but this *single* legitimate object of marriage, and only consummation and constituent element of love. What else does the very etymology of matrimony signify? And in what consists the marriage vow, but in the implied and fully recognized act of covenanting with each other to participate together in this ultimate

repast of love? Candidates for matrimony! what but this do you seek and proffer in forming this alliance? Affected prudishness may pretend to frown upon this home truth; but, viewed in whatever light you please, the long and short, warp and woof, and sole embodiment, of both love and matrimony—the one legitimate element, end, motive and object desired and prompted—of either separately and of both collectively—consists in the anticipation and pledging of each to participate this function of love with the other. This is the origin of the marriage RITES. The bridegroom justly thinks himself *entitled* to these rites, because the very act of the bride in becoming his wife consists simply in a surrender of her celibacy, and a pledge to partake in this parental function. And the value set by either party on matrimony is mainly the price set on this repast. *Other advantages grow incidentally out of marriage, but are only incidental.* All depend on this—are its satellites—and grow legitimately out of it.

"This being 'THE tie that binds,' the absence of reciprocity here is of course *the* bane of contention. If similarity in other respects is essential to love, how ALL ESSENTIAL is this the very essence of the marriage covenant and compact? Matrimonial felicity can no more be had without reciprocity and mutual pleasure here, than noonday without the sun, nor can discord co-exist with reciprocity here any more than darkness and sunshine; because they who cannot make each other happy in this, the *ultimatum* of love and marriage, cannot in minor matters; while those who can, will find all the minor causes of discord drowned in this key-note of concord. The *happiness* conferred by each on the other being the sole occasion of love, and reciprocity here being the heart's-core of all the happiness of both love and wedlock—their basis, and frame-work, and superstructure, and *all in all—therefore*, those who are qualified to confer on each other this *summum bonum* of matrimonial felicity, are bound together by the strongest bond of union connected with our nature; whilst those who cannot both confer and receive mutual pleasure in this respect cannot possibly be happy in married life, and consequently cannot possibly love each other; and, therefore, should never enter together the sacred enclosure of wedlock. On nothing does the bridegroom set an equal value. All else in married life is of little value to him compared with reciprocity and happiness here. *This expected pleasure alone prompts marriage.* Oh! if I could catch the matrimonial ear of the whole world, I would say, in the language of this *law of love*, to the blooming bride as she enters upon the nuptial

relations: By all the happiness you are capable of conferring and receiving in married life, note every invitation to this banquet of love and cordially respond. Coldness or squeamishness in love's repast, will dampen your consort's pleasure, and therefore his love, while your cold repulse or petulant refusal persisted in, will be the death-blow of matrimonial felicity to you both—a blasting sirocco to his fondest hopes; for it will force him to drink the mere dregs of the marriage cup, in lieu of the delicious nectar he had so fondly expected to sip at the hymeneal altar. But, if you watch the rising desires of love, and bestow the welcome embrace, you re-enkindle its flame and crown your blessed union with the complete fruition of this the embodiment of all its pleasures.

"But, nothing will sting him so severely with disappointment, despair and hatred, as unsatisfied desire. The reason is this. As already seen, amativeness, the cerebral organ of this passion, bears the most intimate relation to the whole body, and the entire mentality, as the means of the propagation of both. Hence, its gratification abates that burning fever consequent on its unsatisfied cravings, and calms down that irritability of the animal propensities, which always necessarily accompanies its reversed and painful action.

"The precise physiological principle involved, is, summarily this: amativeness bears the most intimate reciprocal relation possible to the body, in order to its propagation, and also to the animal propensities. Hence, gratification sates that feverish, morbid, irritable and depraved state of both this organ and of the whole of the animal propensities, among which it is situated; but its *denial*, fires up to their highest pitch of abnormal and, therefore, depraved manifestation, the whole of the animal region, the body included; and thus produces sin and misery in their most aggravated forms. Fully to enforce this cardinal doctrine, requires the full exposition of that fundamental law of relation subsisting between the various states of amativeness and of the animal propensities. But, assuming this point, behold in it the cause of that bitter hatred and implacable revenge always and necessarily consequent on the cold refusal in place of the soul-inspiring expectation of a cordial welcome!

"This doctrine of the necessity of reciprocity must commend itself to all who have experience concerning it, and requires no other proof; while the uninitiated will find ample proof in the universal fact that those husbands and wives, either one of whom went reluc-

tantly to the hymeneal altar, never lived happily together. Scrutinize all the cases in which either party was over-persuaded by the importunity of the other, or by officious parents or friends, and every identical one, except those in which the requisite reciprocity has been subsequently re-established, which are rare, will be found to have resulted in misery to both. Let this principle and fact effectually warn all against persuading or being persuaded to marry against their feelings. Ardent love in one can never compensate for the loss of it in the other, but only increases the disparity. Warmth in one and coldness in the other is as ice to fire. Reciprocity is indispensable. Those who love each other well enough to marry will need no urging, but will literally *rush* into each other's arms. Then let all beware how they marry unless both LOVE AND ARE BELOVED; because love in one and not in the other is a breach of love's cardinal requisitions, and therefore can never render either happy, but must, in the very nature of things, torment both for life. And let those who are married put forth their utmost endeavors to reinstate, as far as possible, reciprocity in this vital requisition of matrimonial felicity. A few facts:

"From the very hour that Nero's 'wanton dalliance' and desired incest with his mother was interrupted, he plotted her death, and consummated that most revolting matricide with impatient haste and the most infamous cruelty. Potiphar's wife hated Joseph as cordially after he refused her this indulgence, as she loved him before, and solely in CONSEQUENCE of such refusal. This alone converted the frenzy of her love into revenge equally frantic. The story of Amnon and Tamar (2 Sam. xiii.) also establishes and illustrates our position. An enamored widow in New York, similarly refused by an amorous man, because of his filial regard for her venerated husband, from that hour to this, has pursued him with all the artful vengeance of a human fiend. The details of this case are full of thrilling interest. One of the recent cases of *crim. con.* in New York, grew out of a husband's conscientious refusal to gratify his wife in this respect, while fulfilling her maternal relations. This roused her worst passions, and she sought with a paramour what she was denied in wedlock. In short, does this law of love, and law of mind, that refused indulgence engenders hatred, require farther proof, however similar in other respects, or that reciprocity here is the olive-branch of connubial peace, however illy matched in other respects? Need we prove that coldness in the one and ardor in the other, is 'hope deferred' to the former, and repulsiveness to the latter, which necessarily blasts

their mutual happiness, and of course their love? Is not this SETTLED TRUTH—the very summing up of this whole matter?

"Forbearing reader! Condemn not our freedom; because our subject is fraught with the very life and death of all matrimonial felicity. It is one of MIGHTY moment—the great sandbank of matrimonial shipwreck—yet rarely developed. Its chagrined victims rarely tell the fatal secret. It remains to be disclosed by SCIENCE. Besides, reader, you yourself may require to know what you can learn probably no where else. Accept, then, as you prize domestic happiness, the following matrimonial *life-preservers*, in the form of preparatory advice, to all whom it may concern:

"First, to the reluctant wife! For you to *yield*, is to conquer. By showing a desire to do all you can to oblige a beseeching husband, you throw yourself on his *generosity*, and thereby quell that desire which coldness or refusal would only aggravate. Your cheerful submission to what he knows to be disagreeable, at once excites his pity and gratitude, and thus awakens his higher faculties in your behalf, and subdues desire; because, how *can* he who dotes on you take pleasure in what occasions you pain? He takes your *will* for the deed, and loves you therefore too well to insist on so delicate a matter unless agreeable to you also, or to feast himself at your expense. Compliance is a *sovereign* remedy for his importunity, because it *kills his desires*. Remember, you must always yield *cheerfully*, and with a view to *please him*, or else the whole effect will be lost. Never prove remiss, but do all you can to conform. Thereby you will lay your husband under the highest possible obligations of love and gratitude; whereas the unkind *refusal* begets increased importunity, and makes him *insist on his rights*, and threaten you with vengeance if you dare refuse. Abundant excuse, such as the most unreasonable demand on his part, and utter inability on yours, alone should warrant your refusal.

"Husbands! It is now your turn. To *promote desire* is your only plan. To excite those feelings which alone can render your wishes acceptable to the partner of your love, will obviate present repugnance, and render both happy in what otherwise would be a torment to both. *Cultivate the defective faculty.* Apply those perpetual stimulants which you alone can employ, and your wife, if a true woman, will necessarily respond. This element is of right, at least always *ought* to be, comparatively dormant at marriage, and therefore requires to be *cultivated* before its full activity can reason-

ably be expected. This, and this *alone*, can secure your desired boon—alone can obviate the difficulty. It is not for her, but for *you*, to excite *her* to willingness. Nor need you pride yourself on your manhood, unless you can call forth the desires you so much wish. Her coldness is *your* fault, mainly. Almost *any* wife whose husband is not repugnant, can be persuaded to all the intensity of emotion necessary or desirable.

"But, mark: this can *never* be done by *blaming* her. By soft words and tender manners *only*. And yet, many husbands think to *drive* their wives to this tender repast by *blaming* them for delays. This is the very last thing that should be done; because this produces disaffection, and disaffection weakens the remaining fragment of love. By thus provoking desire, he can frequently obviate barrenness, which is often caused by want of interest in her. Excite this interest, and you thereby secure offspring—the one object of marriage and end effected by love. In short, "*provoke her to love.*"

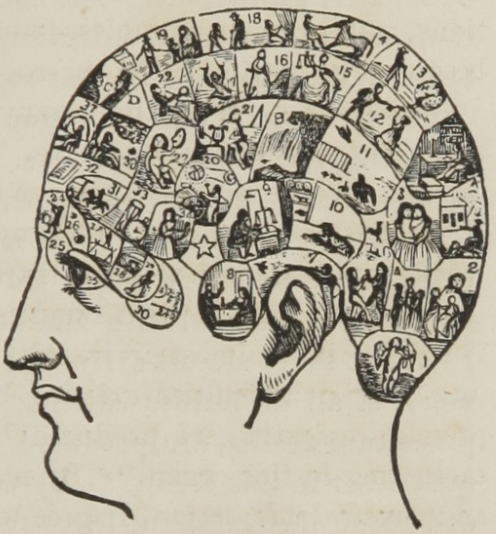
Although the foregoing quotations from Mr. Fowler answer very well to show the necessity of physical and amative adaptation, I must entirely disagree with him in the remark, that "all minor causes of discord are drowned in this key-note of concord."

Entire mental adaptation is of all importance to effect a truly *happy marriage*, and Mr. F. advocates the same views in other portions of his work. Without a correspondence in the moral and religious faculties, and a congeniality in the social feelings, conversational and fireside enjoyments are unknown to the married couple. Besides, it is the nature of all animals, human and brute, to feel a sexual indifference after physical intercourse. In fact, some animals are even cross and quarrelsome immediately thereafter. The reason for this is, that, after an electrical equilibrium is established between the two, they are as two positives or two negatives which repel each other. Consequently, to preserve constant harmony, platonic love must step in when passional love has been gratified, until both regain their natural electric conditions.

WHAT IS MENTAL ADAPTATION?

Mental adaptation, in marriage, consists in a perfect correspondence in the tastes, sentiments and propensities of the husband and wife. The organs of Conscientiousness (15), Benevolence (19), Veneration (18), Hope (16), and Spirituality (17), as represented in the annexed cut, impart to the human mind a religious character.

Now, the possession of high moral and religious sentiments by one, and a total destitution of them in the other, is frequently the cause of matrimonial discords and sometimes separations. How can a pious wife enjoy the society of a husband who ridicules, and perhaps forbids, her devotional exercises? How can a devotional husband love a wife who neither sympathizes with, or participates in, his religious sentiments, while, by precept and example, she trains up his children regardless of his cherished principles?



MENTAL ORGANIZATION.

The organ of Inhabitiveness, (4) when largely developed in the human head, gives attachment to home and love of country. A wife, possessing a full development of this organ, can never live happily with a husband whose Inhabitiveness is small and Locality (31) large. He will ever be on the move, like the rolling stone, and the wife must sacrifice her love of home and a permanent location by following in his wake, or else let him go, and content herself in loneliness. Some wives are rendered miserable by the itinerant propensities of their husbands, who are ever changing their place of residence, and hardly remain long enough in one locality to get the curtains up and carpets down. Sometimes it is the reverse, the wife having the roving propensity, and her husband, unless like her in this respect, is annoyed to death with her discontentment.

The organ of Philoprogenitiveness (2) makes its possessor very fond of children. If the wife has this faculty small, and the husband large, the latter is decidedly inclined to find fault with her management of the children, and bickerings arise from this cause. He is passionately fond of his child, while she is inclined to abuse it. She considers children great plagues, and often tries to destroy them before birth, while his tender soul shrinks from the horrible crime of infanticide. As the principal training and care of the child devolves upon the mother, large philoprogenitiveness in the father is not so essential as in the mother. But there is always "war in the wigwam" when the father possesses this faculty large and the mother small

Adhesiveness (3) is an organ which begets powerful attachments. It is the chief prompter of platonic love. It leads persons to seek the society of those who have similar mental proclivities, and seals congenial acquaintance with enduring friendship. If the husband lacks this quality of mind, the wife ever laments his want of fraternal affection—feels that he married her more for the gratification of his animal desires than for her society. If the wife is destitute of this organ, she is generally cold and repulsive, except when aroused by amative excitement. The home circle is robbed of half its attractions, and the husband, unless immersed in business, not unfrequently becomes the patron of the bar-room or the gaming table.

Amativeness (1) is the organ which seeks physical adaptation, and gives rise to passional love. Its nature and office are embodied in what has been previously remarked on reciprocity in love. Mr. L. N. Fowler remarks, "From my extensive observations and knowledge gained by fifteen years travel in all parts of the country, and becoming acquainted with families from various parts of the world, I have at times almost arrived at the conclusion that one-half, if not more, of all difficulties existing between husbands and wives, and premature deaths, are produced by a want of proper adaptation to each other in this organ." By making the amendment, want of this and *physical adaptation*, I agree with Mr. Fowler.

Many husbands and wives possess an equal development of the organ of Amativeness, and still have not the necessary physical adaptation to make each other happy in its gratification. Two persons may possess an equal development of the organ of Adhesiveness, and yet fail to become friends for want of mental congeniality in other respects. So, also, equality in the organ of Amativeness does not *perfect* passional love. The latter is the offspring of amative and physical adaptation.

The Intellectual faculties, which need not here be enumerated, impart keen perception and reflection—lead their possessor to perceive the existence and qualities of external objects, and their relations, and to compare, judge and discriminate. In marriage, the existence of diversity in these organs in the male and female head is not injurious to matrimonial happiness, provided there is aggregative equality. But this is necessary. The possession of large Reflectives by the wife and large Perceptives by the husband, or vice versa, will not entail disrespect for each other's abilities, while the effect of

this diversity upon the mentality of the offspring is beneficial, because it endows it with the faculties of both.

But no wife can respect a husband who is her inferior, and without respect there can be no real love. Nor can an intelligent husband enjoy the society of a wife who is ignorant, and perhaps uncouth. He may be influenced by the impulse of passion to marry such a woman, but he can never truly respect or love her. He will feel dissatisfied to have his children brought up under her influence.

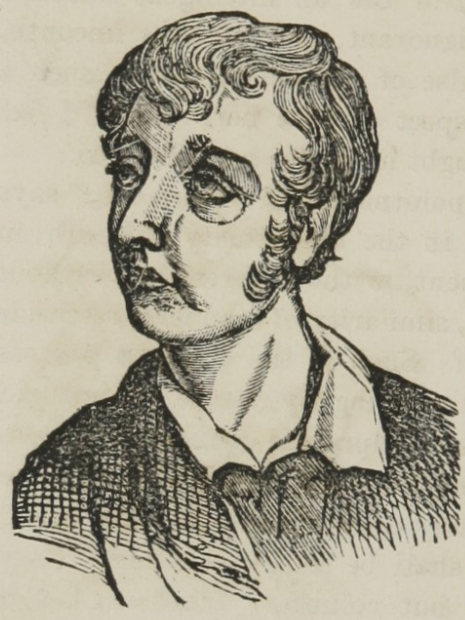
"What can be expected but disappointment and repentance," says Dr. Johnson, "from a choice made in the immaturity of youth, in the ardor of desire, without judgment, without foresight, without inquiry after conformity of opinions, similarity of manners, rectitude of judgment or purity of sentiment? Such is the common process of marriage. A youth and maiden meeting by chance, or brought together by artifice, exchange glances, reciprocate civilities, go home and dream of one another. Having little to divert attention or diversify thought, they find themselves uneasy when they are apart, and therefore conclude that they shall be happy together. They marry, and discover what nothing but voluntary blindness before had concealed; they wear out life in altercations, and charge nature with cruelty."

Passional love, which warms up only at intervals, cannot long render the pair blind to mental disparities. And then, too, when passion has been the governing attraction, and age cools down the impulses of early manhood and womanhood, nothing is left to render their matrimonial relations even tolerable. Therefore, to insure a truly happy marriage, in addition to that amatorial and physical adaptation necessary to promote between two persons of opposite sex strong passional love, there must also exist that mental and moral congeniality which produces hearty friendship—friendship which would be deep and lasting were sexual considerations unthought of.

WHAT IS PHYSICAL ADAPTATION?

Physical adaptation in marriage consists in a perfect dissimilarity in the electrical conditions of the husband and wife. I have shown in the chapter on the "Philosophy of Sexual Intercourse," that every person possesses electricity peculiar to him and herself, and this I have denominated *Individual Electricity*. Now, however large the organ of Amativeness may be in both the male and female head, the

amount of enjoyment which is realized in the sexual embrace must depend upon the electrical differences existing between the two. If the quantity and quality of this element is nearly alike in both, then will intercourse be insipid if not painful, because the sensitive nerves centering in the organs of procreation must be acted upon by an electrical element foreign to their own, in order to produce pleasurable sensations. Any enjoyment which may be derived by the union of two of similar electrical conditions, must arise entirely from the action of the chemical and frictional electricities as explained in the chapter referred to.



SANGUINE TEMPERAMENT.

Nor is it sufficient that one should be positively and the other negatively electrified. The element must be dissimilar in *quality* as well as quantity. The nature of the current produced by the friction of glass on silk, is unlike that generated by a galvanic battery, and so does the electricity of individuals differ in nature in the same ratio that they differ physically. Each person generates and imparts an animal electrical element peculiar to his or her organization, and differences in organization are named temperaments. Thus, there are four temperaments generally recognized,—the "Sanguine," the "Phlegmatic," the "Bilious," and the "Nervous."

PHLEGMATIC TEMPERAMENT.

Dr. Shew correctly describes the temperaments as follows: "In the *Sanguine* temperament there is fair or moderate plumpness of body and firmness of flesh. This temperament is most favorable to what is ordinarily considered 'beauty of person.' The complexion is fair and rather florid, the skin soft and thin, the eyes blue, the hair auburn, reddish

or light chestnut. The mind is active and excitable, perhaps unsteady; the countenance is animated, and the movements quick; the circulation strong and active, and the pulse full.

"The *Phlegmatic* temperament, as the name signifies, is characterized by roundness, and plumpness of form, softness and weakness of the muscles, more or less obesity, especially as age advances; thick lips, pale skin, light or grey eyes and fair hair. The circulation is languid, the pulse slow and small, and all the functions, bodily and mental, move sluggishly.

BILIOUS TEMPERAMENT.

"In *Bilious* temperament, there is much firmness, and a moderate fullness of flesh, with strongly marked features, and a somewhat rough or harsh appearance of persons generally. The hair, eyes and complexion are dark; the pulse is full, firm, and of moderate frequency. This is the temperament which gives the greatest energy of character, bodily and mental power and endurance.

"In the *Nervous* temperament the form is rather small, the muscles slender, the features delicate, the upper lip thin, the movements quick and the countenance pallid. The movements and bodily functions are active, and the mental and moral manifestations are excitable in a remarkable degree."

NERVOUS TEMPERAMENT.

Now, each one of these temperaments generate an electrical element peculiar to itself. These different temperaments are like so many different machines, and the fact that no two of one temperament are exactly alike in size and feature, also leads us to conclude that persons of the same temperament differ somewhat in their electrical natures. But the greatest difference exists in opposite temperaments.

Two or more of these temperaments are often united in one person. In such a case, an individual should seek a partner in marriage who possesses a combination opposite to his own.

Aside from the more perfect connubial felicity to be derived from the union of two of dissimilar temperaments, the physical effect upon offspring is improving. In fact, the children of parents who are alike in temperament are nearly as likely to be unpromising, physically and mentally, as those begotten in the marriage of blood relatives. The production of good offspring is certainly of the highest importance. "The glory and happiness of a city," says a writer, "consist not in the number but the character of its population. Of all the arts in a city, the grandest is the art of forming noble specimens of humanity. The costliest productions of our manufactures are cheap, compared with a wise and healthy human being. A city which should practically adopt the principle that man is worth more than wealth or show, would gain an impulse that would place it at the head of cities. A city in which men should be trained, worthy of the name, would become the metropolis of the earth," and training amounts to nothing, unless there is a mind and body to train. It is a trite saying, that "you cannot make a man of a pig's tail;" nor can you make a really great man unless there is a good physical as well as mental organization to build upon. Hence the necessity of both mental and physical adaptation in marriage, both for the happiness of the married and the production of healthy and intelligent offspring.

CHAPTER IV.

Laws should Enforce Mental and Physical Adaptation in Marriage.

Does the reader ask how? I reply, by doing away with the present rotten system of legalizing marriage, and substituting therefor a *Board of Phrenologists and Physiologists in every county seat, whose functions shall consist in the power to examine into the mental and physical characteristics of candidates for matrimony—to grant or refuse marriage licenses according to the congenialities of the parties presenting themselves, and to grant divorces to those who are miserably mated in wedlock.* Doubtless every reader will exclaim, "How queer!" But, do not, I beg you, denounce the suggestion until you have given it a little investigation. What does the present system of legalizing marriage amount to? Does it guard the marriage state from cat and dog companionships, or sustain the sanctity of the institution? Not at all. Men and women have only to show that they are of sufficient age to entitle them to enter the relation, and forthwith they are ushered into matrimony regardless of their qualifications to render each other happy.

In this State (New York,) no licenses are granted. All that parties have to do is to present themselves before a priest, judge, mayor, magistrate or alderman, and give notice in the presence of witnesses that they are about to assume the relation of husband and wife, and they are married! But look at the divorce laws; it is almost impossible to dissolve the marriage contract, except for adultery, which must be clearly proven! The marriage regulations of this State may be appropriately compared to the devil, who is said to "lead men into perplexing scrapes, and then leave them to extricate themselves as best they can,"—or, like a rat-trap, always open to go in, but never open to go out.

In States where parties are required to obtain license before getting married, the system is no better. Candidates for matrimony have only to show that they are of age and not married already, and license is granted on the payment of a nominal fee. I read, a few

days ago, of a young girl in a neighboring State, who put the figure 14 in her boots, so as to swear she was *over* that age, when application was made for license! In every State in the Union, men and women can rush into matrimony *ad libitum*, but when once caught they can wiggle and twist like a pig in a fence, but cannot get out. The result is, that monogamic countries are filled with adulterers and illegalized polygamists, who sustain the health and soul destroying institution of prostitution; support in splendor thousands of fashionable courtesans; destroy the peace of the home circle; people our cities and villages with moral and physical lepers; fill our almshouses with paupers; our jails and prisons with criminals; our hospitals with cripples, and our asylums with lunatics. This is so, and every physician in extensive practice, and every intelligent man of wide observation, knows it. How vitally important is it, then, that marriage, which seals the parties contracting it to life-long happiness or discord, and perpetuates in health or moral and physical deformity, the noblest work of God, should be wisely guarded against mismated interlopers, who inveigle each other into the belief that they can make each other happy, when they are entirely destitute of the necessary qualifications to warrant the correctness of the impulsive supposition.

Without precaution in legalizing marriage, easy divorce will not answer. The present system of letting down the bars to every one who wishes to enter, and putting them up securely as soon as the victims are in, and the newly proposed system of *keeping the bars* down for free ingress and egress, according to the changing impulses of mankind, are both lame and open to volumes of objections. I have briefly considered a few bearing against the former, and any one having half an eye can see those effecting the expediency of the latter. In the present state of public morals, libertinism would run rampant if men were permitted to rush in and out of marriage at pleasure. No, this will not do.

If the discoveries of science are of value to the student in pursuit of knowledge, and the business man in the pursuit of wealth, of how much more value may they become, if applied to men and women in pursuit of domestic happiness. It has been shown, in a previous chapter, that physical and mental adaptation is indispensable to a truly happy marriage, and it has also been indicated how adaptation may be obtained.

"Until Phrenology was discovered," says Combe, "no index to mental qualities, that could be safely relied upon, was possessed, and each individual, in directing his conduct, was left to his own sagacity. But the natural law never bended one iota to accommodate itself to that state of ignorance. Men suffered from unsuitable alliances, (and women too); and they will continue to do so until they shall avail themselves of the means of judging afforded by Phrenology, and act in accordance with its dictates."

"Among the members of the medical profession," continues the same writer, "Phrenology has many talented defenders and admirers. Professor Elliotson, of London, declared that 'Gall has the immortal honor of having discovered particular parts of the brain to be the seat of different faculties, sentiments, and propensities.' Mr. Abernethy says, 'I readily acknowledge my inability to offer any rational objection to Gall and Spurzheim's system of Phrenology, as affording a satisfactory explanation of the motives of human actions.' Dr. Barlow, Physician to the Bath United Hospital and Infirmary, alludes to Phrenology as a science in which he 'has no hesitation to avow his firm belief; and which, justly estimated, has more power of contributing to the welfare and happiness of mankind, than any other with which we are acquainted.' Dr. Conolly, lately one of the medical Professors in the London University, and now President of the Phrenological Society of Warwick, says, 'I can see nothing which merits the praise of being philosophical in the real or affected contempt professed by so many anatomists and physiologists, for the science of Phrenology.' Dr. Mackintosh says, 'Although I must confess that I have had neither time nor opportunity to examine the system of those distinguished anatomists and physiologists, Gall and Spurzheim, with that care and attention which the importance of that subject demands, and which might enable me to give a decided opinion respecting the truth of all its parts, yet experience and observation oblige me to state, that much of their doctrines appears to be true, and that science owes a great deal to the labors of the gentlemen who have been engaged in phrenological inquiry.' 'The science,' says Mr. Macnish, 'is entirely one of observation; by that it must stand or fall, and by that alone ought it to be tested. The phrenological system appears to me the only one capable of affording a rational and easy explanation of the phenomena of mind. It is impossible to account for dreaming, idiocy, spectral illusions, monomania, and partial genius, in any other way. For these reasons, and

for the much stronger one, that having studied the science for several years with a mind rather hostile, than otherwise, to its doctrines, and found that nature invariably vindicated their truth, I could come to no other conclusion than that of adopting them as a matter of belief, and employing them for the explanation of phenomena which they alone seemed calculated to elucidate satisfactorily. The system of Gall is gaining ground rapidly among scientific men, both in Europe and America. Some of the ablest physiologists in both quarters of the globe have admitted its accordance with nature; and, at this moment, it boasts a greater number of proselytes than at any previous period of its career. The prejudices still existing against it result from ignorance of its real character. As people get acquainted with the science, and the formidable evidence by which it is supported, they will think differently.' Similar passages might be quoted from other esteemed medical writers; but it is sufficient to add, that Andral, one of the highest medical authorities in Europe, was recently President of the Phrenological Society of Paris; that the celebrated Broussais expounds and defends the science in his lectures; that the Medico-Chirurgical Review, which is unquestionably at the head of the British medical periodicals, has for many years adopted Phrenology as founded in nature; and that a conviction of the truth and importance of the science is daily forcing itself upon many, who, before making themselves acquainted with it, were among its bitter opponents. The simplicity and practical character of the phrenological *philosophy* have induced not a few to doubt the possibility of its being founded on *physiological* error. If, as has been well remarked, the truth and beauty of Gall and Spurzheim's philosophical opinions be admitted, one of two conclusions is inevitable. We must either grant the soundness of the organology from which those opinions sprung, or ascribe to the individuals who first taught them an amount of knowledge and talent which they would have blushed to hear attributed to them, and their possession of which is far more incredible than the entire body of phrenological science."

Phrenology long since ceased to be regarded as a humbug, and is now generally admitted to be worthy the name of Science. The Messrs. Fowler have exhibited commendable ability and enterprise in establishing the claims of phrenology in this country, and to them is the American public mainly indebted for the advancement which this science has made here. Few people of intelligence who

have given the subject the least investigation, now doubt that different phases of character are indicated by the shape of the brain; and, the correctness with which practical phrenologists describe the characters of strangers by examinations of their craniums, decides the question beyond cavil. Now why should not the science of phrenology be made to subserve the interests of mankind; and how, I ask, can it be applied more advantageously than to the improvement of the present objectionable system of marriage? Already many careful merchants resort to its expounders to aid them in the employment of honest and faithful clerks. Then why should not those who are about to take conjugal companions for life avail themselves of its teachings? A clerk may be discharged any day if he proves unsuitable for his place. The contract between his employer and himself can be easily dissolved. Not so the matrimonial contract. How invaluable, then, the science of phrenology can be made in regulating marriage.

It has been shown in the preceding chapter how physical adaptation may be attained in marriage, without resorting to that experimental system recommended by many reformers. The law of temperaments is the legitimate study of physiologists, who should and may be able to tell, as soon as their eyes fall upon candidates for marriage, whether they are physically adapted to each other. If the reader inferred from my opening remarks that I propose the subjection of the parties, applying for a marriage license, to any indelicate exposure of the person to the board of examiners, my meaning was misunderstood. Size, form, complexion, etc., indicate the temperament of an individual, and dissimilarity in temperament denotes physical adaptation.

"Why not," interrupts the reader, "impart to the masses the knowledge of physical and mental adaptation, and let them decide for themselves who are suitable companions?" I certainly can offer no objections to this, but do not the masses need governing in this matter while they are destitute of such knowledge? Beside, a great many are too stupid to ever acquire it. There are persons in every State in the Union who cannot read and write, notwithstanding the educational advantages so universally enjoyed, especially in the New England and middle States. Then, again, thousands of men, of unquestionable intelligence, are so completely engrossed in commercial and other business pursuits, that their attention cannot be diverted for one moment to the valuable teachings of physiology and phrenology.

"But," says another objector, "it would be downright tyranny for a law to exist which would prevent a man and woman from marrying if they were of mature age and had done nothing to debar them the privilege." Would it? What then can be said of a law which compels men and women to live together in a state of open warfare, because, in a thoughtless moment, they appeared before a minister, alderman or magistrate and united themselves in wedlock? The difficulty of dissolving the marriage contract, when once made, is well known to every body who has given the subject any attention. Now, if it is anti-republican to dictate in the choice of companions in marriage, so as to let only those unite who are physically and mentally capable of making each other happy, how much more tyrannical is it to compel men and women to live together who are only capable of rendering each other deplorably miserable. In Switzerland "the native of the Cantons, obedient to the law of nature as well as that of his country, seeks the *permission* of the magistrate when about to unite himself in marriage; and his assent is only accorded when the parties are *fitted by nature, age, and circumstances.* The consequence of this wise legislation is a *hardy and mature race*, capable of every manly effort and endurance." This course is taken without any scientific knowledge of physiology and phrenology on the part of the magistrate, who is rather governed by cultivated perception than by any definite rule which should govern the union of the sexes. Still this imperfect system seems to be better than that which prevails in other monogamic countries, and brings into being a better race of men and women. Thus it is said of the Swiss that "they are indomitable people, who have preserved their independence for five hundred years, surrounded by despotism." If the dictation of a wise magistrate works so well in the Cantons of Switzerland, what great results might we not expect in the counties of the United States, if a board of physiologists and phrenologists were stationed in each, to grant or refuse marriage licenses according to the fitness of applicants.

"Let us have easy divorce laws!" exclaims one. That's right; but, sir, be consistent. Is a remedy better than a prevention? It is an old and truthful adage, that "an ounce of prevention is better than a pound of cure." Is this case an exception? It is plain that obedience to the laws of adaptation in marriage, will insure domestic bliss, and do away, in great measure, with the necessity of divorce. Now, which should we do—maintain the sanctity of the marriage

institution, or open both the front and back doors, and let thoughtless people rush in and out—one day before the parson, the next before the judge?

Marriage is now considered a *lottery*, but it need not be. The moral, mental and physical characters of candidates for marriage may be completely unmasked to each other if the plan I suggest be adopted. All manner of deceit is practiced by both sexes before marriage to entrap each other. If the lady be religious, then is her admirer a constant attendant at church; he bows his head with reverence in prayer time; converses feelingly on the subject of religion, and obtains a reputation, at least, for morality, be he ever so depraved at heart. Does the lady possess a literary turn of mind—then does he temporarily devote his attention to literature, and pretends to be a laborious student. At the toilet he lays each particular hair where it will show to the best advantage; so does she. If his form is ugly, he bribes the tailor to conceal defects; has nature been stingy in developing her womanly charms, cotton and whalebone are called to the rescue. Many a man has married a supposed armful of female loveliness, which proved to be little more than he could have purchased at any fashionable dry goods store.

Thus is every species of device resorted to in courtship to cover up moral, mental and physical defects, which must all be uncovered in less than one year after marriage. Do you say they get the worst of it as a just punishment for their deceit? No, they don't. The heaviest penalty falls upon the children of such marriages. "How many born of such relationships," says a writer, "are organically prepared for a fretful, joyless childhood, a nervous and uncomfortable maturity, and a stern and heartless old age! Have you never seen a young infant's eyes, that looked as old and sad as if they had been closed by grief?—faces that haunt you with their prematurely sad and earnest gaze? Yes, these effects of unnatural matrimonial relations look us in the face in every community." Nor is the offspring only involved in the wretchedness which follows. Society and religion suffer by such unwelcome contributions to the human race. Then, too, from the disappointed victims of unhappy marriages, prostitution receives its most liberal supporters; and, in fact, every moral department in life shares the penalty.

Were the plan I propose adopted, seldom would it be necessary for the Board to interpose an arbitrary edict. To begin with, men and women, girls and boys, knowing that their mental and physical

peculiarities would be unreservedly disclosed by the officers possessing the exclusive power of granting licenses, would, to a great degree, dispense with artifice in conducting their courtships, and those who did not, would become heartily disgusted with each other's deception, when their characteristics were laid open for their deliberate conisderation, by those who were approved judges.

.The Board might be delegated with optional powers, and if parties applied who were tolerably congenial, explain discrepancies, and dismiss them to reconisder their proposed union. If a second application were made it might be granted, but put a positive and irrevocable injunction on all who should be found, on examination, *totally disqualified, mentally and physically*, to render each other happy. This would be a signal death blow to thousands of marriages which are now daily taking place for considerations of wealth, influence and convenience.

Seldom is a gentleman and lady so captivated with each other as to render prohibition fatal to the happiness of one or both, unless there is a certain degree of congeniality existing between them. Indeed, I doubt if such a case would occur once in a century.

Young people, full of moonshine, poetry and romance, frequently form attachments which they fancy must be gratified, or their disappointed hopes will drive them to celibacy or the grave. To such of these as were found to have attachments based on the laws of adaptation, the Board could grant license, and the balance, I guarantee, would suffer no greater inconvenience than a few sleepless nights. There is a great deal of "puppy love" amongst this class, which can be easily transferred.

In a previous chapter I denounced the positive interference of parents in the matrimonial selections of their children. I do now, for the reason that such interferences are almost invariably prompted by personal prejudice, favoritism, or by other considerations of a selfish nature. Very few parents understand the laws of adaptation. Their opposition to, or persuasion in favor of, their children's alliances, is not in the least dictated by physiological and phrenological knowledge. A New York Fifth Avenue mother would no more allow her daughter to marry a farmer or mechanic, than she would permit her to become the wife of a Sing Sing convict! When the daughter of a wealthy man in New York recently married her father's coachman, all "snob-dom" was in commotion, and the poor fellow had to go to law to get the custody

of his wife. Frequently farmers and others, who constitute the real bone and sinew of our country, are equally prejudiced against those they term "city fellows," and would put a summary veto on the marriage of a daughter to a "lying lawyer" or a slick-haired dry goods clerk.

Thus is the marriage of men and women now made to conform to their social positions in life. Why not do away with all this, and make it only to conform to mental and physical adaptation? Let parents advise, but pass all dictatorial power over to a Board of scientific men, who can read character as readily as an intelligent man can read a newspaper, and who are also qualified, by their physiological researches, to decide with minute correctness on physical fitness. No marriage should be interdicted by parents, when mental and physical adaptation exists between their son or daughter and his or her selection. But this species of tyranny is daily practiced under existing marriage regulations, and children are often virtually compelled to marry those for whom they have little respect and no love. It is absolutely ridiculous to charge the measures I wish to inaugurate with tyranny, when a worse species of despotism is now constantly practiced by parents and society before marriage, and by the laws of every State in the Union after the parties have been legally united. My plan would not be in the least prohibitive—only *regulative*. It would serve to put a stop to money marriages, which are now of daily occurrence, and which are a curse to the parties contracting them and to their posterity. It would prevent young men from marrying old women, and young women old men. It would prevent young ladies from "marrying homes" and domestic misery. It would prevent "young people from marrying in haste and repenting at leisure." It would prevent rascals from becoming the husbands of virtuous women, and female fiends from becoming the wives of good men. It would prevent selfish mothers from selling their daughters to millionaires. It would prevent intermarriage between relatives, and what is equally as objectionable, intermarriage between persons of like temperaments. But with real affectional marriages, founded on mental and physical attraction, it would not in the least interfere.

As a divorcing power, the organization of boards of examiners on the principle I suggest, would be the very perfection of human legislation. What do law courts know of physiology and phrenology? What qualifications do judges possess to enable them to decide on

the merits of applicants for divorce? I do not question the value and correctness of their judgment in deciding titles to lands, the guilt of criminals and so forth, but what has the judiciary legitimately to do with matrimonial quarrels, and deciding upon the physical and mental capacities of married people to render themselves happy in wedlock? Legislators, too, who are often appealed to by those who have contracted unhappy matrimonial alliances; what are their qualifications, as a body, to judge of the expediency or inexpediency of decreeing a separation? An amusing specimen of their legislation in matters of divorce was recently given in the Ohio legislature. An unhappy couple in Cincinnati petitioned that honorable body to unloose the fetters which had for *thirty years* bound them to an uncongenial companionship. For ten years they had lived under separate roofs. The petition was referred to the "Committee on Federal Relations," and the *same day* they submitted the following report, which, though calculated to disturb the gravity of the reader, cannot fail to impress every one with the unfairness with which they treated the application:

"The petitioners—James and Maria Sutton—do not sufficiently set forth the cause why they 'mutually severed and parted;' and after a cohabitation of thirty years, it is necessarily very important to know these reasons. They leave an immense range of inference in the minds of this learned assembly. They might have been dissatisfied with each other's personal beauty, or wearied with their respective mutual attractions. They might have been fighting constantly for thirty years, and at last both being exhausted and neither being able to 'come up to time,' they mutually backed out, fizzled and crawled away from the scene of combat. Again, some direful fiend in moustache and patent leather boots may have intruded his fascinating but diabolical figure into their peaceful domestic circle, poisoned the happiness of that shrine, and finally caused a separation between the blessed pair, and connection between his own back and a tough cow-hide. Which of these is the cause the committee are unable to say.

"Again, they are of opinion that two mortal sinners, who have been in purgatory for thirty years, should certainly be put through in one direction or the other, instead of being allowed to return to the terrestrial condition of their former existence. A precedent will be found for this course in the case of 'Orpheus vs. Pluto,' first Pandæmonium Reports, 729.

"The committee could see no reason why these evidently ancient turtle doves should not peaceably and quietly pursue the course they practiced for thirty years, and mutually return to each other's bosoms; and would advise this course for reasons as follows:

'For high the bliss that waits on wedded love,
But purest emblem of the bliss above,
Of one fond heart to be the slave and lord,
Bless and be blessed, adore and be adored;
To draw new rapture from another's joy;
To share each pang and half its sting destroy;
To own the link of soul, the chain of mind,
That hearts to hearts, and hands to hands can bind,
For ever and ever. Amen.'

"The committee being, therefore, unapprised of the causes of this separation or its probable monstrous results, can only recommend the House to advise them to 'stick it out' for their brief future of this earth. Whatever their difficulties or 'embarrassments' may be, whether sentimental or constitutional, the difficulties of the legislature are both 'sentimental' and constitutional: as, therefore, this House 'wouldn't if it could' nor 'couldn't if it would,' they recommend the petitioners to the court of Common Pleas, and to beware of bigamy."

Courts of Common Pleas, and all other presently constituted legal tribunals, are not much more considerate in their treatment of divorce cases. In fact the functions of these legal bodies, as evinced by daily observation, are rather calculated to keep people in hot water than to help them out.

A divorcing tribunal should be composed of men who make the sciences of physiology and phrenology their almost exclusive studies. A court of divorce thus organized would not be obliged to summon a crowd of witnesses to divulge all the private affairs of an unhappy married couple applying for relief, as do now the courts of law, where all the privacies of an unhappy marriage are eagerly exhumed for the world to gaze, and scandal mongers to feast upon. It would rely only on the unerring evidences furnished by the mental and physical manifestations of the parties. It would not be necessary for this court to ascertain what horrible conduct one or both had been guilty of, but rather what violations of social and matrimonial relations might be reasonably expected from the union of those uncongenial or antagonistic materials.

Men and women are generally good or bad, according to the circumstances which surround them. A woman may be a devoted and faithful wife if united to a congenial companion, who otherwise would bring disgrace upon herself by the most open violations of chastity. A man who has stumbled into an uncongenial marriage may become the frequenter of the bar-room and bawdy-house, who, had he been united to his true counterpart, would have been a model husband and an exemplary father. The world is full of good bad men and good bad women, who only need assorting, matrimonially, to become happy fathers and mothers and valuable members of society.

It has been said "there are ten times as many fugitives from matrimony as there are fugitives from slavery, and that it may well be doubted if the aggregate or average of their sufferings has been less." I will go further and assert that there are ten times as many slaves in matrimony, under the legal whip, as there are slaves in compulsory service under the overseer's lash! And escape from one is about as difficult as escape from the other. An "underground railroad" exists for both classes of sufferers, but all escapes thereby are violations of law, and do not guarantee permanent liberty to the fugitives. But under present marriage regulations we cannot be surprised that both husbands and wives do frequently avail themselves of it, and secretly seek that pleasure abroad which mental and physical uncongeniality denies them at home. "American society," says Dr. Davis, "is more critical and hypocritical than that of Paris. Hence, *without deserving* it, we get praised for virtue, and the French get cursed for vice." In France the "underground railroad" is tacitly tolerated; in Spain and Italy, openly so; in this country it is tolerated by neither word nor implication, but still has many passengers.

A Licensing and Divorcing Board need be attended with no expense to the State or county in which it is located. If the poorest classes of Mexicans can pay twenty-two dollars as a marriage fee to an exacting priest, cannot the enlightened and industrious men of our prosperous country pay five, ten, or even twenty-five for a marriage license, if so large a fee be necessary to maintain an efficient Board of Examiners? More than that amount is usually expended by every bridegroom in a wedding tour, and, if not in this way, for some other superfluities.

In order to sustain in purity, the monogamic form of marriage, such laws for legalizing and divorcing matrimonial contracts, as will

tend to promote mental and physical congeniality must be enacted. The people of the civilized world have not yet entirely overcome the polygamic propensities inherited from their early ancestors. As has been seen in the first chapter, polygamy is practiced to a surprising extent, in violation of law, in all Christian countries, while it is sustained by the customs and laws of nearly all barbarous and semi-barbarous nations. Therefore, to carry out successfully the monogamic system, and to restrain mankind from practically following in the footsteps of the ancient patriarchs, marriage must be so regulated by law as to secure congenial companionships, and exclude all alliances of an unhappy character.

CHAPTER V.

Three Phases of Marriage Daguerreotyped.

UNDER the present hap-hazard system of legalizing marriage, and with the prevailing ignorance of the laws of physical and mental adaptation, it is not strange that the civilized world is full of ill-assorted matrimonial alliances. I shall attempt in this chapter to daguerreotype three of the most prominent phases of marriage presented in civilized society, all of which would be improved, and the last of which would be most effectually obliterated, if the exclusive power of granting marriage licenses were vested in Boards of Examiners fully qualified, by a proper understanding of physiology and phrenology, to decide upon the adaptedness of parties presenting themselves as candidates for matrimony.

1ST. MENTAL MARRIAGES.

Mental marriages may be defined as those in which social, moral and intellectual adaptation has been secured, with little or no regard for physical adaptation. They may be termed nearly happy, as those which are perfectly happy have been formed under the auspices of both mental and physical adaptation. In all London, a newspaper statistician finds only one hundred and twenty-seven mental or nearly happy marriages. In this country, where wealth and title have less influence with the people in their matrimonial selections, it is reasonable to presume, there is a larger percentage of mental marriages than in England. Still, in free and enlightened America, they are not numerous when compared with those of a more discordant nature.

Mental marriages may also be called friendship marriages, because the parties contracting them are drawn together chiefly by platonic love. Napoleon's marriage with Josephine was a mental marriage. Most people are familiar with the details of this, and it is therefore needless to repeat them here. Such an alliance engenders powerful attachments between the husband and wife, and imparts to each much social happiness. They enjoy each other's presence, and are

lonesome and morose when even temporarily separated. Still, if Amativeness is large or fully developed, entire contentment does not exist, because their want of physical adaptation disqualifies them for the full enjoyment of the sexual embrace.

Singular as it may appear, there are more elopements from this class than from any other. Unable to realize within themselves, to the fullest extent, that sexual gratification enjoyed by those of opposite temperaments, they frequently fall victims to seduction, and become the illicit companions of depraved men and women, whom they find, by bitter experience, are only able to impart to them transitory enjoyments, while the companionships of the intervals, embraced in the ordinary social communications of life, are but wretched imitations of those previously enjoyed with the ones whom they cruelly and unreflectingly abandon. And not unfrequently the little enjoyment they do at first experience, in their new relation, is suddenly interrupted by the discovery that their new companions are not naturally possessed of any more power to make them amatorially happy than their lawful ones, and that the unusual felicity at first experienced with their paramours is wholly attributable to a slight difference in electrical conditions, and vanishes like a dream, when an equilibrium is restored between them.

Barrenness often occurs in mental marriages in consequence of the similarity existing in the electrical conditions of the husband and wife, by which not only sexual enjoyment is curtailed, but also that activity and contractive power of the genital system necessary to reproduction.

"It is a well known law of nature," says Mrs. Hester Pendleton, "that issue follows the union of contrarieties. These contrarieties, it is found, must not only be male and female, but, in the human species, there should also be a *difference in the temperaments*. And hence it has been noticed by one who has given considerable attention to the subject, that those *wives who are of the same temperament as their husbands* are either sterile, or, if they have issue, their children are feeble, and generally short-lived. When, on the contrary, there is the most marked difference in the temperaments of the husband and wife, other things being equal, we usually find the most numerous and healthy offspring."

A French physician once informed me that while practicing in Paris, he was applied to by a gentleman and lady, both of the bilious temperament, and another couple, both of the nervo-sanguine tem-

perament, whose marriages of many years had been fruitless. Both couples being painfully desirous of offspring, he resorted to various remedies to cure their sterility, but without avail. Finally, failing to receive any encouragement from medical treatment, they mutually determined to try and remedy the difficulty themselves by a singular compromise which granted to each dissappointed husband the occasional custody of the other's wife. The elapse of a few months indicated that the novel experiment was successful, and at the expiration of the natural time both were presented with heirs! This instance answers better for an illustration of my position than for an example worthy of imitation by others. The expedient is more consistent with the French standard of morality, than with that of ours; and yet, I am informed that it is sometimes resorted to in the large cities of the United States. The results of my practice have proved that sterility produced by a want of physical adaptation can usually be cured by electrical remedies, as well as much of the sexual indisposition arising therefrom. (See Card to Married People.)

Desire for offspring is, with few exceptions, common to all married people, as well as a passion for sexual enjoyment, and hence it is natural that more or less discontentment should exist when the electrical or temperamental conditions of a husband and wife so nearly correspond as to deprive them of one or both. It is not therefore surprising that mental marriages, which insure to the parties contracting them an immense amount of social happiness, do not yield that unadulterated connubial felicity which is obtained by marriages based on physical as well as mental adaptation. There are very few of the latter; perhaps one in a thousand. There would be more if the system of granting marriage licenses which I propose were established. Two persons, mentally adapted, applying for a marriage license, should not be positively refused, but they should be advised, and the point wherein they lack entire congeniality explained. Many intelligent lovers would thereupon withdraw their application, and seek out more congenial companionships on the principles demonstrated to them by the board of examiners; the majority would undoubtedly persist in their application, for "love is blind." Still, it were well if a few of this class could be influenced to form perfectly happy alliances, for discontent, elopements and infidelities, will assuredly take place, to some degree, when mental adaptation only is realized.

2D. PHYSICAL MARRIAGES.

These are composed of males and females well mated physically, with little or no mental adaptation. They may be termed tolerably happy marriages. It is estimated that there are three thousand one hundred and seventy-five thus united in London. The average is larger in this country, for the reason before explained, that social equality is not enjoyed to so great a degree in the European as in the American States.

In physical marriage, many obtain all the happiness which they imagine matrimony can yield. Sexual intercourse is generally enjoyed, to the fullest degree, by one or both parties, according to the equality, size and activity of their amative organ, and the state of their corporeal health. In these marriages, husbands seldom find social attractions at home, but spend their evenings in business, in political caucuses, masculine gatherings of various kinds, or at the gaming-table or club-room. They are sometimes seen riding or walking, with closed lips, in company with their wives; and they have been known to hold conversation with them in public. But usually all evidence of conjugal affection, as well as all positive evidence of discontent, manifests itself only in the privacy of the bed-chamber. They are seldom seen together in social gatherings, public entertainments, or at any time; and if they are, a kind of mutual indifference is discernable to a penetrating observer. Still, without important interruptions, they sail down life's troubled stream with considerable smoothness, and in the society of friends, at least, profess attachment to each other, which, in part, exists, while the world regards them as good citizens and happy people. The libertine is not as apt to bear off a prize from this class as from the first considered, though his attentions are not unfrequently encouraged, and his licentious propensities gratified. The unfaithful wife finds in his embrace an agreeable variety, resulting from the difference existing between his individual electricity and that of her lawful partner, to whom she has become accustomed. The husband, unless possessed of a consistent religious character, or great veneration for civil law, does not regard infidelity on his part as a crying sin, and still could not tolerate it in his companion. Elopements are very rare, because it is necessary that one or the other should experience, with a third party, sexual enjoyment never experienced before, to sufficiently prepare him or her for the sacrifice of early associations, friends and reputa-

tion at the altar of lust. It requires sexual intoxication to drive people to such an extremity, and nothing can produce this madness except a conviction that a husband or wife is incapable of gratifying his or her amative desire, while it has been found by experience that another can. Consequently, separations seldom take place in physical marriages, except by divorce, which are not uncommon, as infidelity on the part of either is liable to detection, and, on the part of the wife, unendurable!

Physical marriages are prolific, except when disease or sexual excess has weakened or destroyed the tone of the reproductive organs. The children of such unions are usually physically strong, but are apt to be unbalanced and distempered in mind.

Marriages of this kind, it would not be expedient to legally interdict, but the good counsel of an intelligent board of examiners might influence many intelligent persons presenting themselves for license, to seek more congenial alliances. The ladies, particularly, who think so much of attentive husbands, if convinced that their lovers are mentally so uncongenial as to probably become negligent after marriage, would be decidedly inclined to back out of all foolish engagements, when advised by a competent board of examiners. When there is in almost every community a true "Jack" for every "Gill," it is a great misfortune that there should exist so many ill-assorted marriages, by which husbands are rendered negligent and wives lonely and miserable.

Dr. Ryan probably had his eye on marriages of this class when he penned the following: "Every imperfection, capricious temper, vanity, folly, &c., appear in the married state. The demeanor towards the world is agreeable and obliging, but, in domestic life, the mask is thrown off, and an individual appears such as he or she really is. Hence it is incredible how much a wife has to bear from a husband who is capricious, haughty, choleric, dyspeptic, and intractable; or what a sensible husband has to endure from a silly, unreasonable and intractable wife. *It is difficult for married persons to acquire each other's tastes, feelings and opinions.*"

This last remark contains a volume of truth. The writer might have said it is *impossible* for a husband and wife to *acquire* each other's tastes, &c. The only sure way to realize a correspondence in this respect, is to marry with due reference to mental adaptation; by so doing, similarity in sentiments is *natural*, and the impracticable task of *acquiring* is done away with.

3d. LUCIFER MATCHES.

These may be defined marriages contracted without regard to physical or mental adaptation. The civilized world is full of such. "The motives which influence a majority of the world in contracting matrimonial unions," says Dr. Ryan, "are generally false, selfish, and most detrimental to the procreation of sound and vigorous offspring; such as ambition, wealth, rank, title, interest, a love of independence, of an establishment, a desire to escape parental restraint, anger, a determination to disinherit relations, disdain for a faithless lover or mistress, necessity, obligation, passion, imitation, and very rarely the only proper motive, pure and virtuous affection."

In this division we find old men with young wives, and old ladies with young husbands. I have now in my mind's eye a man of thirty-five, who has a wife of fifty-five or sixty. They quarreled desperately for several years, under one roof, but finally the young husband left her bed and board, and the two have since kept up the warfare in courts of law. They alone have not suffered the penalty of their discordant union, but friends on both sides have been involved in the legal quarrels which have resulted therefrom. The health and once honorable character of the husband has been ruined; his wealth absorbed by lawyers and judges; and the reputation of many of his friends compromised by his subsequent open licentiousness.

Ladies who "marry homes" sometimes stumble into mental or physical adaptation, but not often. I have in mind several who have not married *peaceful* homes. "Family jars" are of almost daily occurrence, and disease marks the countenances of the unhappy wives. Their physician knows their wretchedness, but the world little dreams of it.

Those who are influenced by wealth in forming their matrimonial alliances are seldom so fortunate as to get congenial companions. Men will sometimes marry ladies for whom they cherish not one spark of affection, in order to secure wealth. Mr. L. N. Fowler gives a rich illustration of this class, as follows: "Mr. M. of O. married a lady from the city, and carried her to his home. He thought her father rich, and probably was sanguine in his hopes and anticipations. When they had been married some time, it was rumored that his father-in-law had met with losses which would involve his property. So he took his 'Cara Sposa' back to her father's mansion. She had not been there long, before her father's

affairs turned out more prosperously than was anticipated. Then the good husband retraced his steps to the city to take his wife back again; but it was *no go;* the father said nay."

Ladies often marry rich gentlemen for whom they hardly feel respect, thinking that a luxurious home and a fat purse will compensate them for all the misery they will have to encounter in eating and sleeping with an odious husband. They find experience a dear teacher, and, in this case, one from whose tuition it is difficult to escape.

Gold kidnaps many fashionable ladies, and subjects them to slavery the most abject. The visions of pretty dresses which flit through their minds, when a wealthy man proposes, perfectly bewilder their usually keen perception, and they seldom recover from their infatuation until the cruel trap is sprung, and they are prisoners in uncongenial matrimony. A majority of these wives would readily exchange situations with the prostitute but for the loss of reputation which such a step would incur, for they are constantly obliged to submit to the embraces of a man whom they hate, while the trafficker in lust sometimes enjoys the embrace of one she can love. Ladies can entertain no greater delusion than that wealth alone can make them happy in matrimony.

The trade of acquiring wealth makes many men stingy, and it is not uncommon for the wives of wealthy men to carry light purses. It is particularly galling to the female who has been seduced into an uncongenial marriage, by the attractions of riches, to find her husband parsimonious as well as ugly. Still, such is often the experience of ladies who marry golden husbands. A sad instance of this kind is related by Mrs. Nichols. Here is the affecting story as she gives it:

"A most gentle and noble creature was my friend ten years since. I have seldom seen so great material and spiritual beauty as she possessed. Her presence seemed to hallow all places, so pure, so truthful, so charming her life. She was the daughter of a widow who lived in poverty in a remote country town, and she was induced to accept a man as her husband who was wealthy and educated, and could give her an elegant home and the society of a city. She was very young when she married, and she was at once separated from her mother and friends, for her husband was so miserly that he would have grudged twenty-five cents given to any one, friend or foe, forever. He took her to a fashionable home, but the griping poverty in which she lived there was known only to herself, and those who were so placed for observation that they could not but see. The husband was not unkind,

not ignorant, not an unpleasant man to those about him, but pinching meanness was a habit with him that involved all his life. The wife was in all things disappointed. She knew that her mother, whom she loved adoringly, was sewing for a living when she had no strength to sit up, but lay and sewed in bed; that she was alone, dying very slowly of consumption, without even the comfort of a letter from her daughter, because of the expense of postage, which this lady could not get money to pay, though she lived in a house worth thousands of dollars. If she had married with the hope of sustaining her mother, or having her with her, how bitter was the disappointment.

"The young wife bore her heavy burden in silence—oh! how many burdens are thus borne!—till her health failed. She bore three children in rapid succession, and with suffering that only a mother can know, and then commenced having miscarriages and abortions. She begged her husband to allow her to come to me and have the benefits of water-cure. I was sure I could cure her if I had her away from her destroyer: but he was her legal owner, and for six years she died constantly. Six times she miscarried or aborted, and a sickening horror of her false relation of soul and body, a daily and hourly misery, and constant flooding, was her lot. Her peerless beauty faded, and her glorious life became nearly insanity at times; and again a resigned and almost torpid idiocy seemed to possess her.

"Every effort was made by her friends to induce the husband to place her under my care, but in vain. He asserted his ownership to her latest breath, and after twelve years of agony and resignation, a human soul was blotted out, and the lifeless clay, beautiful to the last, was alone left to him who never had a thought but that she was his property as much as his horses or his house. He would have punished any infidelity to the marriage bond as he would have punished the thief of his horses, or the incendiary who had burned his dwelling—and yet his presence had been a hateful horror to his wife. She had been his victim, by far worse used than his harlot would have been had he been so immoral as to keep one, but he was not. He was a rich, respectable and moral murderer, who had probably no more idea of his true character than society had. He had only starved his wife in her sympathies, and made her the slave of his senses, whilst he lived in his business, his dollars, his dinners, and, what is called, domestic life, receiving much sympathy that his beautiful wife was always sick and sad, and not pleasant company."

Marrying to please relatives rarely secures mental or physical adaptation. Parents do not realize how much misery they frequently bring upon their children by persuading them to marry those for whom they feel no attraction. Were the legal guardians of the young as well instructed in physiology and phrenology as they frequently are in many studies of a less useful nature, their interference in the matrimonial selections of young people would be more excusable. But their objections to one or preferences for another are generally the result of selfish motives, without regard to fitness.

A lady of considerable personal beauty and good education once called on me, in Cincinnati, to consult me regarding her rapidly declining health. I found, on examination, that her nervous system was terribly deranged, and that there was every appearance of approaching insanity. I knew she must be laboring under constant mental excitement, and interrogated her as to the cause. She was the victim of an unhappy marriage, formed at the instigation of friends. From her story it was apparent that neither physical or mental adaptation had been realized, for she did not give birth to a child till she had been married nine years, and her husband's society to her was anything but agreeable. She was rather religiously inclined, while her husband was a profane wretch. He would make her blood thrill with the most horrid imprecations, without the least provocation. Although a prosperous merchant in respectable standing, she was never allowed a dollar in money, and almost suffered for the want of comfortable clothing for herself and child. She would have left him had one of her relatives been in circumstances to have afforded her a home; for her health was too far gone for her to think of self-maintenance; and, rather than have them suffer the unhappiness they would have done, had they known her matrimonial trials, she kept them profoundly ignorant of her miserable situation. I was the only one to whom she had ever confided her infelicity, and the tears gushed from her eyes like water from a fountain, while she related the sorrowful tale of her sufferings. But her case is no more affecting than hundreds which have come under my observation. Nor does my experience differ from that of any physician in large practice. The world is full of "Lucifer Matches," and the wretchedness they entail destroys health; hence, to the physician is revealed the infelicity in married life.

The poet Milton's first marriage, belonged to the Lucifer class, I sh uld judge, from the following extracts from his life and writings:

"In his thirty-fifth year, Milton married Mary, the daughter of Mr. Powell, a justice of the peace in Oxfordshire. After an absence of little more than a month, he brought his bride to town with him, and hoped, as Johnson observes, to enjoy the advantages of conjugal life; but spare diet, and hard study, and a house full of pupils, did not suit the young and gay daughter of a cavalier. She had been brought up in a very different society; so, after having lived for a month a philosophic life, after having been used at home to a great house, and much company and joviality, her friends, possibly at her own desire, made earnest suit to have her company for the remaining part of the summer, which was granted upon a promise of her return at Michaelmas. When Michaelmas came, the lady had no inclination to quit the hospitality and delight of her father's mansion for the austerer habits and seclusion of the poet's study.

"Milton sent repeated letters to her, which were all unanswered; and a messenger who was despatched to urge her return, was dismissed with contempt. He resolved immediately to repudiate her, on the ground of disobedience; and, to support the propriety and lawfulness of his conduct, he published 'The Doctrine and Discipline of Divorce.'"

There is one passage in this treatise in which Milton clearly points to himself, and to the presumed causes of his unhappiness: "The soberest and best governed men," he says, "are least practiced in these affairs; and who knows not that the *bashful muteness of a virgin may oftentimes hide all the unloveliness and natural sloth which is really unfit for conversation*? Nor is there that freedom of access granted or presumed, as may suffice to a perfect discerning, until too late; when any indisposition is suspected, what more usual than the persuasions of friends, that acquaintance, as it increases, will mend all? And lastly, is it not strange that many who have spent their youth *chastely, are, in some things, not so quick-sighted, while they haste too eagerly to light the nuptial torch*? Nor is it, therefore, for a modest error, that a man should forfeit so great a happiness, and no charitable means to relieve him, since *they who have lived most loosely*, by reason of their bold accustomings, *prove most successful* in their matches, because their wild affections, unsettling at will, have been so *many divorces to teach them experience*. Whereas, the sober man, honoring the appearance of modesty, and hoping well of every social virtue under that veil, may easily chance to meet with a mind to all other due conversation inaccessible, and to the more estimable

and superior purposes of matrimony useless—and almost lifeless; and what a solace, what a fit help such a consort would be through the whole life of a man, is less pain to conjecture than to have experience." He speaks, again, of a "mute and spiritless mate;" and again, "if he shall find *himself bound fast to an image of earth and phlegm*, with whom he looked to be the copartner of a sweet and gladsome society."

Observation corroborates the truth of Milton's remark, that "they who live most loosely, by reason of their bold accustomings, prove most successful in their matches." I have often remarked the mental and physical adaptation existing between gamblers and their wives, and other characters of more notoriety than good reputation. "One-eyed Thompson" and "Bill Poole" were represented as most devoted husbands and kind fathers. No husband ever penned a more affectionate and affecting epistle than that which Thompson wrote his wife just previous to his suicide.

The tenacity with which the wives of bad men cling to their husbands, when imprisoned for crime, is also an illustration of the correctness of Milton's remark. Many a wife of a respectable husband, in good standing in society, would consider it a most fortunate circumstance, if the latter were incarcerated in prison long enough to give her a chance to escape from the thralldom of uncongenial matrimony.

Milton advocated easy divorce; so do I. But I would have both the front and back gates of matrimony under the care of competent men, whose physiological and phrenological acquirements qualify them to admit and release people with particular reference to mental and physical adaptation. By this wise arrangement all "Lucifer Matches" would be interdicted, and the happiness and longevity of the human family immeasurably increased.

CHAPTER VI.

Philosophy of Elopements.

ELOPEMENTS are becoming so frequent, in both high and humble life, that Part II. would be incomplete without an investigation into their causes. Over five hundred occurred in the United States during the year 1857.

It is common to ascribe elopements to human depravity, but I am disposed to attribute them to human ignorance. Our public schools make good historians, good mathematicians, good grammarians, good geographers, good ministers, good lawyers, and poor doctors, but no physiologists or phrenologists; and parents are generally poorly qualified to impart that knowledge to children which institutions of learning so universally withhold. Hence, I claim that ignorance of the valuable sciences of physiology and phrenology, and consequent non-conformity to the law of physical and mental adaptation in marriage, is the chiefest cause of elopements. The law of adaptation in the marriage of men and women is the same as the law of affinity in the combination of substances. "By experiment," says Comstock, "we know that some bodies have an affinity to each other; that is, we know that on presenting them to each other under certain circumstances they will combine and form a third substance which differs from either of the first. We know also by the same means that other substances, when presented together in the same manner, will repel each other; that is, they will not combine, nor can they be made to unite so as to form a third substance. In a great variety of instances, after two substances have combined, when mixed alone, or without the admixture of any other substance, *this first union may be destroyed by the intervention of another, or a third substance, having a stronger attraction for one of these substances than they have for each other.*"

Now in this law of chemical attraction or affinity, we have an illustration of the law of mental and physical adaptation. By both observation and the teachings of science, we know that a male and female having adaptation or affinity, under certain circumstances, when pre-

sented to each other, will unite and form what is termed a married couple. We also know that there are males and females who, when presented together, repel each other like oil and water, but who may be induced to unite by adding a pile of gold, the same as oil and water can be made to unite by the addition of alkali. Again, we know that a male and female, tolerably adapted, may be made to unite, and that this first union may be destroyed by the intervention of another, or a third party, having a stronger mental and physical attraction for the husband or wife than they have for each other.

In chemistry, alcohol may be married to gum camphor, the combination being called spirits of camphor; but if water be brought in contact with this marriage the alcohol will straightway elope with the water and leave the camphor a grass widower. This same law is, to a great extent, obeyed by human beings, and elopements are usually first caused by the non-observance of the law of mental and physical adaptation in marriage, and secondly by the discovery, by one or the other, of a person for whom he or she feels a greater attraction. Let us suppose Mr. A. to be a man of the bilious temperament, with large acquisitiveness, small benevolence, small ideality and small intellectual faculties. He marries Miss B. who is also of the bilious temperament, with small acquisitiveness, large ideality, large benevolence and large intellectual faculties. Now the similarity between their physical organizations disqualifies them to make each other happy sexually, while the dissimilarity in their mental characteristics destroys their social happiness. After a few years or months Mr. C., a gentleman of nervous temperament, full of ideality, benevolence and intelligence is introduced to the family. He finds Mrs. A. a most agreeable woman and Mrs. A. is perfectly captivated with Mr. C. Now is it not apparent to every reader that it is perfectly *natural* for Mr. C. to run away with Mr. A.'s wife, and for Mr. A.'s wife to be entirely willing that Mr. C. should? Just exactly as natural as it is for the water to unite with the alcohol in the spirits of camphor, leaving the camphor to take care of itself.

But let us suppose a case in which mental adaptation has been observed. Mr. Smart, a gentleman of the nervo-sanguine temperament and full development of the social and intellectual faculties, marries Miss Prim of a corresponding temperament and mental characteristics. They are perfectly happy in their social relations, but not so in their sexual, because their correspondence in temperament renders their electrical conditions similar. Mrs. Smart feels

nothing magnetic in the touch or presence of Mr. S., nor does Mr. Smart feel the least pleasurable emotion in contact with Mrs. S., further than that engendered by platonic love. They are as two negatives or two positives in their physical relations. In course of time Mr. Villain becomes an acquaintance of Mr. S., and is introduced to the good wife. This Mr. V. is of the phlegmatic temperament, with social and intellectual faculties corresponding with Mr. S. and his lady, which latter make him an agreeable friend. He may be entirely destitute of the moral and religious organs, but Mr. and Mrs. S. do not know that, for they have never investigated "that humbug" Phrenology, and Mr. V. is not going to tell them he is a scamp. The new friend being of an entirely opposite temperament to Mrs. S., the electrical conditions of the two are totally unlike, and the latter experiences a strange happiness in his magnetic atmosphere. Anon, the community is perfectly thunderstruck to learn that the accomplished and amiable Mrs. S. has actually eloped with Mr. V., leaving her devoted and highly respected husband disconsolate. Every body marvels, but they would not if the law of affinity in all its bearings, or the law of mental and physical adaptation, was understood.

"Prof. Silliman mentions that in June, 1823, he crossed the Hudson at Catskill, in company with a friend, and was proceeding in a carriage by the river, along the road, which is there very narrow, with the water on one side, and a steep bank, covered by bushes, on the other. His attention at that place was arrested by observing the number of small birds of different species, flying across the road and then back again, and turning and wheeling in manifold gyrations, and with much chirping, yet making no progress from the particular place over which they fluttered. His own and his friend's curiosity was much excited, but was soon satisfied by observing a black snake of considerable size, partly coiled and partly erect from the ground, with the appearance of great animation, his eyes brilliant, and his tongue rapidly brandishing. This reptile they perceived to be the cause and centre of the wild motions of the birds. The excitement, however, ceased as soon as the snake, alarmed by the approach of the carriage, retired into the bushes: *the birds did not escape, but, alighting upon the neighboring branches, probably awaited the re-appearance of their cruel tormentor and enemy.*" The snake was "charming" the birds, and this word "charming" is another expression for magnetizing. In a similar manner men charm

or magnetize ladies of opposite temperaments, and run off with them. But my object in quoting the Professor's anecdote is to remind the reader how very similar the conduct of some ladies is to that of the birds in the story. They did not escape when they could. In a similar way ladies often tamper with the electric powers of gentlemen, as if to see how far they can go without actually becoming their victims. In this way, ladies of religious principles sometimes astonish the church and society with elopements. When the libertine begins to exercise his magnetic powers to overcome their chastity, they do not think for a moment that there is a probability of their yielding; but his atmosphere is agreeable, because magnetic, and so is his touch; consequently they will, in a measure, encourage his advances. It is in this way that a married woman who wishes and intends to be virtuous will sometimes tempt herself in the presence of a libertine, till all at once she is overpowered. A sense of remorse seizes upon her mind, and is aggravated in the society of her husband, because she knows she has deceived him; and, with this unpleasant reflection, his society becomes painful rather than agreeable. In such a state of feeling it is not difficult for her paramour to persuade her to elope. The birds alluded to should have flown off when the magnetic spell was broken, if they did not want to be swallowed by the reptile, and so with ladies; if they do not wish to succumb to the magnetic powers of the seducer, they should avoid his presence, and, above all, contact with him.

Ladies, too, often magnetize gentlemen of the opposite temperament, and make them do many foolish things—sometimes persuade them to run away from helpless families. Now all these evils, and those before adverted to, may be, in a great degree, avoided, if the law of mental and physical adaptation be observed in contracting marriage. Where perfect affinity or congeniality exists, no third party can be more affinitive or congenial.

It is nevertheless true that congenial marriages may sometimes be broken up by ignorance of the philosophy of sexuality, as treated in Chapter II. It is a common error with many husbands and wives to flatter each other that the animalism of marriage could not possibly be enjoyed with any other persons than themselves. This, so far from being true, is entirely the reverse. The almost constant contact in presence or person of a husband and wife does not allow either to fully regain their native electrical conditions, in consequence of which a person less congenially adapted physically, may actually

possess a higher degree of electrical adaptation for either than exists between themselves. This, however, could only exist temporarily, if the two persons were allowed to come in frequent contact. But ignorance of this fact, sometimes willful and oftener otherwise, is the cause of elopements. A husband indulges in an illicit amour with a woman perhaps less physically adapted to himself than his wife; but never before having come in such immediate contact with her, the electrical conditions of the two are more dissimilar than those existing between himself and wife, who have perhaps eaten and slept together for years; the deluded man at once supposes his unlawful partner better capable of making him happy than his own wife, and an elopement is the result. A week or a month will suffice to bring about an electrical equilibrium, and the foolish fellow would gladly return home if his wife and society would but give him a cordial and forgiving reception. Wives, ignorant of this same philosophy, sometimes become unfaithful, and elopement is generally the result, unless they be so situated that infidelity cannot be detected by injured husbands. Under the last named circumstances the wife has an opportunity to learn the physical uncongeniality of her paramour before she takes the bolder step. Between persons of corresponding temperament, an equilibrium and a similarity in electrical conditions is soon induced, and unhappy indeed must be the wife who abandons a more congenial husband for a less congenial paramour, while under the intoxication of sensuality resulting entirely from temporary dissimilarity in electrical conditions. It is high time that men and women understood the philosophy of sexuality. Such knowledge would tend to make husbands and wives more faithful to each other, and greatly aid in the prevention of elopements.

Negligence in dress and in preserving a good personal appearance, on the part of married people is sometimes the cause of elopements. "It is no uncommon thing," says a writer, "for women to become *slatternly after marriage*. They say that they have other things to attend to, and dress is habitually neglected—except, perhaps, on great occasions, when there is a display of finery and bad taste abroad, to be followed by greater negligence at home. Great respect is shown to what is called 'company;' but, apart from this, there is a sort of *cui bono* abandonment, and the compliment which is paid to strangers is withheld from those who have the best right to claim, and are most likely to appreciate it. This is a fatal but too common error. When a woman, with reference to the question of personal

adornment, begins to say to herself, 'It is only my husband,' she must prepare herself for consequences which, perhaps, she may rue to the latest day of her life.

"*The effect, indeed, of attention or inattention to dress*—and we include in the one little word whatever contributes to personal comeliness and attractiveness—*upon the domestic happiness*, especially of the lower and middle classes, cannot easily be overstated. The *placens uxor*, as we have said, is no small part of the totality of home. If a man finds that he has not secured what he believed he had married, he has a right to feel disappointed. We do not say that he has a right to retaliate. The obligations of the connubial contract are not conditional, but absolute. Negligence on the one side does not excuse negligence on the other; but it will very surely induce it. When there is nothing attractive at home, a man, however inexcusable such conduct may be, will seek it abroad, whether at the ale-house, the club, the theatre, the gaming-table, or only in what is commonly called 'society.' We do not mean to say that dress alone is the agency by which the erratic propensities of husbands are to be restrained, but that it is a *highly important part of it*. Indeed, it may be asserted that the absence of attention to this matter presupposes the absence of almost all other gentle, kindly and attractive qualities.

"A man marries, indeed, for the sake of the '*domus et placens uxor*.' He does not take a women to his hearth because she is a philosopher, or an arithmetician, but because, in homely language, there is 'something nice about her.' It was, doubtless, the design of the Almighty, in giving man a helpmate, that she should satisfy his natural craving after the beautiful, the graceful, and the gentle. For this was woman formed:

'For softness she and sweet attractive grace.

The woman who forgets this, ignores one of the great objects of her creation. *The wife, who forgets this, violates one of the primeval conditions of the connubial contract.*" In justice to the wife it should be said that she does not always violate this condition voluntarily. Her husband may be a stingy piece of meanness, who will not furnish his (literally) *better half* with the time and means to make herself beautiful, graceful and gentle. So far as practicable, however, the wife should endeavor to make herself prepossessing to her husband as well as to outsiders.

Men, too, often become careless in their dress and manners after marriage. They flatter themselves that their market is made, and that there is no further necessity for honied words, cleanly person, and good clothes. The trap of matrimony sprung, and the two not unfrequently put on "old duds" and commence making grimaces at each other. Now, who is surprised to hear that one or the other, espying a more attractive person in another cage, or basking in "single blessedness," breaks out and runs off with the new object of his or her love?

Negligence after marriage is, however, generally the result of physical and mental unadaptedness, from which springs nearly all infidelity in the state matrimonial. Let wise legislation remedy this evil, and we may with certainty look for less connubial infelicity and fewer love elopements from the ranks of the married.

CHAPTER VII.

Intermarriage of Relatives.

"ANOTHER natural law in regard to marriage, is," says Combe, "that the parties should not be related to each other in blood. This law holds good in the transmission of all organized beings. Even vegetables are deteriorated if the same stock be repeatedly planted on the same ground. In the case of the lower animals, a continued disregard of this law is almost universally admitted to be detrimental, and human nature affords no exception to the rule. It is written in our organization, and the consequences of its infringement may be discovered in the degeneracy, physical and mental, of many nobles, and royal families, who have long and systematically set it at defiance. Kings of Portugal and Spain, for instance, occasionally apply to the Pope for permission to marry nieces. The Pope grants the dispensation, and the marriage is celebrated with all the solemnities of religion. The blessing of Heaven is invoked on the union. The real power of his holiness, however, is put to the test. He is successful in delivering the King from the censures of the church, and his offspring from the civil consequences of illegitimacy; but the Creator yields not one jot or tittle of His law. The union is altogether unfruitful, or children miserably constituted in body and imbecile in mind are produced; and this is the form in which the divine displeasure is announced." In Turkey it is said of a simpleton, "he is of the Emirs." The Emirs constitute the hereditary nobility, and are the descendants of Fatimah, the daughter of Mahomet. They have intermarried so long and extensively that their imbecility has become a by-word even among those who revere the memory of the prophet.

In this country, intermarriage between relatives is practiced to an extent which calls loudly for legislative interference. Authoritative statisticians have shown most plainly that a large per centage of the insanity and idiocy found in our asylums is attributable to this violation of nature's law,—and how many other diseases are produced thereby it is difficult to estimate. Speaking of the physical effects

of intermarriage between blood relatives, the editor of the Fredericksburg News says, that, in the county in which he was raised, "for twenty generations back certain families of wealth and respectability have intermarried, until there cannot be found in three or four of them a sound man or woman! One has sore eyes, another scrofula, a third is an idiot, a fourth blind, a fifth bandy-legged, a sixth with a head about the size of a turnip, with not one out of the number exempt from physical defects of some kind or other."

The reason why such marriages are injurious to offspring is plainly indicated in previous chapters, showing the necessity of physical adaptation. If two persons of the same temperament are nearly alike electrically, how much more so are two individuals of the same blood, particularly, if of the same temperament also. I have no doubt that, in all cases in which the children of full cousins entirely escape mental or physical disease, their parents happen to be of opposite temperament. At least my observation sustains this hypothesis. I have seen brothers and sisters so entirely unlike in temperament as to be less nearly related to each other, physically, than to many persons not at all consanguineous. Such cases are rare, but it is nevertheless true they do sometimes occur. This condition oftener exists between cousins. But even when cousins do entirely differ in temperament, there is one weighty reason why they should not intermarry, viz: *their inherited predispositions to disease are generally similar, in consequence of which the predisposed infirmity will almost assuredly be developed in the offspring.* When there is no such predisposition, and they are of opposite temperament, the objection to their intermarriage is not, perhaps, well founded.

Combe says that "in Scotland, the practice of full cousins marrying is not uncommon; and you will meet with examples of healthy families born of such unions, and from these an argument is maintained against the existence of the natural law which we are considering." "But," continues the same writer, "it is only when the parents have both had excellent constitutions that the children do not attract attention by their imperfections. The first alliance against the natural law, brings down the tone of the organs and functions, say one degree; the second two degrees; and the third three; and perseverance in transgression ends in glaring imperfections, or in extinction of the race. This is undeniable, and it proves the reality of the law."

"It is thought," says Dr. Elliotson, "that a cross within the same nation is always desirable, but that a *cross between two nations begets* offspring superior to either. The importance of crossing an inferior nation with a better, is shown by the great improvement of the Persians, who were originally ugly and clumsy, *ill-made* and *rough-skinned*, by intermixing with the Georgians and Circassians, the two most beautiful nations in the world."

"There is hardly a man of rank in Persia," says Lawrence, "who is not born of a Georgian or Circassian mother; and even the king himself is commonly sprung, on the female side, from one or the other of these countries." Herein we see the beneficial effects of crossing temperaments.

The superior enterprise and native intelligence of the people of the United States is mainly attributable to the fact that our population has ever been heterogeneous, and made up of materials contributed by every nation on the globe. We have a mixture of all sorts: French, English, German, Scotch, Irish, Russian, Turk, Chinese, and every other variety which the old world can furnish, together with contributions from South and Central America. These have been, and are, constantly amalgamating or crossing. America, consequently, is, as she ought to be, the most powerful and progressive nation in the whole world. And still her prospects of future greatness would be immeasurably enhanced, if intermarriage between relatives and like temperaments were prohibited by law. Put a stop to immigration, and allow consanguineous families and similar temperaments to intermarry, and national degeneracy would soon ensue.

Thus far, accidental crossing, arising from the presence and constant influx of foreigners, has given physical and mental vigor to our population; yet we have idiots, maniacs, cripples, consumptives, &c., who are, in a majority of instances, the production, directly or indirectly, of bad marriages. As a nation's greatness depends upon the character of her population, it is the duty of every government to bestow at least as much attention upon the improvement of her human stock, as agricultural societies expend upon the improvement of the breeds of their horses and cattle.

To have enterprising and intellectual men and women, we must have boys and girls who are well developed physically and mentally. To look for these without due regard to adaptation in marriage, is as foolish as to expect "the olive to grow on the craggy summit of Ben Nevis, or the pine apple to expand amid the glaciers of Grinder-

walde." Parents are in great degree responsible for the physical infirmities and mental imperfections of their children. They are particularly so, when the natural law against the intermarriage of relatives has been violated. Once put in operation, a discriminative system of granting marriage licenses, such as I have suggested, and the marrying of nieces, cousins, and other blood relatives, will be discontinued, except in cases where temperamental difference and freedom from inherited diseases render the union unprejudicial.

CHAPTER VIII.

Essays for Married People Only.

SEXUAL EXCESS.

Both health and happiness, in married life, are seriously curtailed by sexual excess, growing out of ignorance of the philosophy of sexual intercourse. No married man or woman should neglect to read Chapter II. of this Part, for a perusal of that cannot fail to impress upon the mind of the reader the fact that sexual excess, besides exhausting the nervous system, and thereby rendering its victims susceptible to disease, produces sexual satiety. In no way, probably, can the physiologist apply a more certain remedy to this evil than to convince married people that moderation in indulgence heightens the pleasure, and that those who give way to excess lose much of the sexual enjoyment afforded in married life. With this view, I shall treat this subject more with reference to its direct effects upon the pleasures than upon the health of the married.

Bearing on this point, I find some very truthful remarks in "Love and Parentage," by O. S. Fowler. "If," says the writer, "parents would diminish their frequency so as to enhance ecstasy, they would be incalculable gainers in the amount of pleasure experienced, besides doubling, perhaps quadrupling, all the endowments of their offspring. No mistake can be greater than the prevalent supposition that hymeneal pleasure is in proportion to frequency; whereas it is in the reverse ratio. Do we not enjoy a single meal, when really hungry, more than scores when not so? So here frequency begets satiety, and gluts the appetite and enjoyment. Suppose New Year came once a week, we should take less pleasure in fifty-two new years than we now do in one, because frequency would render it insipid; whereas now weeks and months are spent in most delightful preparation and anticipation of this one day, which is often an instrument of more and more exalted pleasure, than any entire month of the year. The applicability of this illustration to the case in hand, is too apparent to require specification, and the practical lesson here taught, should

induce the married, merely as a means of securing the very pleasure sought, to partake less often, that it may be with a keener relish.

"Bear in mind that we write to PROMOTE sexual pleasure instead of to curtail it. We recommend abstinence in order to increase the sum total of enjoyment, and deprecate frequency, because destructive of the very pleasure sought. The epicurean philosophy is the true one. Self-denial forms no part of our creed. We go for SELF-*enjoyment* in the fullest sense of that term, and in its application to the subject in hand. We wish to show parents how they can the most effectually ENJOY this banquet, instead of diminishing one iota from hymeneal bliss as such. That exercise of this function is most concordant with nature which yields the most enjoyment, both in and of itself, and in its various and multifarious bearings on our other enjoyments. Thus qualified, neither our motives nor our philosophy can well be misunderstood; for we give the largest liberty compatible with the highest sexual enjoyment, to promote which is the one desire of both this section and this work. Call me not a hymeneal Stoic, but EPICURE; yet as gluttony precludes gustatory pleasure, and as a single meal, eaten with the keen relish conferred by appetite, gives more and more exalted pleasure than scores without it, so hymeneal postponement is the secret of hymeneal appetite and pleasure; while as the gourmand can never know exalted gustatory pleasure, so the cloyed advocates of connubial frequency necessarily deprive themselves of most of the pleasures they seek, and what few are left are embittered." Continues the same writer, sexual excess "breeds disgust for its paramour. We are compelled by a law of mind, to regard a frequent partner of sensuality as a kind of *animal tool*, a mere sexual *thing*, gross, low and sensual. This shows *why* the libertine, however intently he pursued his 'game,' before indulgence, always becomes indifferent after desire is sated, and finally casts her off. This is *always* the case because based in the law of mind that sensuality, in and of itself, degrades its joint partner in their own eyes, and in the eyes of each other breeds disgust of self and one another, deteriorates the moral tone, and demeans and animalizes the entire being! This abasement is *inherent* in excessive indulgence for its own sake; nor does marriage wipe away the polluting stain. Carnality is carnality, the world over, in wedlock as much as out of it, and *constitutionally* 'breeds contempt, disgust,' and hatred, even between the married. This must *always* be the case where animal

indulgence is sought; the laws of nature knowing no difference between those *legally* married or unmarried. I speak of mere animal indulgence as such."

Many good things have been written by physiologists on this subject, but their arguments against sexual excess lack vitality, because neither themselves nor their readers correctly understand the true philosophy of sexual intercourse, and upon a proper understanding of this depends the reformation of married people.

As has been previously shown, sexual pleasure is produced by the action of electricity, in three forms, on the sensitive nerves permeating the sexual organs, viz: individual electricity, chemical electricity, and frictional electricity. The first is the natural product of every animal organism; the second, of the union of acid and alkali; the third, of friction, which draws the electricity from the nervous systems of both the male and female while in the act of coition. Now, to render individual electricity active in copulation, sufficient time must elapse between each indulgence to allow the male and female to regain the electrical conditions peculiar to each. Sexual pleasure depends, in great measure, on the *electrical difference* existing between the parties, and the longer intercourse is abstained from the more unlike will they become electrically, and consequently, greater will be the enjoyment if long intervals intervene between each copulation. That this philosophy is sustained by fact, every married couple know who have come together after long separations. The electrical conditions of two persons of the same temperament may become as much unlike by protracted separation, as those of two persons of opposite temperament who are continually together. Hence, married people of like temperament should be more abstemious than their neighbors, who are physically adapted, in order to derive the same amount of gratification.

To render chemical electricity active in copulation, sufficient time must elapse for the vagina to get clear of the neutralized fluid. As soda is insipid after the effervescent effect is over, so is the alkali of the vagina dead and inactive after having been neutralized by the acid of the male. Several days and sometimes weeks must elapse, after one indulgence, before the secretions of the vagina will become so purely alkaline as to be prepared for another animated combination with the acid of the male.

The action of frictional electricity is about all that is left to exercise the nerves of the generative organs of the slaves to sexual excess.

The enjoyment of this is not so much dependent upon moderation, because the nervous systems of all living persons are constantly supplied, more or less, with vital electricity, to carry on the various functions of life, such as digestion, muscular motion, &c., and this can be diverted to the sexual organs by violent friction. But all this is at the expense of the vital system, and brings sexual excess down on a par with that horrible practice—masturbation. Many married people open their eyes with holy horror, when they learn of the secret practices of careless youth, apparently unconscious that sexual excess is no better. But such is the fact.

"Who can say," interrogates Dr. Dixon, "that these excesses are not often followed by those direful diseases, insanity and consumption? The records of our madhouses, and the melancholy deaths by consumption, of the newly-married, bear ample witness to the truth of such assertions. Are they not transmitted to posterity? Look at the frequent mental imbecility, and the pallid hue, and attenuated form of the children who are the earlier products of marriage, and see the parents vibrating between life and the grave, until the candid physician, or the terrors of death, teach them to abstain, and nature gathers up her shattered powers, and asserts anew her control of the organism. Should the lesson suffice and mature age be attained, again look at the offspring; if the first children survive, the last would not seem to be born of the same parents, so different are they in vigor and sprightliness: and in maturer life almost invariably more intellectual." We therefore see that the sexual happiness of married people, and the health of parent and child, depend upon moderation in the marriage bed.

THE PREVENTION OF CONCEPTION.

During an extensive practice of several years, I have found one of the most fruitful sources of disease to be the various modes resorted to by married people to prevent a too rapid increase of offspring. The country is flooded with quack nostrums, injurious and unreliable "recipes," &c., all of which have been produced, of course, because there is an actual demand for some reliable prevention; and it is a matter of not much doubt in my mind that the health of married females has been quite as much deteriorated by their use, as it would have been had they actually given birth to a child as often as once in fourteen months or two years. But the female has not alone

suffered through their use, for that which is injurious to one of the sexes, under such circumstances, is invariably detrimental to both.

Prevention pills, taken internally by the female, tend to weaken the muscular fibres of the womb, and, if successful as a prevention, in a very short time produce obdurate barrenness; then "female weaknesses" necessarily follow, when purulent and excoriating fluids are exuded from the internal membranes, and the male, at each copulation, becomes inoculated with the virus, by which the powers of his generative organs are debilitated or absolutely destroyed. Many will appreciate the truthfulness of this remark under the incentive of sad experience.

The use of caustic washes as injections, produce the same results, though more rapidly; and many a lady who is suffering under the most aggravated forms of leucorrhœa can trace its origin directly to their application.

The use of water, as an injection, has met the approval of some, but it is by no means reliable, and fails eighty cases in a hundred; besides, the frequent application of cold water to the vagina in a little while deadens the sensitiveness of the female sexual organs, from which arises a disinclination for sexual intercourse.

A more common mode of prevention is resorted to by the male, and is usually termed "withdrawing." This practice is more disastrous to health than all the rest, because its effects are developed so gradually that neither the male or female is really aware of its injurious tendency, until their systems are shattered to a frightful extent, and not even then, unless they are somewhat familiar with the teachings of physiology. To both sexes it is little better than self-pollution. In a natural and full intercourse, as has been before shown, *electricity*, individual, chemical, and frictional, is evolved, and it is the action of this wonderful agent on the delicate nerves centering in the sexual parts which produces the pleasurable sensations; and it is at the moment the discharge of the seminal fluids takes place that a quieting equilibrium is restored between the parties, by which the agitated nervous systems of both are recompensed for the excitement which they have undergone. In the practice of "withdrawing," electricity in all the three forms is brought into action; but this condition is excited without being allowed to regulate itself, or to restore to the nerves the *principal* which has been borrowed, or the *interest* which has accumulated; hence the injury, gradual and imperceptible, resulting from this common and

health destroying practice. Nor is this the only one. It is a well known fact among medical men, that the seminal fluids are necessary to allay the irritation which is induced in the vagina during copulation, and consequently leucorrhœa and other weaknesses are also the bitter fruits of such violations of nature's laws.

There are many other pernicious practices resorted to, but those I have briefly considered are the most common. That a harmless and sure prevention, in the hands of only medical men and the married, must conduce to the health and happiness of the human family, there can be no reasonable doubt. Such is the testimony of all medical writers. Dr. Hollick has made some very truthful remarks on this subject. He says—"It is well known that there are many severe diseases to which females are subject, that can never be removed while they conceive; but which, if uncured, are sure to become fatal, and probably also descend to their children. Some females also have deformed pelvises, and can never bring forth live children, while others are *certain to die* if the child remains in the womb till it is a certain size. Besides these cases, how many there are that remain in constant ill-health and suffering from continued child-bearing, without the possibility of relief or escape.

"It is not generally known that it is the regular custom in medical practice, when a female has a deformed pelvis, or is otherwise incapable of being delivered at the full term, to *produce abortion*. This, however, is the invariable custom! and it is done because it is thought better to sacrifice the fœtus only than to let both die, as they assuredly would if the gestation were allowed to proceed. Now, it may well be a question in such cases, whether it would not be better to teach how to prevent conception altogether. I am confident that much of the horrible practice of procuring abortion, now so prevalent among married people, is caused by the want of simple and reliable means of prevention.

"There are few persons, except medical men, who have any idea of the extent to which the revolting practice of abortion is now carried, nor of the awful consequences that frequently follow from it. Every female who undergoes any of the disgusting operations practiced for this purpose, does so *at the risk of her life*, and to the almost certain destruction of her health if she survives. Those that take drugs are also equally exposed to risk. Every female may be told with truth—and, indeed, every one ought to know—that *there are no safe means of abortion*. It is true that some few may undergo the ordeal in safety,

but none can depend upon doing so, and the chances are ten to one that death, or the evils referred to, will follow. A general knowledge of this fact would do much to prevent the practice, but it would not do away with it altogether, unless some *reliable* means of *prevention* were known, and in many cases it must become a choice between abortion and prevention.

"Some people will say that it is possible for persons to avoid having a family without using preventive means. But the deprivation required *will not* be undergone by the great mass, and cannot be undergone without the most immoral consequences. It is sheer absurdity to suppose that the promptings of nature can be totally unheeded; and illicit intercourse and vicious habits of self-indulgence would certainly follow a total deprivation of the marital right in most instances."

The propriety, however, of giving, in a work like this, to young and old, unmarried as well as married, definite, *harmless* and *sure* means for the prevention of conception, may well be questioned. Unmarried ladies are often restrained, in moments of excited amative passion, from surrendering their virginity to their lovers and to the destroyers of female virtue, through fear of becoming pregnant. This restraint is wholesome, and it is not expedient that it should be removed. I shall be willing to direct *married people* in this important matter, who apply in writing, over the signatures of both husband and wife, provided they comply with the terms given in the "Card to Married People," in the closing part of this chapter. There are means both *reliable* and *healthful*, but the knowledge of them should be limited to the ranks of the married.

SEXUAL INDIFFERENCE.

This, on the part of the husband or wife, is frequently the cause of matrimonial infelicity and infidelity; so much so as to demand the serious attention of the faithful physiologist. The necessity of reciprocity in the marital relations is treated at length in Chapter III. of Part Second, and to this I would refer the attention of the interested reader.

Sexual indisposition is often caused by a want of physical adaptation; or, in other words, by a similarity in temperament, by which the electrical conditions of both are rendered the same or nearly so. Although this cannot be entirely cured, it may be in a great measur remedied by electrical and mechanical means, and the observance of

appropriate directions regarding diet, habits, etc. In all cases of this kind a great improvement may be effected, and this affirmation is based on the success of the author in treating hundreds of cases which have been entrusted to his care, in various parts of the United States.

Impotency, arising from sexual excesses, often causes indifference in the male. These cases can generally be radically cured by restoring the tone of the generative organs, and imparting by medical and electrical remedies, vigor and health to the vascular and nervous systems.

One of the most common causes of indisposition on the part of the female is leucorrhœa, the presence of which disease corrupts the alkali of the vagina, and so coats the mucous lining as to render the parts insensible to electrical influences. It also prevents the evolution of frictional electricity, by an excessive lubrication of the clitoris. Sometimes, too, indisposition is caused by a want of proper development of the clitoris. This organ is so small in some females as to almost preclude amative excitement by friction. Secret habits in girlhood also, in many instances, produce indisposition in adult age. Self-abuse is no less destructive to the reproductive organs of the female than to those of the male. I might go on and name many other causes of sexual indisposition, but those which I have mentioned are the most common. All are more or less under the control of the skillful physician, and in many cases can be entirely removed by electrical, medical and mechanical remedies. (See Card to Married People, in the last part of this chapter.)

IMPRESSIONS ON THE UNBORN CHILD.

The effects of the mind of the mother on her embryotic offspring are very remarkable, and I may add mysterious. It is indeed difficult to clearly account for them, although I am convinced that they are the results of the action of the mind's electricity on the mental and physical organization of the fœtus. "Matter," truly remarks Dr. Davis, "is the *servant* of mind. Nothing is more obvious than the sympathetic alliance of these two eternal principles. Mind is the moving principle; matter is the principle which is moved. And it is well established that the productive mind influences and moulds the body and soul before as well as after birth. History is brimful of examples, and settles the doctrine as true, that the unborn child is psychologized by the maternal mind." The following remarkable

examples, illustrative of the effect of the mind of the mother upon the mind of her unborn child, are related by the same author:

"Five months before the birth of Caligula, the Roman Emperor, his mother *dreamed* that a supernatural being brought from the sky and gave her an eagle, which changed slowly into a venomous serpent, and was stoned to death by the multitude. The angel said: 'The eagle is power; the serpent is tyranny; the last is assassination.' Justified by her imagination only, she insisted that the history of her unborn child had been symboled forth. This terrible impression acted like a charm upon the coming spirit; and, lo, the life and death of Caligula was an exact fulfillment of his mother's dream.

"In a dream the mother of Nero saw a dove descend, holding in its mouth a scorpion, which was dropped upon her bosom, and presently stung itself to death. A few weeks prior to the birth of her son, this dream was repeated. She said it denoted *peace*, first; next, *persecution;* the last *suicide*. And the history of Nero was an exact correspondence.

"While in the house of Levi, a young woman had an impressive *dream*, in which she beheld a beautiful damsel leaning over the river's brink, with her sweet face beaming compassionately upon the form of an innocent child. Presently this child became a great man; and his might was felt in all the earth. An angel now descended from a high mountain, and said: 'Behold! so shall it be with thy son.' * * * Not long after this dream, the woman became the bride of a distant kinsman. And twice before the birth of her first child, the same dream was impressed upon her; and the same angel appeared with the same message. Of course, the psychological effect was complete. Her son's name was Moses.

"A woman, of considerable physical courage, mounted a horse, rode side by side with her soldier-husband and witnessed the drilling of the troops for battle. The exciting music and scene together, inspired her with a deep thirst to behold a war and a conquest. This event transpired a few months before the birth of her child, whose name was—'Napoleon.'

"During the important period immediately preceding the birth of Dante, his young mother saw a vision of startling grandeur and great depth of significance. She beheld a populated globe of symmetrical proportions, rise gradually out of the sea and float mid-heavens. It was decorated with every conceivable element of natural and artificial beauty. Upon a high and grand mountain, which melted away

into the distant horizon, and sloped gracefully into lands and lakes that spread out to the left, stood a man with a brilliant countenance, whom she knew to be her son. Pointing with his upraised hand, he bade her look down to the right of the mountain. She beheld a precipice of abrupt descent, like the wall of an immeasurable gulf, with depth unknown. Whereupon she thought she fainted with excess of fright. But her son was serene as a morning star; and, looking again, she saw no evil. After this beautiful and thrilling vision, Dante's mother had only in view the greatness of her unborn child—whose genius as a scholar and poet, as a creator of a world of fancies, is known throughout all the lands of civilization."

An old number of Dr. Dixon's Scalpel also gives two interesting illustrations of the subject under consideration. "Mr. H. of the northern part of New York State, married some forty years since. Pecuniary circumstances rendered offspring undesirable. Within a year, however, the wife thought herself with child; on expressing this belief to her husband, she was, at the moment, quite shocked at the dissatisfaction with which he received it. Taking his hat, he left the house, and was absent for near an hour. He was distressed on his return to find his wife in tears. He assured her he was rejoiced to learn the probable realization of her announcement; that he was now satisfied with the condition of his pecuniary affairs. The wife dried her tears, but expressed her conviction that her offspring would suffer from her agitation. Her fears gradually increased as gestation advanced. A healthy and well-formed boy was born. After some months, it manifested an extreme unwillingness to approach the father. This gradually increased, until its dissatisfaction was manifested by loud and continued screaming when brought near him. As age advanced, the most persevering efforts were made to overcome this repugnance, but in vain, and the attempt was abandoned in despair. This state continued, and at the time of our receiving the information, the son, then an active and rising member of the bar, had never been able to speak a word to his father, though the most painful efforts were made.

"A gentleman of Brandon, Vt., removed to New York City, and while there, went one day to visit the Zoological Garden. While there, his wife, who was enciente, and who was of a highly nervous temperament, became alarmed at the ferocity of a beautiful Bengal tiger. The lady fainted. In process of time, she gave birth to a

healthy boy, which grew like other children. After the child was old enough to run about, he exhibited the strongest of tempers when vexed at any thing. At such times he would growl and shriek, and fly at the faces of his companions with all the ferocity of a wild cat—tearing their clothes, biting and scratching their faces, and the like—his eyes, during the paroxysms, being of a fiery or green color, like those of a cat when angry. As he advanced in years, it became necessary for an older person to accompany him, to prevent his injuring his playmates during his paroxysms of fury. At other times, he was of a most amiable disposition."

The effects of the maternal mind on the *physical* organization of the fœtus are also often very extraordinary, as will be seen from the following instances related in the Scalpel:

"A few years since we were requested by Dr. Moore Hoyt to examine an infant of a few months' age. We found a healthy child and mother; the former presenting an eschar directly across the knee-pan of each knee. They were as if made by the scratch of a nail, and from two to two and a half inches in length. Dr. H. was astonished on seeing these marks at the birth of a child; but examination made it evident that this state of the knees had been produced in the womb! But how? The mother had spent, for a number of days, some hours daily on her knees, leaning over a cradle, and nursing a sick child. She complained of pain on rising, but did not anticipate any deformity in her child. When we saw the eschars they were completely healed.

"The next case occurred in our own practice. A lady, during the second month of gestation, was presented by her husband with a pair of ear-rings. She was desirous to wear them the same evening to a party, but found it impossible to insert the loop into one ear, as the hole had partially grown up. The attempt was abandoned, with some disappointment, and the expression of apprehension that her child would be marked. At birth, the child presented a hole in the center of one lobe of the ear, so nearly perforated, that, on stretching it slightly with two fingers, the unperforated part proved so thin as to be absolutely diaphanous, a deep cleft running downward for a quarter of an inch from the center of the hole.

"The next case was related to us by Dr. Cox, now practicing at Williamsburg, L. I. A lady was in constant attendance upon her dying father; his disease was a cancer on the forehead, and required repeated daily dressing; this was done by the daughter, who was in

the early period of pregnancy. In a few months the father died, and the daughter was delivered, at the full period, of an infant disfigured with a large tumor on the forehead. This the doctor assured us became an open sore, in all respects similar to the one of which the child's grandfather died. It resisted every application, and soon terminated the child's life.

"In the town of Brandon, Vt., lived a man who one morning desired his wife (then with child) to assist him in killing a calf. The wife of the man's brother tried to dissuade her from going, but she went. The calf was thrown upon its side, and as the man was in the act of applying the knife to its throat, his wife helping to hold it down, it suddenly sprang up, receiving at the same time a severe cut across the mouth and nose, the knife passing over and cutting off one of its ears. The woman became alarmed, and ran to the house. In due time she gave birth to a living child, which had a hare-lip, each lip being deeply cut through, and the cleft in the superior one extending entirely through it, and far back toward the posterior part of the palate; it had also but one ear. The child died soon after birth.

"In Rutland Vt., a married lady had a favorite pet cat, which she loved immoderately. One day, the husband came in, and found her holding the favorite tabby, as usual. Being under the influence of liquor and passion, he seized the cat, and with an oath, dashed its head against the hearth. The wife was greatly affected. Some months after, she gave birth to a female child, whose physical organization presented strange peculiarities. Its face bore the general resemblance to that of a cat—having no chin; with the mouth quite at the lower part of the face; the nose long and depressed, and the eyes like those of the cat. The hands were deformed; very short fingers, crooked and sharp nails. When she was nine years old, the child had never spoken a word, but made known her wants by a kind of yawling, cat-like sound, which was horrible to hear.

"In the same town resided a child, upon whose face was a peculiar red stain. At a wedding party given to a young couple soon after their marriage, the bride received the contents of a wine-glass upon her face as she was playfully running from one room to another. It spattered her face, neck, and breast, and caused her much confusion of mind, and not a little anger. Her first born child came into the world with its face, neck, and breast well covered with claret. As it increased in years, the color of the mark became brighter."

No physiologist, as yet, has been able to satisfactorily explain *how* the mind of the mother thus influences the mental and physical formation of her offspring. But that it does do it, no medical man of extensive observation will deny. I might mention numerous instances which have come to my personal knowledge, but as they are no more remarkable or interesting than those which I have quoted, it is unnecessary that they should be given.

Whatever is the cause of these impressions, they teach the necessity of the maintenance, by the mother, of a happy state of mind during the period of gestation. But this is impossible if she be unhappily married, or if she daily meets, in her out-of-door exercises, deformed and loathsome people. Accidents will occasionally happen to shock the nerves of pregnant ladies, but deformed men, women and children should be kept out of public thoroughfares by their parents and guardians; and ill-assorted marriages should be interdicted by law. In some countries deformed children are slain as soon as born; this custom is inhuman, and a violation of law in all Christian nations. But those having such unfortunate offspring should keep them, both in childhood and manhood, out of all public places, lest their disgusting images be daguerreotyped in the minds of pregnant women, and their hideous forms reproduced in every generation.

FOOD FOR PREGNANT WOMEN.

Experiment and observation have shown that the pains and perils of child-bed may be greatly diminished, if pregnant ladies will only pay strict regard to their diet, and eat such food as possesses the least amount of calcareous matter. What I mean by calcareous matter is that which, when taken into the system, goes to produce bone. There can be no mistake in the hypothesis that the fœtus in the womb is nourished by the same food which is eaten by the mother, and if this contains a large quantity of calcareous matter, the bones of the unborn child are too rapidly developed, in consequence of which its delivery is attended with greater danger and more pain. It is not necessary to enter into an argument to show why a child with large bones should give the mother more pain in its delivery than one with small bones—the fact is self-evident. It matters little how fat the little fellow becomes, because his flesh is yielding and readily conforms to the shape of the passage; but a large and inflexible frame reverses the fact, and makes the passage conform to it.

Many ladies, during gestation, mistakenly resort to the very diet which produces the most mischief. All kinds of bread, puddings, cakes, etc., made of Indian-meal, usually so wholesome for people both in and out of health, are often used, to the exclusion of almost all other food, by pregnant women, under the erroneous supposition that they are best suited to their condition. Now, analysis shows that twelve thousand five hundred pounds of Indian corn contains one hundred and eighty lbs. of calcareous matter, while the same quantity of rice contains only ten lbs! The flesh of young animals contains only one-twenty-fourth as much calcareous matter as Indian corn, and all kinds of fruits contain only one-three hundred and sixtieth part as much. It is therefore plain that all preparations of Indian corn are an unsuitable diet for ladies who are pregnant, although no one will question their wholesomeness for nearly all persons under other circumstances.

Common salt, which performs a very important part in the animal organism, and also all condiments, contain nearly as large a percentage of calcareous matter as Indian corn; and although food is insipid without at least a moderate use of these luxuries, it would be well for all ladies who are about to become mothers to abstain as much as possible from their use until after confinement.

Potatoes are much better than wheat bread; barley bread better than either; and preparations of arrow-root, sago and tapioca better than any of these, while all kinds of fruits, like peaches, prunes, apricots, tamarinds, nectarines, cherries, plums, apples, pears, pine-apples, oranges, lemons, figs, raisins, grapes, blackberries, strawberries, gooseberries, raspberries, cranberries, mulberries, elderberries, bilberries, currants, melons, etc., are the most harmless things which can be eaten during the period of pregnancy.

All kinds of animal food, and particularly eggs and milk, are admissable; also, such vegetable food as lettuce, celery, onions, beets, turnips, carrots, radishes, mushrooms, parsley, parsneps, and peas. But fruits lead all these in their freedom from calcareous matter, and are consequently best adapted to the condition of ladies in a state of pregnancy. Potatoes, preparations of corn, wheat, oat and rye flour, and beans, should be carefully avoided.

I have directed many ladies in the selection of proper food during gestation, according to the foregoing rules, and, in all, the results have met my most sanguine expectations. Those who had previously suffered the most agonizing labor pains, found a happy diminution

in their length and severity; others, who, from their compact build, anticipated painful and protracted labor, in many instances, escaped with less than average suffering; while many have, in substance, said to me—"Doctor, it's nothing but fun to have children by pursuing your directions while enciente."

CARD TO MARRIED PEOPLE.

Husbands and wives in all parts of the world are at liberty to consult the author by letter on any of the subjects treated in this work. Valuable advice will be given how to promote matrimonial felicity where there is discord; how to prevent conception; how to improve or cure sexual indifference; how to cure barrenness and impotency; how to secure healthy offspring; how to avoid pains in child-bed, &c. Those who consult the author on any of these matters must describe the personal appearance of both husband and wife—that is, give the height, weight, age, color of hair and eyes, and complexion, of each; also, the measure around the right arm, between the elbow and shoulder, the measure around the right thigh, and around the calf of the right limb, in order that their temperaments may be correctly determined. *Consultation fee invariably* $1. No letters for advice will be noticed, which do not contain this fee, which is not charged so much with a view of profit, as to indemnify the author for his time, stationery and postal expense, in replying to the questions of correspondents. "Time is money," and so are stamps, envelopes and paper. All consultation letters are regarded as *strictly confidential*, and those wishing advice can depend upon the *faithful adherence* of the author to this rule. Address E. B. Foote, M. D., Saratoga Springs, N. Y.

CHAPTER IX.

Essays for Young and Old, bearing on Happiness in Marriage

EARLY MARRIAGE.

Much has been written pro and con. regarding the expediency of early marriage. Physiologists, I believe, are about equally divided in their opinions on this question. The opposers of early marriage contend that the offspring of young parents are not as strong, physically and mentally, as those of parents of more mature age, and give the names of Coleridge, Goldsmith, Wirt, Richelieu, Oberlin, Ignatius Loyola, and other distinguished poets, statesmen and philosophers, together with the fact that they were the youngest children of their parents, as illustrative examples of the correctness of their theory.

While it is useless to deny that a majority of the world's great men were not the first born, it is rather jumping at a conclusion to attribute the cause entirely to the maturity of their parents. Many great men are the eldest children of their progenitors, and I am firmly convinced that many more would be, except for the sexual excesses to which nearly all newly married people are given. In fact, it is almost surprising that there are any first or second children who acquire distinction, considering the mental and physical enervation which nearly all newly married people bring upon themselves by the constant amative excitement under which they are pleased to keep themselves, while the romance and novelty of their new relation remain. It must, therefore, necessarily require several years of moderation for their systems to regain their wonted energies, and, as a sequence, we may reasonably look for the best specimens of the genus homo among the youngest offspring of parents. If this reasoning is correct, and I appeal to the candid judgment of all experienced physiological observers if it is not, the chief and only important argument against early marriage is futile, while the arguments in favor of early marriage are numerous and momentous.

When God created man, He implanted in him two passions stronger than all others, the ultimate object of one being to sustain life, and

that of the other to reproduce it. One passion calls for food, the other for sexuality. Starvation of either often dethrones reason and renders men reckless and unmanageable. A man who is denied alimentary food scruples not to break locks and destroy life to obtain means for the gratification of his appetite. A man who is denied sexual food violates virtue and social regulations, or himself, for the gratification of his carnal appetite. Now, as to the precise time when these appetites should be gratified, it would seem that nature had distinctly indicated, and that is, *when they manifest themselves.* Immediately after birth the child exhibits an appetite for food, and the humane mother does not deny it nourishment, nor would she listen to the advice of any philosopher who directed her to deprive her offspring of the nourishment of her breast till it arrived at a certain age, adjudged proper by his school of savans. Appetite for food is thus early developed because the existence and growth of the infant depend on immediate and repeated nourishment; but sexual appetite remains undeveloped for many years because its immediate manifestation is not necessary for reproduction. Now the question arises, *does nature develop the latter before the individual is qualified for the propagation of perfect specimens of his kind?* All who have observed the perfection of nature in all her works will unhesitatingly answer—No! Then we are to conclude that the age of puberty is that which nature appointed for marriage, are we? Yes, I reply, if we make a few years of allowance for the prematurity induced by the improprieties of parents and the improper training and bad habits of children. The organ of amativeness is frequently too largely developed in the embryonic offspring by the excessive indulgence of the parents in sexual pleasures during the period of gestation. After the birth of the child, he is usually feasted on meats, tea and coffee and other stimulating food and drink, fit only for persons of adult age, by which sexual precocity is produced. In consequence of these habits, for which parents are responsible, nature is in a measure perverted, and the sexual appetite is created a few years earlier than nature designed. Hence, even in this climate, girls usually commence menstruating at the age of thirteen or fourteen, and boys are often victims to habits of masturbation at twelve or thirteen. Nature's directions have been, in a measure, destroyed, as were the tables of the commandments in the days of Moses; but they may be restored in a few generations, if mankind will but return to the observance of the laws of life and health.

Notwithstanding, however, nature is to a certain extent anticipated in the development of the sexual appetite, the fact that sexual desires are manifested at an early period of manhood and womanhood is a strong argument in favor of early marriage, in view of which men and women should marry as soon after puberty as they are qualified to assume the cares and responsibilities which the relation entails; and, by this remark I do not mean until they get rich, or in a position to live fashionably, but as soon as they can honorably support themselves and the children which may be born to them.

In England, the 26th year is the mean age at which men marry, and the 25th, that at which women marry. In this country, the 24th year is the mean age at which men marry, and the 18th, that at which women marry. Now, I am not aware that the English surpass the Yankees in mental power, and if they do in physical strength, it is nothing more than we might expect when we contrast the habits of the English women with those of this country. The former are noted for their love of pedestrian exercise, and the latter for their devotion to badly ventilated kitchens or parlors, and sedentary habits generally. That early marriage does not produce physical weakness, we have only to look at the Chinese, who regard a *bachelor* of *twenty* as an object of contempt! Still the "Celestials" have a fair reputation for physical strength, and deformity is not common among them.

The tendency of early marriage, if formed on true principles, with due regard to the teachings of physiology and phrenology, is wholesome and elevating. "Every school boy knows," says a newspaper writer, "that a kite would not fly unless it had a string tying it down. It is just so in life. The man who is tied down by half a dozen blooming responsibilities and their mother, will make a higher and stronger flight than the bachelor, who, having nothing to keep him steady, is always floundering in the mud. If you want to rise in the world tie yourself to somebody."

Southey says that "a man may be cheerful and contented in celibacy, but I do not think he can ever be happy; it is an unnatural state, and the best feelings of his nature are never called into action." Now, if it is an "unnatural state" for a man at thirty-five, it must be equally so at twenty-five, and even for a young man who has but just attained the age of puberty.

"Early marriages, wherever they can be contracted with any ordinary regard to prudence," says Dr. Wardlaw, of Scotland, in his lectures on Magdalenism, "are among the best preventives of prostitution; and whatever contributes to hinder the formation of these, may be regarded as standing chargeable with their share of its encouragement, as ranking among the causes of Magdalenism. I deny not that prudence is a virtue, and the question of marriage is a proper sphere for its exercise. But there cannot be a doubt that high notions, which, by the refinement and extravagance of our times, have been introduced, of the *style* in which young men entering on life must set up their domestic establishment, have, in many instances, laid restraints on the early cultivation of virtuous love, and prevented the happy union of hearts in youthful wedlock. I cannot look upon this as at all an improvement on the homely habits of our fathers. Many are the young men who are thus tempted to remain single by their felt inability to *start* in what is regarded a somewhat *creditable* style. Would to God I had the ear of all the youth in our city, and in our country, that I might tell them of the sweets of early virtuous union; and that I might earnestly and affectionately urge them to consult their own best interests, and to set an example pregnant with the most beneficial results to the community, by bidding defiance to the tyranny of fashion; by returning to the good old way; by finding a partner who will marry from love; and who will be willing and more than willing to begin upon little, and by the blessing of Providence, to rise gradually to more. *That* was the way in the olden time; and, although no croaker for the superiority of all that pertained to ancestry, *this*, most assuredly, is a point in which I should say of the former days, 'they were better than these.' I would say to the rising youth—the hopes of coming generations—'Moderate your views; defy custom; marry; fear God; be virtuous; and be happy.' Could my voice and my counsel prevail, what a salutary check would be given to the prevalence of the vice which is our present subject."

Celibacy is almost incompatible with virtue, and masturbation and prostitution cannot fail to result from deferring marriage much beyond the age of puberty. A life of celibacy is rarely a life of virtue, and I make the remark without ignoring the fact that Newton, Galileo, Michael Angelo, Locke, Hume, Pope, Bacon, Voltaire, Cowper, and many other distinguished men, have lived and died old bachelors. The inborn sexual passion is generally too strong in man to be safely

denied gratification, and if not gratified in virtuous marriage, it seeks gratification in the dens of harlotry, or the secret chamber of the masturbator. Yet, those who possess not this passion, "are of all men most miserable." "The difference between a thoroughly selfish old bachelor, and a man that is married and fit to be married to a woman he loves," says Dixon, "is about the same as that of an American yacht and a Chinese junk: one will sail in the very eye of the wind, the other only when it is dead astern."

"Your true bachelor," says the same writer, "is stupid and awkward, and requires an immense berth; he is given to seat himself in the lady's chair and to toast his shins before the middle of the fire; very solicitous is he about his creature comforts, and a perfect stoic to woman's charms. He takes no hints; never mind how coolly he is treated, nor what symptoms of the opera or an evening party to which he has not been invited he may perceive, so much the more will he not go. Nay, the very appearance of the lady's gallant, will not move him; he can inflict himself and his twaddle on some unfortunate member of the family; she may make the best of him for her martyrdom is certain. If there be a stupid and good-natured brother who smokes fine cigars, and he will tolerate the insult to the sister, the sitting room will be rendered peculiarly acceptable at breakfast to those who have delicate olfactories. The mental peculiarities of this creature, are all characterized by dogmatism and selfishness, and no one at all familiar with the animal can fail at once to detect him.

"The marriage of a young girl to such an individual, can be productive of nothing but unhappiness; it is equally opposed to experience and natural instinct. The soul, as well as the body, shrinks into arid selfishness when it does not early bow to woman's charms. The lightning of the eye and the music of the voice are quenched by the vice of celibacy, and the miserable creature dreams not that the forfeit of his devotion to his personal comforts, is nothing less than the capacity of their enjoyment."

BUSINESS AVOCATIONS SHOULD BE OPEN TO FEMALES.

One prolific cause of unhappy marriages, is the limited sphere allowed females in which to exercise their ingenuity and talents for self-maintenance. In most parts of the civilized world it is not considered strictly respectable for a lady to pursue any active avocation sufficient in itself to give her comfortable support. Daughters are

expected to lead idle lives under the parental roof until they can catch husbands; and, if their parents are not in circumstances of affluence, marriage is their only refuge from pecuniary want in advanced age. The result is that women daily marry homes with little regard to the feelings they entertain for their proprietors.

Now, this is all wrong, and should be remedied by opening for their pursuit all departments of business which they are physically qualified to conduct, and by giving them, at public schools, such *practical* educations as will enable them to compete successfully with their neighbors in broadcloth. I know that there exists no civil law against ladies becoming merchants, lawyers, doctors, etc., but society has established a code which is about as effective as if it came by authority of state, particularly as the education imparted to females in the family and in school is such as to practically enforce obedience thereto.

"Our girls are educated," says a writer, "not to develop their faculties as human beings; not to give the freest scope to their talents and aid them in the pursuit of happiness; not to qualify them for the struggle of an earnest life, for honorable independence by industry, art or literature. No, they are educated, ostensibly and at best, to make good wives and mothers, frequently that they may be successful in catching husbands. Whatever knowledge a husband may think desirable, whatever accomplishments may aid them to entice and entrap some man of a suitable position to marry them; whatever may fit them to shine in those resorts of fashion and gaiety which are our matrimonial markets, in these things our daughters receive instruction."

To show the necessity of ladies throwing off their dependence on the coarser sex, I cannot do better than quote Mrs. Jamieson. She says: "In these days, when society is becoming every day more artificial and more complex, and marriage, as the gentlemen assure us, more and more expensive, hazardous, and inexpedient, women must find means to fill up the void in existence. Men, our natural protectors, our law-givers, our masters, throw us upon our own resources; the qualities which they pretend to admire in us—the overflowing, the clinging affections of a warm heart—the household devotion—the submissive wish to please, that feels 'every vanity in fondness lost'—the tender, shrinking sensitiveness which Adam thought so charming in his Eve—to cultivate these, to make them, by artificial means, the staple of the womanly character, is it not to

cultivate a taste for sunshine and roses, in those we send to spend their lives in the arctic zone? We have gone away from nature, and we must, if we can, substitute another nature.

"Art, literature, and science remain to us. Religion—which formerly opened the doors of nunneries and convents to forlorn women—now mingling her beautiful and soothing influence with resources which the prejudices have yet left open to us, only in the assiduous employment of such faculties as we are permitted to exercise can we find health, and peace, and compensation for the wasted or repulsed impulses and energies more proper to our sex—more natural, perhaps more pleasing to God; but trusting in his mercy, and using the means he has given, we must do the best we can for ourselves and for our sisterhood. The prejudices which would have shut us out from nobler consolation and occupations, have ceased, in great part, and will soon be remembered only as the rude, coarse barbarism of a by-gone age. Let us, then, have no more caricatures of methodistical, card-playing, and acrimonious old maids. Let us have no more of scandal, parrots, cats or lap-dogs—or worse!—these never-failing subjects of derision with the vulgar and the frivolous, but the source of a thousand compassionate and melancholy feelings in those who can reflect! In the name of humanity and womanhood, let us have no more of them. Coleridge, who has said and written the most beautiful, the most tender, the most reverential things of woman—who understands better than any man, any poet, what I call the metaphysics of love—Coleridge, as you will remember, has asserted that the perfection of a woman's character is to be characterless. 'Every man,' said he, 'would like to have an Ophelia or a Desdemona for his wife.' No doubt; the sentiment is truly a masculine one; and what was their fate? What would now be the fate of such unresisting and confiding angels? Is this the age of Arcadia? Do we live among Paladins and Sir Charles Grandisons? and are our weakness, and our innocence, and our ignorance, safeguards—or snares? Do we, indeed, find our account in being 'fine by defect, and beautifully weak?' No, no; women need, in these times, character beyond anything else; the qualities which will enable them to endure and resist evil; the self-governed, the cultivated, active mind, to protect and to maintain ourselves. How many wretched women marry for maintenance! How many wretched women sell themselves to dishonor, for bread! and there is small difference, if any, in the infamy and the misery! How many

unmarried women live in heart-wearing dependence; if poor, in solitary penury—loveless, joyless, unendeared; if rich, in aimless pitiless trifling! How many, strange to say, marry for the independence they dare not otherwise claim! But, the snare-paths open to us, the less fear that we should go astray.

"Surely it is dangerous, it is wicked, in these days, to follow the old saw, to bring up women to be 'happy wives and mothers;' that is to say, to let all her accomplishments, her sentiments, her views of life, take one direction; as if for women there existed only one destiny, one hope, one blessing, one object, one passion in existence. Some people say it ought to be so, but we know it is not so; we know that hundreds, that thousands of women are not happy wives and mothers—are never either wives or mothers at all. The cultivation of the moral strength and the active energies of a woman's mind, together with the intellectual faculties and tastes, will not make a woman a less good, less happy wife and mother, and will enable her to find content and independence when denied love and happiness."

It is gratifying to see ladies of talent attempting to rouse in their sex proper appreciation and appropriation of the latent practical talents of women. There is not the shadow of a reason that woman should be pecuniarily *dependent* upon man. Although in few respects like him, she is in all respects *naturally* his equal. And notwithstanding she has been educated for centuries past to not only feel, but acknowledge, mental superiority on the part of the "lords of creation," there have been, from time to time, bursting forth from her sex, intellectual lights like Madams De Stael, De Genlis, Martineau and Wright, to remind her of her slumbering genius.

I have not patience to bring forward facts and arguments, numerous though they are, to prove that woman is mentally and physically capable of maintaining herself. It seems to me like a contemptible insult to her palpable ability, to directly or indirectly raise the question. "In the reign of Ann of Austria," says a writer, "French women took the lead of political factions; the French princess had a regiment, and ladies of the court took rank as marshals in the army. Women preached in public, supported controversies, published and defended theses, harangued in Latin, and wrote Greek and Hebrew. Ladies took degrees in the universities, became doctors of law, and filled professorships. About this time works were written in several languages, *to prove that women were superior to men.*" In ancient Egypt, women engaged in trade and commerce, and in the early ages

of Greece they were allowed the right of suffrage. What a stigma, then, is it, upon the character of this boasted age of enlightenment, that thousands of women are driven to the infamous trade of prostitution for a bare livelihood! that many more, who would rather die victims to starvation, than earn their bread in harlotry, struggle year in and year out with the unrecompensing needle for a mere subsistence!

Much has already been written concerning the poor pay females receive in the limited branches of industry which social despotism allows them to pursue, and I shall not here dwell on the subject. I will only advise, nay, *urge* ladies to *crowd themselves* into all business pursuits for which they are physically qualified, such as retailing dry goods, jewelry, books, stationery, newspapers, household furniture, crockery ware, and groceries, and manufacturing and selling cotton and woollen goods, fine shoes, confectionary; and all professions and trades for which they have both physical and mental adaptedness, in order that they may become less dependent upon their "legal protectors," and be enabled to live lives of "single blessedness" rather than unite themselves to disagreeable masses of masculine blood and bones, for the mere sake of escaping from poverty and starvation. Remember that, in the eyes of God, respectable prostitution, such as marrying for homes and wealth, is no better than that practiced by abandoned women.

LADIES SHOULD BE ALLOWED TO "POP THE QUESTION."

What! solicit gentlemen to marry them? Certainly!—why not? Have not ladies preferences which they have a *natural* right to indicate as well as gentlemen? Is there any good reason why ladies should not have the privilege to choose, as well as refuse? Strange, how firmly rooted false notions become by education! Custom is a powerful law-maker, but not always a just one. He is particularly despotic in his conduct to ladies, and winks at many improprieties committed by gentlemen. He only reproves gentlemen when they get drunk, commit fornication and adultery, gamble, and do many other disgusting and criminal things; but the ladies he condemns and heaps with reproaches, whenever they are found guilty of any such offences. He opens to man a wide field for industry and the accumulation of wealth; to woman he gives a "seven-by-nine" room, in which she may labor in penury until she can obtain absolution by marriage. And then, to crown all, if she wishes to marry, the old

tyrant commands her to wait and accept or refuse such offers as may be made, while to man he gives the exclusive prerogative of choice! True, woman has choice between her suitors, if she have more than one, but it is often synonymous with a "choice between two evils," while man may select from an hundred or a thousand. The ladies, in justice to themselves and their female posterity, should rebel against this despotism as did our revolutionary fathers against British tyranny in colonial times. Emperors and Kings do not monopolize despotism; Custom, though not himself a despot, is often despotic, and the ladies are the most patient and uncomplaining victims of his tyranny.

REBELS OF THE YEAR 1900 AGAINST OLD KING CUSTOM.

"How many women," says Dr. Davis, "have wished themselves men! Because, simply, that a ridiculous custom deprives women of social freedom. * * What wonder that some strong women-natures have burst the bonds, and steeled their hearts against the shafts of ridicule and derision! How low must be the social state which curtails the social liberties of woman! She has no liberties to *first* manifest her preference to some kindred spirit of the opposite gender. No, indeed! If a woman should visit a man first, and inform him of her love towards him, the whole community would at once conclude that such an one 'is no better than she should be.'"

Robert Southey, the poet, who would perhaps have laughed at the proposition of giving ladies the right to ask the hand of gentlemen in marriage, once said that "the *risks* of marriage are far greater on the *woman's side;*" "*women,*" he added, "*have so little the power*

of choice, that it is not, perhaps, fair to say they are less likely to choose well than we are." He further said—"I know of nothing which a good and sensible man is so certain to find, if he looks for it, as a good wife." I am equally certain that there is nothing which a good and sensible woman would so certainly find, *if she were allowed to look for it*, as a good husband. I deny that "their opinions concerning men are less accurate than men's opinions of their sex," as has been asserted. Neither sex deserve great credit for judging of human character, especially before marriage; but ladies, as a rule, are gifted with keener perception than gentlemen. The female sex would not get cheated oftener in marriage than the male sex, if the former enjoyed the same prerogative to choose that the latter arrogates to itself. "Manage as they may," says Nichols, "girls must wait for offers, and be the choice generally of a very narrow circle; and there is always a great temptation to accept the first, for fear of never having another." While this fact must universally be admitted, there is not a single good reason which can be urged against giving to ladies the right to manifest their preferences; but many may be adduced in favor of allowing them the valuable privilege.

It frequently happens that an aristocratic lady's true counterpart is among the ranks of the humble, and while he would not dare to approach her with a proposition of marriage, she *must not*, no matter how strong her affection for him, because custom forbids such a breach (?) of propriety. Many instances of this kind have come to my knowledge. A man in circumstances of affluence feels no delicacy in proposing to a lady in humble life; but if their circumstances are reversed, he fears his aspirations may be treated with scorn if he essays to offer her his hand in marriage. He thinks himself the recipient of great favor if she treats him with politeness and attention, and dares not think her conduct towards him is actuated by a desire that he should propose marriage. So bold a step on his part might forfeit even her friendship, and he chooses rather to remain sure in the possession of this latter than to encounter self-mortification and her displeasure, possibly, by soliciting her love. She perceives his diffidence, and wishes she might, for one moment, avail herself of his prerogative. But she hesitates. She, too, may mistake his sentiments; and, if so, and she should propose, what would the neighbors say; how people would laugh! Months roll on, and she, failing to make him understand her real sentiments, bestows her hand

on some worthless fop who has more money than brains, and who has had the bravery to offer himself because he flourishes in the same circle of society that she does. She accepts because she may not have a better offer, and perhaps because he has a sister she loves, even if she does not love him; and therefore she considers the family connection a happy one. This is no fancy picture. Every observer knows that instances of this kind are of frequent occurrence.

Diffidence often prevents gentlemen from proposing when their "sweethearts" occupy the same social position with themselves, and ladies, under such circumstances, would often "help them out," if they felt that they had a right to. L. N. Fowler relates an interesting example of this kind. "A very worthy, honest, diffident man, of the city of New York, paid his addresses to a young lady of equal worth and virtue, and the acquaintance became so intimate that he spent most of his leisure hours with her, always waited on her to and from church, &c., and continued so to do until *fifteen years had elapsed*: by this time the patience of the young woman became exhausted, and she resolved on bringing matters to a crisis. So she informed her lover, on his next visit, that she was about to leave the city. 'Are you?' replied he, with surprise. '*When* are you going?' 'To-morrow.' '*Where* are you going?' 'I don't know.' 'What shall I do? How long do you intend to be gone?' 'I don't know what you will do, neither do I know how long I shall be gone,' said she; 'and now if you want me, say so, and take me; for now is your last opportunity.' He took the hint, and arrangements being made, they were soon married. After he had tasted the sweets of married life, said he—'Wife, why did you not say so before; for we might have been married fifteen years ago, as well as now, if you had merely said the word. I was ready to marry, and resolved to make the proposal again and again; but each time my heart would rise in my throat, so that I could not speak." Now, according to social etiquette, this lady was guilty of gross impropriety when she said to her bashful lover, "If you want me, say so, and take me." She would no doubt have said the same thing many years previous, had not custom forbade it; and she would most undoubtedly have married some *one she loved less* before the expiration of the long term of courtship, had another offered!

It belongs to ladies to work a reform in this matter. They must "declare their independence," and sustain each other in assuming a prerogative which rightly belongs to them. If a group of ladies are

informed, by an amazed biped in broadcloth, that Miss Somebody actually asked Mr. Somebodyelse to marry her, they must not laugh and join with him in ridiculing the heroic girl, but unite with one accord in praising her for her courage, and *lash with sarcasm* the masculine gossiper who has heralded the report to them. It is all wrong that the gentlemen have a world full of fair ones to select from, while ladies can only choose between two, three or half a dozen stupid admirers, who may offer themselves. There is no weighty reason that it should be so, and the female sex is recreant to its own rights and happiness, if it does not assume the right to choose and propose.

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