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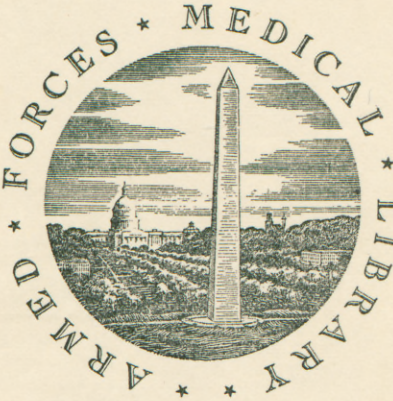

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DISCOURSE

ON

SELF-LIMITED DISEASES.

DELIVERED BEFORE

THE MASSACHUSETTS MEDICAL SOCIETY,

AT THEIR ANNUAL MEETING, MAY 27, 1835.

BY JACOB BIGELOW, M. D.

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ADVERTISEMENT.

This Discourse is reprinted from the Medical Communications of the Massachusetts Medical Society, by whose appointment it was written. The enumeration of self-limited diseases, which it contains, is by no means so complete, as it may hereafter become, should the attention of medical inquirers be drawn more extensively to the subject.

Boston, July 1, 1835.

SELF-LIMITED DISEASES.

SINCE the period of our last annual meeting, our Society has sustained a loss, in the decease of its worthy and respected Vice-President. Dr. JOHN DIXWELL, whose professional career in this city had been assiduous, enlightened, and honorable, and whose faithful services in successive offices of the Society, had been so long recognized, that his familiar countenance seemed almost necessarily associated with our periodical assemblings, has departed from amongst us.

In the same year has died, Dr. BENJAMIN LYNDE OLIVER, a patriarch in the medical community, the long and even tenor of whose life has been characterized by a philosophic taste, and a laudable zeal to increase the resources of the healing art.

Dr. EZRA STARKWEATHER, one of the distinguished members of our profession, has vacated by his death a station rendered influential by the weight

of his private character, and important by his efficient services, both in the councils of this Society, and in those of the Commonwealth.

It is fit that the tribute of our passing homage should be paid to the memory of men like these, and that the instructions, which may result from the noticeable event of their decease, should be brought home to our most serious contemplation. We meet, not to lament the fate of men, whose lot was desirable, in as much as their usefulness and good name were commensurate with their lives; but rather to review the duties which are devolved upon ourselves, as surviving representatives of a difficult and responsible profession.

The death of medical men is an occurrence which eminently demands our attention, for it speaks to us of our science, and of ourselves. It reminds us, that we, in turn, are to become victims of the incompetency of our own art. It admonishes us, that the sphere of our professional exertions is limited, at last, by insurmountable barriers. It brings with it the humiliating conclusion, that while other sciences have been carried forward, within our own time and almost under our own eyes, to a degree of unprecedented advancement, Medicine, in regard to some of its professed and most important objects, is still an ineffectual speculation. Observations are multiplied, but the observers disap-

pear, and leave their task unfinished. We have seen the maturity of age, and the ardent purpose of youth, called off from the half cultivated field of their labors, expectations and promise. It becomes us to look upon this deeply interesting subject with unprejudiced eyes, and to endeavor to elicit useful truth from the great lesson that surrounds us.

In comparing the advances which have been made, during the present age, in different departments of Medical science, we are brought to the conclusion, that they have not all been cultivated with equally satisfactory success. Some of them have received new and important illustrations from scientific inquiry, but others are still surrounded with their original difficulties. The structure and functions of the human body, the laws which govern the progress of its diseases, and more especially the diagnosis of its morbid conditions, are better understood now, than they were at the beginning of the present century. But the science of therapeutics, or the branch of knowledge by the application of which physicians are expected to remove diseases, has not, seemingly, attained to a much more elevated standing than it formerly possessed. The records of mortality attest its frequent failures, and the inability to control the event of diseases, which at times is felt by the most gifted and experienced

practitioners, give evidence that, in many cases, disease is more easily understood, than cured.

This deficiency of the healing art is not justly attributable to any want of sagacity or diligence on the part of the medical profession. It belongs rather to the inherent difficulties of the case, and is, after abating the effect of errors and accidents, to be ascribed to the apparent fact, that certain morbid processes in the human body have a definite and necessary career, from which they are not to be diverted by any known agents, with which it is in our power to oppose them. To these morbid affections, the duration of which, and frequently the event also, are beyond the control of our present remedial means, I have, on the present occasion, applied the name of *Self-limited diseases;* and it will be the object of this discourse to endeavor to show the existence of such a class, and to inquire how far certain individual diseases may be considered as belonging to it.

By a self-limited disease, I would be understood to express one which receives limits from its own nature, and not from foreign influences; one which, after it has obtained foothold in the system, cannot, in the present state of our knowledge, be eradicated, or abridged, by art,—but to which there is due a certain succession of processes, to be completed in a certain time; which time and processes may vary

with the constitution and condition of the patient, and may tend to death, or to recovery, but are not known to be shortened, or greatly changed, by medical treatment.

These expressions are not intended to apply to the palliation of diseases, for he who turns a pillow, or administers a seasonable draught of water to a patient, palliates his sufferings; but they apply to the more important consideration of removing diseases themselves through medical means.

The existence of a class of diseases, like those under consideration, is, to a certain extent, already admitted, both by the profession, and the public; and this admission is evinced by the use of certain familiar terms of expression. Thus, when people speak of a 'settled disease,' or of the time of 'the run of a disease,' it implies, on their part, a recognition of the law, that certain diseases regulate their own limits and period of continuance.

It is difficult to select a perfectly satisfactory or convincing example of a self-limited disease from among the graver morbid affections, because in these affections, the solicitude of the practitioner usually leads him to the employment of remedies, in consequence of which, the effect of remedies is mixed up with the phenomena of disease, so that the mind has difficulty in separating them. [Note A.] We must therefore seek for our most striking or deci-

sive examples among those diseases which are sufficiently mild, not to be thought to require ordinarily the use of remedies, and in which the natural history of the disease may be observed, divested of foreign influences. Such examples are found in the vaccine disease, the chicken pox, and the salivation produced by mercury. These are strictly self-limited diseases, having their own rise, climax, and decline, and I know of no *medical* practice which is able, were it deemed necessary, to divert them from their appropriate course, or hasten their termination. [Note B.]

It may appear to some, that the distinction of these diseases from others, is the old distinction of acute and chronic. Yet on due inquiry, such an identification is not found to be sustained, for there are some acute diseases which, we have reason to believe, are shortened by the employment of remedies; while on the other hand, certain chronic cases of disease are known to get well spontaneously, after years of continuance.

If the inquiry be made, why one disease has necessary limits, while another is without them, the reply is not uniform, nor always easy to be made. Sometimes the law of the disease may be traced to the nature of the exciting cause. Thus the morbid poison of measles, or of small pox, when received into the body, produces a self-limited disease; but

the morbid poisons of itch and syphilis may give rise to others which are not limited, except by medical treatment. [Note C.] Sometimes also, the cause being the same, the result will depend on the part, organ, or texture which is affected. Thus if we divide with a cutting instrument the cellular or muscular substance, we produce a self-limited disease, which, although it cannot by any art, be healed within a certain number of days or weeks, yet in the end gets well spontaneously, by one process, if the lips are in contact,—and by another and slower process, if they are separated.* But if, on the other hand, we divide a considerable artery, we have then an unlimited disease; and the hemorrhage, or the aneurism, which follows, does not get well, except through the interposition of art.

The class of diseases under consideration, comprehends morbid affections, differing greatly from each other, in the time, place and nature of their spontaneous developements; so that they may admit of at least three general subdivisions. These may be called, 1st. The *simple;* in which the disease observes a continuous time, and mostly a definite seat: 2d. The *paroxysmal;* in which the disease, having apparently disappeared, returns at its own periods: and, 3d. The *metastatic;* in which the dis-

* In one case, the disease is a solution of continuity; in the other, a solution of continuity and contact.

ease undergoes metastasis or spontaneous change of place. In the present state of our knowledge, we have no difficulty in finding examples of each of these subdivisions. There are also other examples, in which the disease, although capable of being in part influenced by medical treatment, still retains a portion of its original intractability, and has strong relations to the class in question.

As a mode of directing our inquiries toward these diseases, we may suspect those complaints to be self-limited, in which it is observed that the unwary, and the sceptical, who neglect to resort to remedies, recover their health without them. We may also suspect diseases to be of this character, when we find opposite modes of treatment recommended, and their success vouched for, by practitioners of authority and veracity. We may moreover attach the same suspicion to cases, in which the supposed cure takes place under chance applications, or inconsiderable remedies; as in the empirical modes of practice on the one hand, and the minute doses of the homœopathic method on the other. Lastly, we may apprehend that cases are fatally self-limited, when enlightened physicians die themselves of the diseases which they had labored to illustrate,—as in the case of Corvisart, Laennec, Armstrong, and others. [Note D.]

In proceeding to enumerate more precisely some

of the diseases which appear to me to be self-limited in their character, I approach the subject with diffidence. I am aware that the works of medical writers, and especially of medical compilers, teem with remedies and modes of treatment for all diseases; and that in the morbid affections of which we speak, remedies are often urged with zeal and confidence, even though sometimes of an opposite character. Moreover, in many places, at the present day, a charm is popularly attached to what is called an active, bold, or heroic practice; and a corresponding reproach awaits the opposite course, which is cautious, palliative, and expectant. In regard to the diseases which have been called self-limited, I would not be understood to deny that remedies capable of removing them may exist; I would only assert, that they have not yet been proved to exist.

Under the simple self-limited diseases, we may class *hooping cough.* This disease has its regular increase, height, and decline, occupying ordinarily from one to six months. During this period, medical treatment is for the most part of no avail. After hooping cough has reached its climax, change of air sometimes appears to hasten convalescence. Also if inflammatory, or other morbid affections, supervene upon the pure disease, they may become subjects for medical treatment. With these excep-

tions, hooping cough appears to be a self-limited disease.

Most of the class of diseases usually denominated eruptive fevers, are self-limited. *Measles*, for example, is never known to be cut short by art, or abridged of its natural career. *Scarlet fever*, a disease of which we have had much and fatal experience during the last three years, is eminently of this character. The reasons, which induce me thus to regard it, are the following. The writings of medical observers agree in assigning to it a common, or average period of duration, and this is confirmed by the observations of practitioners at the present day. From this average duration and character there are great natural deviations, the disease being sometimes so slight, as to attract the notice of none but medical eyes, and sometimes so malignant, that treatment is admitted to be hopeless. The modes of treatment, which have had most testimony in their favor, are various, and opposite. By Dr. Fothergill, stimulants were relied on; by Dr. Currie, cold water; by Dr. Southwood Smith, and others, blood letting. But it is not satisfactorily shewn, that either of these modes of practice has been particularly successful; for where the writers have furnished us any thing like definite, or numerical results, it does not appear that the mortality was less in their hands than it is among those who pursue a more expec-

tant practice. The post mortuary appearances, which in many diseases furnish useful lessons for practice, are in scarlet fever extremely various and uncertain; and sometimes no morbid changes, sufficient to account for death, can be discovered in any of the vital organs, or great cavities. [Note E.]

Small Pox is another example of the class of affections under consideration. It may, at first view, appear, that inoculation has placed artificial limits on this disease. But it must be recollected, that inoculated Small Pox is itself only a milder variety of the same disease, having its own customary limits of extent and duration, which are fixed, quite as much as those of the distinct and confluent forms of the natural disease.

Erysipelas is an eruptive fever, having strong analogies with those which have been detailed. It is not certain, that art can very materially affect either the duration or the extent of this malady. If a physician is called to a case of erysipelas, which is beginning to be developed upon a part of the face, and if he is asked, whether the disease will extend to the crown, or the neck, or to the right ear or the left,—he cannot tell. And if he is asked to prevent it from visiting either of these places, I know of no satisfactory evidence that he can do it. Erysipelas, however, in a great number of simple, or exanthematous cases, in subjects previously

healthy, gets well without any treatment; and in a great number of deep-seated and phlegmonous cases, as well as of those in which vital organs are affected, it proves fatal under the most approved methods of medical and surgical practice. It is true, that patients have recovered, under punctures, incisions, and cautery. It is also true, that they have died under the same operations, so that it may be submitted as a doubtful point, whether we yet possess adequate evidence, that erysipelas is not also a self-limited disease.

It is a question of great interest to the medical profession, to determine whether *typhus* is a disease susceptible of control from medical means. On this subject no one now doubts, that if the disease is once fairly established in the system, it cannot be eradicated by art, but must complete a certain natural course, before convalescence can take place. But a question still exists, whether this disease is capable of being jugulated, or broken up, at its outset, by the early application of remedies.

It must be allowed, that attacks of disease resembling those of typhus, sometimes speedily disappear during the use of remedies; but it is by no means certain that such cases are actually cases of typhus. The diagnosis of typhus, during the first day or two, is extremely difficult, its character being simulated by different febrile and inflammatory

affections; so that if a patient, under the use of remedies, succeeds in avoiding protracted disease, we are not justified in saying, that the disease he has escaped was typhus. Andral, whose experiments on the different modes of treatment in continued fever, are very extensive, has stated, that in a number of cases, observed by him, in which the fever was sufficiently intense, the disease ceased in twenty-four or forty-eight hours, without any treatment, except that of rest and a regulated diet.*

Moreover, in weighing the influence of treatment, it ought to be recollected, that during the existence of any prevailing epidemic, mild cases, partaking of a similar character to that of the reigning disease, continually appear among the less susceptible part of the community. Thus cholera is attended by diarrhœa or cholerine, influenza by mild catarrh, small pox by varioloid, scarlet fever by slight sore throats or ephemeral eruptions, &c. Now, although these cases are in reality modified examples of the grave diseases which they accompany, yet I believe that no well-informed physician will attribute the mildness or shortness of their character to his own particular practice.

On the other hand, it is certain that cases of real typhus do often come under active treatment at an early stage, without being broken up, or disarmed

* Clinique III. 619.

of their appropriate consequences. This particularly happens, when the disease is endemic in families, so that successive cases begin, as it were, under the eye of the attending physician, who has every possible inducement to detect and prevent them, if he can. In such families, indeed, it will sometimes happen, that febrile attacks of different kinds, consequent upon fatigue and anxiety, and perhaps partaking of the typhoid character, will take place among the friends and attendants of the sick; and these may disappear speedily, under rest and evacuations. But that grave and specific typhus will thus disappear, is a point of which we as yet want proof. That it sometimes fails to disappear, we have abundant proof.

Typhus has, in many respects, a marked affinity with the class of eruptive fevers, which are supposed to depend on a specific morbid poison, and which no one pretends to intercept, after the body has become infected with them. Scarlet fever and measles, for example, when once established, require a certain number of days to finish their course; so also does typhus. Scarlet fever and measles can, in most cases, be had but once during life; but to this general rule there are exceptions. The same is precisely true in regard to typhus. The contagiousness of scarlet fever is a point of dispute among physicians; and so is that of typhus. Scar-

let fever is attended by an eruption on the skin. Typhus also has for one of its most constant symptoms a red, lenticular eruption, called by the French *taches*, consisting of a few, scattered, rose-colored pimples, appearing chiefly on the trunk, from about the sixth to the nineteenth day of the disease. There also occurs, in most subjects, a minute, vesicular eruption, called *sudamina*, about the neck and elsewhere. In scarlet fever, moreover, certain portions of the mucous membrane undergo morbid alterations, particularly on the tonsils, and other parts of the fauces, and these frequently degenerate into ulcers, affecting the subjacent textures. In like manner, in typhus, the mucous membrane of the glandular patches in the small intestines, which have been named after the anatomist Peyer, undergo morbid changes, and these changes are followed by ulcerations, and sometimes perforations of the intestine. This fact, established by the researches of Louis and other pathologists in Paris, has been abundantly confirmed by post mortem examinations made in this country during the last few years. If it be objected to the proposed classification of typhus, that the *taches* are sometimes few in number, or wholly absent: it is equally true, that the pustules of inoculated small pox are likewise often very few, or absent; and that the eruption of scarlatina sometimes wholly fails to appear. The sore throat

also in the latter disease is wanting, quite as often, to say the least, as the morbid affection of Peyer's glands.

Before quitting the subject of typhus, I beg leave to introduce the opinion of one or two medical writers, in regard to the possibility of interrupting or breaking up this disease by means of art. M. Louis, of whose researches in regard to typhus, it is but small praise to say, that they are more exact and comprehensive than those of any living writer, is of opinion that the disease cannot be thus intercepted. 'Experience,' says he, 'has shown, that a well marked typhoid affection is not capable of being broken up.'* To this testimony of one of the most eminent teachers in the French metropolis, it may not be amiss to add that of an American physician, whose opportunities for observing the disease in different parts of New-England were extensive, and whose Essay on Typhus Fever well merits an attentive perusal. The late Dr. Nathan Smith, in the course of some remarks on the possibility of interrupting this disease at its commencement, ob-

* 'L' experience ayant montré, que l' affection typhoide bien caractérisée, n' est pas susceptible d' etre jugulée, ce qui n' est guere moins vrai, d' aillcurs, suivant toutes les apparences, de la peripneumonie et des autres maladies inflammatoires.'—Louis, *Gastro-entérite.* II. 512.

Andral says, in regard to the different modes of treatment in typhus, 'Quelles que soient les mèthodes employées, il est un certain nombre de cas où, sans que ces methodes y prennent part, la nature conduit la maladie à une terminaison heureuse ou funeste.—*Clinique* III. 616, 617.

serves, 'During the whole of my practice I have never been satisfied that I have cut short a single case of typhus, that I knew to be such.'

Having said thus much, I leave the subject of the tractability of typhus, to the light of future investigation. It is but justice to state, that numerous and highly respectable authorities are declared in favor of the efficacy of art in shortening and mitigating this disease; and it will be a source of gratification to the friends of humanity and science, should it ultimately be settled, that the active treatment now usually pursued at the commencement of typhus, is instrumental in lessening its duration, severity, or danger.

Among the morbid affections which have now been enumerated, may be found sufficient examples of continued diseases, which receive limits from their own nature, and not from the interference of art. Whether the number of these diseases may not be augmented by additions from among other fevers, and acute inflammations, I am not prepared to decide. It is difficult, however, to withhold the belief, that a more extended inquiry must probably serve to multiply, rather than diminish, the number of maladies to which this character will be found appropriate.

We come next to a second order of self-limited diseases, of which the term *paroxysmal* is sufficient-

ly descriptive. This term applies to certain morbid affections, which recur in fits or paroxysms, leaving the patient comparatively well in the intervals, at the same time that the paroxysms themselves can neither be foreseen, prevented, nor, as far as we know, materially abridged in their duration. At the head of this subdivision stands *Epilepsy*, a disease which has long been eminent as an opprobrium of medicine, and for which, it is believed, the healing art has not yet devised a cure. The first attacks of epilepsy, especially while there is any doubt as to the nature of the malady, are usually made the subjects of active and various treatment. But after the recurring paroxysms have established the character of the disease, if active medical practice is persevered in, it is rather to satisfy the anxiety of friends, than the judgment of the practitioner.

Angina pectoris, appropriately called by Dr. Good, Sternalgia, is a paroxysmal disease, which controls its own movements. The anatomical character of this disease is not well understood, and I may add, the same is true of its medical treatment. And in this place it may be proper to state, that various incurable lesions of the heart, lungs, brain, and other viscera, do not apparently destroy life by a regular, undeviating march; but that as far as their outward phenomena afford evidence, they seem to proceed by alternate fits and pauses, undergoing,

in their progress, all states, except that of retrogradation. This is apparently true in regard to tubercles, ossification, hypertrophy, and some other morbid alterations. It is also even true in regard to old age itself.

Thirty years ago, we might have added *gout* to the opprobrious list under consideration. But as we may now be said to possess the means of shortening the paroxysms, by the use of certain acrid narcotics; and as an abstemious life goes far towards lessening the frequency and violence of the recurrence, we may be justified in withdrawing gout from the place it would otherwise occupy. [Note F.]

The diseases of mania and melancholy, asthma, when it depends on emphysema of the lungs, gravel in the kidneys, and the symptoms produced by ascarides in the rectum, [Note G.] furnish other examples of maladies, which manifest themselves in unforeseen paroxysms. Cases, which bear the names of all the above diseases, are undoubtedly relieved, and sometimes even removed by medicine; but it is equally true, that other cases are wholly intractable, both as to their recurrence, their duration, and their susceptibility of much change from medical treatment. And it will come to the recollection of many practitioners, that they have, in the course of their lives, believed themselves to have cured these diseases, when in fact they have only

witnessed the spontaneous subsidence of a paroxysm.

The last subdivision of our subject includes what may be called *metastatic* diseases. By this term I wish to express certain morbid affections, which pass by metastasis from one part of the body to another, for the most part independently of artificial influence. Of this kind are certain *cutaneous* affections, more especially some which are chronic and hereditary. Many persons pass a considerable portion of their lives in alternate annoyance from a disease of the skin, and from its vicarious substitute in some internal organ. Others again are afflicted with hemorrhagic, or purulent *discharges*, which at times disappear, only to be succeeded by equally troublesome affections in a different part. *Gonorrhœa* cannot be prevented from occasional metastasis of inflammation to the testes, and *mumps* are sometimes found to undergo the same transition. But perhaps the most remarkable example of a metastatic disease is found in *acute rheumatism*. This morbid affection often begins to discover itself in a limited and comparatively unimportant part of the system. From thence, in grave cases, it travels by successive migrations from joint to joint, and from limb to limb, till it has visited nearly all the great articulations of the body. It also attacks the organs of sense, and the viscera which are essential to life.

During the course of these migrations, the attending physician cannot foretell at any given stage, what part will be next invaded by the disease, neither can he protect any part from being thus invaded; nor can he control the period, during which the disease will reside in any particular part previously to its next metastasis. And in alarming and dangerous cases of this disease, it often happens that the physician can do little more than stand by with his palliatives, in the anxious hope, that the disease will at length pass by another metastasis, to some less vital, or less important organ.

I forbear to dilate on the structural lesions of different organs, many of which can only be cured by the extirpation of the part in which they reside, thus sacrificing the integrity of the body to the preservation of life; and in which even extirpation cannot avail, when the seat of the disease is in a vital part. I also pass over the pestilential epidemics of plague, yellow fever, malignant dysentery and cholera; diseases about which the medical profession have many differences of opinion, and of which thousands die annually, though hundreds of volumes have been written for their preservation. [Note H.]

It may perhaps appear that the views, which have now been taken of the power of medicine in so large a class of diseases, are gloomy and discouraging, and that an unworthy tribute is paid to the labors

of those physicians, who have patiently studied, and ardently acted, for the benefit of humanity. Such views, however, are far from being the object of the present discourse. Were it permitted by the compass of the subject under consideration, it would be a very grateful task to enumerate those maladies of the human frame, over which we have reason to believe that medicine has obtained decisive influence. To a medical audience, it is unnecessary to recall the instances of pain relieved, spasms controlled, inflammations checked, [Note I.] and diseased associations broken up, under limitable diseases, by the agency of the healing art. Were there no other trophy for the medical profession to boast, it is sufficient to know, that the diseases of small pox and syphilis alone would have entailed misery and extermination on a large portion of our species, had not medical science discovered the prevention of the one, and the successful management of the other.

But that the usefulness of our profession may extend, our knowledge must go on to increase; and the foundation of all knowledge is truth. For truth then, we must earnestly seek, even when its developements do not flatter our professional pride, nor attest the infallibility of our art. To discover truth in science, is often extremely difficult; in no science is it more difficult than in medicine. Independently of the common defects of medical evidence, our

self-interest, our self-esteem, and sometimes even our feelings of humanity, may be arrayed against the truth. It is difficult to view the operations of nature, divested of the interferences of art, so much do our habits and partialities incline us to neglect the former, and to exaggerate the importance of the latter. The mass of medical testimony is always on the side of art. Medical books are prompt to point out the cure of diseases. Medical schools find it incumbent on them to teach the cure of diseases. The young student goes forth into the world, believing that if he does not cure diseases, it is his own fault. Yet when a score or two of years have passed over his head, he will come at length to the conviction, that some diseases are controlled by nature alone. He will often pause at the end of a long and anxious attendance, and ask himself, how far the result of the case is different from what it would have been under less officious treatment, than that which he has pursued; how many in the accumulated array of remedies, which have supplanted each other in the patient's chamber, have actually been instrumental in doing him any good. He will also ask himself, whether, in the course of his life, he has not had occasion to change his opinion, perhaps more than once, in regard to the management of the disease in question, and whether he does not, even now, feel the want of additional light?

Medicine has been rightly called a conjectural art, because in many of its deductions, and especially in those which relate to the cure of diseases, positive evidence is denied to us. We are seldom justified in concluding that our remedies have promoted the cure of a disease, until we know, that cases exactly similar in time, place, and circumstances, have failed to do equally well under the omission of those remedies; and such cases moreover must exist in sufficient numbers to justify the admission of a general law, on their basis. Nothing can be more illogical, than to draw our general conclusions, as we are sometimes too apt to do, from the results of insulated and remarkable cases; for such cases may be found in support of any extravagance in medicine; and if there is any point in which the vulgar differ from the judicious part of the profession, it is in drawing premature and sweeping conclusions, from scanty premises of this kind. Moreover, it is in many cases not less illogical to attribute the removal of diseases, or even of their troublesome symptoms, to the means which have been most recently employed. It is a common error to infer that things which are consecutive in the order of time, have necessarily the relation to cause and effect. It often happens that the last remedy used, bears off the credit of having removed an obstruction, or cured a disease, where-

as in fact the result may have been owing to the first remedy employed, or to the joint effect of all the remedies, or to the act of nature uninfluenced by any of the remedies. We see this remarkably exemplified in recoveries from amenorrhœa, and from various irregularities of the alimentary canal.

An inherent difficulty, which every medical man finds to stand in the way of an unbiassed and satisfactory judgment, is the heavy responsibility which rests upon the issue of his cases. When a friend, or valuable patient, is committed to our charge, we cannot stand by, as curious spectators, to study the natural history of his disease. We feel that we are called on to attempt his rescue by vigorous means, so that at least the fault of omission shall not lie upon our charge. We proceed to put in practice those measures, which on the whole have appeared to us to do most good; and if these fail us, we resort to other measures, which we have read of, or heard of. And at the end of our attendance we may be left in uncertainty, whether the duration of sickness has been shortened, or lengthened, by our practice, and whether the patient is really indebted to us for good or evil. In the study of experimental philosophy, we rarely admit a conclusion to be true, until its opposite has been proved to be untrue. But in medicine we are often obliged to be content to accept as evidence the results of cases, which

have been finished under treatment, because we have not the opportunity to know how far these results would have been different, had the cases been left to themselves. And it too frequently happens, that medical books do not relieve our difficulties on this score, for a great deal of our practical literature consists in reports of interesting, extraordinary, and successful results, published by men who have a doctrine to establish, or a reputation to build. 'Few authors,' says Andral, 'have published all the cases they have observed, and the greater part have only taken the trouble to present to us those facts which favor their own views.'* A prevailing error among writers on therapeutics, proceeds from their professional, or personal, reluctance to admit that the healing art, as practised by them, is not, or may not be, all sufficient, in all cases; so that on this subject they suffer themselves, as well as their readers, to be deceived. Hence we have no disease, however intractable or fatal, for which the press has not poured forth its asserted remedies. Even of late, we have seen unfailing cures of cholera successively announced in almost every city, in which that pestilence unchecked has completed its work of devastation!

* Bien peu d' auteurs ont publié tous les cas qu' ils ont observés, et la plupart ne se sont empressés de nous transmettre que les faits que caressaient leurs idées.—*Clinique* III. 618.

It is only when, in connexion with these flattering exhibitions, we have a full and faithful report of the failures of medical practice, in similar, and in common cases, setting forth not only the truth, but the whole truth, that we have a basis sufficiently broad to erect a superstructure in therapeutics, on which dependence may be placed. Such, it must give the friends of science gratification to observe, is a part of the rigid method, which characterises the best examples of the modern French school; and such, it is not difficult to foresee, must ultimately be the only species of evidence on this subject, to which the medical profession will pay deference.

It appears to me to be one of the most important desiderata in practical medicine, to ascertain, in regard to each doubtful disease, how far its cases are really self-limited, and how far they are controllable by any treatment. This question can be satisfactorily settled only by instituting, in a large number of cases, which are well identified and nearly similar, a fair experimental comparison of the different active and the expectant modes of practice, with their varieties in regard to time, order and degree. This experiment is vast, considering the number of combinations which it must involve; and even much more extensive than a corresponding series of pathological observations; yet every honest and intelligent observer may contribute to it his mite.

Opportunities for such observations, and especially for monographs of diseases, are found in the practice of most physicians, yet hospitals and other public charities afford the most appropriate field for instituting them upon a large scale. The aggregate of results, successful and unsuccessful, circumstantially and impartially reported by competent observers, will give us a near approximation to truth, in regard to the diseases of the time and place, in which the experiments are instituted. The *numerical* method employed by Louis in his extensive pathological researches, and now adopted by his most distinguished cotemporaries in France, affords the means of as near an approach to certainty on this head, as the subject itself admits. And I may add, that no previous medical inquirer has apparently submitted to the profession any species of evidence so broad in its foundations, and so convincing in its results, as that which characterises the great works of this author on Phthisis and Typhoid fever.

In regard to acknowledged self-limited diseases, the question will naturally arise, whether the practitioner is called on to do nothing for the benefit of his patient; whether he shall fold his hands, and look passively on the progress of a disease, which he cannot interrupt. To this I would answer,—by no means. The opportunities of doing good may be as great in these diseases as in any others; for, in

treating every disease, there is a right method, and a wrong. In the first place, we may save the patient from much harm, not only by forbearing ourselves to afflict him with unnecessary practice, but also by preventing the ill-judged activity of others. For the same reason that we would not suffer him to be shaken in his bed, when rest was considered necessary to him, we should not allow him to be tormented with useless and annoying applications, in a disease of settled destiny. It should be remembered that all cases are susceptible of errors of commission, as well as of omission, and that by an excessive application of the means of art, we may frustrate the intentions of nature, when they are salutary, or embitter the approach of death when it is inevitable. What practitioner, I would ask, ever rendered a greater service to mankind, than Ambrose Paré, and his subsequent coadjutors, who introduced into modern surgery the art of healing by the first intention? These men with vast difficulty succeeded in convincing the profession, that instead of the old method of treating incised wounds by keeping them open with forcible and painful applications, it was better simply to place the parts securely in their natural situation, and then to let them alone.—In the second place, we may do much good by a palliative, and preventive course, by alleviating pain, procuring sleep, guarding the diet, re-

gulating the alimentary canal,—in fine, by obviating such sufferings as admit of mitigation, and preventing, or removing the causes of others, which are incidental, but not necessary, to the stateof disease. In doing this, we must distinguish between the disease itself, and the accidents of the disease, for the latter often admit of relief, when the former do not. We should also inquire whether the original cause of the disease, or any accessory cause, is still operating, and if so, whether it can in any measure be prevented or removed: as, for example, when it exists in the habits of life of the patient, in the local atmosphere, or in the presence of any other deleterious agent. [Note K.] Lastly, by a just prognosis, founded on a correct view of the case, we may sustain the patient and his friends during the inevitable course of the disease; and may save them from the pangs of disappointed hope on the one side, or of unnecessary despondency on the other.

It will be seen that, in the foregoing remarks, a low estimate has been placed on the resources of art, when compared with those of nature. But I may be excused for doing this in the presence of an audience of educated men, and the members of a society, whose motto is *Naturâ duce*. The longer and the more philosophically we contemplate this subject, the more obvious it will appear, that the physician is but the minister and servant of na-

ture ; that in cases like those which have been engaging our consideration, we can do little more than follow in the train of disease, and endeavor to aid nature in her salutary intentions, or to remove obstacles out of her path. How little, indeed, could we accomplish without her aid ! It has been wisely observed by Sir Gilbert Blane, that 'the benefit derivable to mankind at large, from artificial remedies, is so limited, that if a spontaneous principle of restoration had not existed, the human species would long ago have been extinct.' *

But if we can accomplish comparatively little in the actual direction of disease, the necessity becomes more imperative that we should do that little wisely, and well. The importance and usefulness of the medical profession, instead of being diminished, will always be elevated, exactly in proportion as it understands itself, weighs justly its own powers, and professes simply what it can accomplish. It is no derogation from the importance of our art, that we cannot always control the events of life and death, or even of health and sickness. The incompetency which we feel in this respect, is shared by almost every man upon whom the great responsibilities of society are devolved. The statesman cannot control the destinies of nations, nor the military commander the event of battles. The most eloquent

* Medical Logic, p. 49.

pleader may fail to convince the judgment of his hearers, and the most skilful pilot may not be able to weather the storm. Yet it is not the less necessary, that responsible men should study deeply and understandingly the science of their respective vocations. It is not the less important, for the sake of those whose safety is, and always will be, committed to their charge, that they should look with unbiassed judgment upon the necessary results of inevitable causes. And while an earnest and inquiring solicitude should always be kept alive, in regard to the improvement of professional knowledge; it should never be forgotten, that knowledge has for its only just and lasting foundation, a rigid, impartial, and inflexible requisition of the truth.

NOTES.

NOTE A.

The difficulty of discriminating between the symptoms of disease, and the effects of treatment, has undoubtedly led to much erroneous practice, so that we cannot be too careful or vigilant, in watching the consequences of our own remedies. For a long time, the effects resulting from an excessive use of mercury, were mistaken for the phenomena of syphilis. The arterial reaction, described by Marshall Hall, which sometimes follows excessive blood-letting, has been confounded with the arterial action of disease requiring farther depletion. Constitutional irritation, produced or kept up by an inordinate use of vesicatories and other counter-stimulants, has been made a reason for the farther continuance of those applications. Much acute and unnecessary suffering has been caused by the prolonged application of sinapisms to the tender skins of infants, and the limbs of dying patients. The pains of hunger, resulting from a too restricted diet, are most keenly felt by convalescents from sickness; yet we sometimes see the cries of infants, arising from this cause, mistaken for signs of disease, and met by the practitioner with medicines, and farther restrictions. I do not speak of these things as common occurrences, yet they have been sufficiently so, to render it obvious, that circumspection on the part of the practitioner is necessary to avoid them.

NOTE B.

The vaccine vesicle might, if it were desired, be extirpated by the knife or caustic, although if the vesicle be sufficiently developed to excite notice, the surgical remedy would be at least as bad as the disease. In regard to medical remedies, I have had occasion to observe their inefficiency in cases where inflammatory diseases requiring treatment, have occurred during the progress of cow pox. The depletive remedies employed for the former diseases did not affect the progress of the vaccine vesicle. When this vesicle is slow and diminutive, it is commonly owing to the co-existence of some other cutaneous affection.

In regard to mercurial salivation, although the treatment proposed by Dr. Pearson and others, may have been reiterated in many volumes, yet I believe that most practitioners of experience find themselves obliged to rely upon time and palliatives, aided by the withdrawal of the cause.

NOTE C.

The modern introduction of the non-mercurial treatment in syphilis, might almost lead us to consider this malady also, as among the self-limited diseases. Although syphilis, as it existed in the days of Mr. Hunter, appears to have yielded to mercury alone, so that this eminent author regarded it as one of the distinguishing traits of the disease, that it had no tendency to spontaneous recovery; yet the experience of the last twenty years has shown that syphilis, as it now exists in all its prominent varieties, has been cured in some thousands of cases, by a treatment in which no mercury in any shape is employed. Nevertheless, the treatment by the anti-phlogistic

method, which has been substituted, requires, in order to be successful, more or less depletion, abstinence and positive rest, conjoined occasionally with other remedies. So that the disease still undergoes efficient treatment; and indeed, when it is wholly neglected, as it sometimes is by the abject and the reckless, it results in the most deplorable consequences, of which our hospitals and alms-houses furnish sufficient and frequent examples.

NOTE D.

Corvisart died of a disease of the heart; Laennec and Armstrong of pulmonary consumption. Other examples may be found of persons who were writers on the diseases of which they afterwards died.

NOTE E.

Ulceration in the tonsils and palate is the most common lesion in Scarlatina, but the other morbid appearances discovered in autopsies of cases of this disease are exceedingly various and uncertain. Among those which I have observed, or which have been noticed by my medical friends in this city, are ulcerations in the larynx, and inflammation of the mucous membrane of the trachea and bronchiæ. In one case of thirty-six hours duration, the chief morbid appearance, in addition to the ulcerated throat, was an extensive peritonitis with effusion of coagulating lymph, lining most of the abdominal cavity. Serous effusions in and upon the brain have been occasionally noticed, but most frequently in the secondary forms of the disease. In the child of an eminent physician in this city, whose case and autopsy I witnessed, there was slight ulceration of the tonsils, but no lesion of any important viscus could be de-

tected, though diligently sought for by our best pathological anatomists. Two similar cases have been stated to me, and I find them also noticed by some writers on the disease. In these cases the poison of the disease seems to destroy life without exciting inflammatory action.

Family predisposition appears to influence the tendency to mortality in Scarlatina. In some cases the children of a family all die in rapid succession. A predisposition to take the disease seems also affected by the same cause, so that it sometimes operates during the same season upon members of the same family residing in different places, without personal intercourse.

The latent period between the inception and developement of this disease appears subject to great variation. I knew a patient to be taken with scarlet fever in forty-eight hours after arriving in this country by a passage of forty days from Europe. In this instance, as no case existed in the ship, the latent period must have been less than two days, or more than forty.

Scarlatina and some other eruptive fevers reciprocally affect the developement of each other. During the prevalence of measles and scarlet fever in this city in the winter and spring of 1832, a considerable number of cases occurred, in which the two diseases, each preserving its own distinctive character, were successively passed through by patients, without quitting their beds, yet the diseases were in no wise blended, or intermixed. In the family of a lady residing in Tremont place, five individuals had scarlet fever, and three of them measles, nearly at the same time. The circumstances are interesting. One child had measles first, the disappearance of which was immediately followed by scarlatina ; both diseases proved mild, and were completed in about twenty days. Another child had

severe Scarlatina with a bad throat, the ulcers of which were not healed before the sixteenth day. After this the patient remained stationary, with a quick pulse and without return of appetite or strength for several days more, when the eruption of measles appeared under the cuticle which was desquamating from Scarlatina, and passed through its regular course. A third child in the same family was affected in a more singular manner. The eruption of measles appeared first, with slight catarrhal symptoms, and continued one day. It then vanished, and was in two days succeeded by scarlet fever. This lasted about a week, and when the patient was expected to get well, the crimson eruption of measles reappeared, and lasted three days more. In these cases the two diseases, though probably coexisting in the body at the same time, and in the last case decidedly so, were never extant at once in an active or characteristic form. There was no reason to suppose that the intensity of either disease was diminished, or aggravated, by the presence of the other.

Scarlet fever exists in some cases where its presence is not suspected, as the following cases, selected from a number of similar ones, may show. A child, previously well, was taken in fits at night, and died on the following morning. As the disease was not epidemic at the time, the nature of the complaint was not suspected till a few hours before death, when another child coming out with the eruption, this circumstance led me to an examination of the throat of the first, which was found ulcerated. In another case, a child was affected with a very troublesome rheumatic stiff neck. On inquiry it was ascertained that a scarlet efflorescence had existed on the preceding week, of which the rheumatism was doubtless a sequel, though the nature of the eruption had not been apprehended.

The sequelæ or secondary effects of scarlet fever are extremely various. Rheumatic affections are among the most common. Dropsical effusions are frequent, both in the cellular texture and in large cavities. Anasarca and ascites are not of uncommon occurrence. I have seen hydrocele, which disappeared spontaneously in a few weeks, and hydrocephalus which proved fatal. Troublesome indurations of the parotid and submaxillary glands often occur, and may, or may not, be followed by suppuration. A fatal induration of the whole anterior neck is sometimes met with. This I have seen both in the primary and secondary disease. A purulent or sanious discharge from the ears occasionally follows scarlet fever, and sometimes continues long enough to destroy the organic texture, and with it the sense of hearing, in one or both ears. Erysipelas and roseola are among the other appearances which I have seen to supervene upon this uncertain disease. Fortunately, however, the largest portion of cases are attended with no sequelæ, or with such as disappear spontaneously in their own time, without permanent injury to the patient.

NOTE F.

We have sufficient evidence that many cases of gout, both in this country and Europe, have had their paroxysms abridged by the use of colchicum, and different species of veratrum. Some individuals are fortunate enough to obtain this effect under a moderate dose, which only affects the bowels. But in most persons it is necessary to take enough of the medicine to produce vomiting and temporary prostration, before the desired result can be obtained. This effect is sometimes so severe that many patients prefer the disease to the remedy, and in fact the

practice is hardly warranted in the case of very feeble or aged persons.

Three cases have occurred to me in which gout has disappeared altogether under an entire abstinence from spirituous and fermented liquids. In one of these it is now thirteen years since a paroxysm occurred, and in another seven years, the individuals both enjoying good health, and leading active lives. The third case was that of a gentleman of this city, lately deceased at 76 years of age, who had suffered more than twenty years with gout, and was reduced to use crutches. After commencing a course of entire abstinence, the paroxysms began to abate in violence, and for the last seven years of his life he assured me he had not felt the sensation of gout. In his last illness a slight chiragra occurred after taking a dose of tincture of rhubarb. Some other cases are now in the progress of trial, with apparent alleviation of the disease. I have been told by others that this plan of treatment has in some instances failed to be followed by relief, and very probably this may be true; but such instances have not yet come under my personal observation, where the experiment has been fairly made.

NOTE G.

The natural history of the small ascarides is curious, and not well understood. Many individuals are infested with them in childhood, but get rid of them as they advance in years. Some, however, are troubled with them during the whole of a long life, though they are represented as less annoying after middle age, than before. They most commonly appear periodically, both in children and adults, after intervals of from three to six weeks. During the intervals they are neither

felt, nor seen in the discharges. Their periodical return is announced by a sense of itching and burning at the extremity of the rectum, felt principally in the evening, sometimes producing tumefaction, and eruption of the neighboring skin. This irritation continues to recur every evening for perhaps a week, or more, and then ceases. During this time the worms are discharged alive and active in every alvine evacuation. Cathartics and enemata bring away vast numbers of them, but without diminishing the annoyance occasioned by those which remain behind. At length they spontaneously cease to appear, the irritation subsides, cathartics no longer bring them to light, and the inexperienced practitioner flatters himself that the evil is remedied. Nevertheless, after a few weeks, they again return in undiminished numbers, attended by the same phenomena as before. Whether the new race are cotemporaries of the old, or descendants from them, it is not easy to tell.

It is commonly believed that the principal residence of ascarides is in the rectum, because they are most felt there. They have been found however, in every part of the alimentary tube. Many patients, immediately after a cessation of the annoyance in the rectum, are visited by pain in the epigastrium, attended with costiveness and clay-colored discharges. This state continues for two or three days, and is then followed by a bilious diarrhea. I have repeatedly known these consecutive events to occur with great regularity for half a dozen years, so much so that my inquiries are generally directed towards this cause, when children have complained of epigastric pains at regular periods. Whether, in these cases, the worms ascend to the duodenum and mouth of the biliary duct, or whether the whole is an affair of sympathy, future autopsies may perhaps determine.

The nidus of these animals, and perhaps the food also, appears to be the mucus which lines the alimentary canal. Buried in this substance, they resist the effect of the most violent cathartics and vermifuges, oil of turpentine and croton not excepted. If it be permitted to derive an hypothesis from the phenomena which they exhibit, it would be, that during a greater part of the time, they remain quietly imbedded in this mucus, deriving from it their habitation and nourishment, being at the same time secured from the effects of the peristaltic motion; but that at certain periods, perhaps at their generating seasons, they issue forth from this covert, and mingle themselves in the contents of the alimentary canal; in consequence of which they are liable to be expelled with the common mass.

I have known ascarides to be eradicated by a severe dysentery. In some cases they have been totally removed by large injections of oil, particularly of lamp oil. But more frequently they resist these and most other remedies for a series of years. A temporary palliative may always be found in small injections of weak salt water, or even of an ounce or two of cold water.

NOTE H.

I would by no means undervalue the exertions, which have been made, and are still making by indefatigable and distinguished men, for the control of what are called pestilential epidemics. I would only be understood to state that no one method of treatment, in the diseases enumerated, appears to have acquired sufficient credit with the profession generally, to be turned in their hands to any great practical account. The records of medical literature show, that a period of ten years has seldom

elapsed, without the annunciation of some effectual mode of practice, in some one of these diseases. And what is more, the amount of evidence with which these statements are supported, and the pathological skill with which the indications are explained, seem sometimes sufficient to shake the incredulity of the most sceptical. Nevertheless, after a certain term of years the diseases are found to be fatal as before, and fresh innovations in practice take the place of the old, and excite confidence anew, among the sanguine and ardent members of the profession. The truth is, that no epidemic is equally malignant in all seasons and places; and from some unknown cause, the laws which affect its tendency to death or recovery, are essentially different in different climates at the same period, or in the same climate at different periods. This fact must be known to those who have personal experience in regard to these diseases, or who are conversant in their epidemic history. Reliance, therefore, cannot be justly accorded to any mode of treatment which has not had the testimony of a large number of years in its favor, and this also under a proper variety of situations, and circumstances. Were it otherwise, these diseases, in the hands of the medical profession, would long ago have ceased to be pestilences.

NOTE I.

I am aware that some of the most distinguished French pathologists of the present day incline to the opinion that many acute diseases, or at least inflammations, are incapable of being shortened in their duration, by art. [See marginal note, page 20.] The opposite opinion prevails very generally in this country and in England, and it would be premature to consider the question as decided, until it has been submitted

more extensively to the test of comparative numerical results. It is certain that the most distressing symptoms of acute inflammations are often arrested at once by remedies. This happens, for example, from blood-letting in croup and pleurisy, and from opium in strangury and dysentery. If, however, the disease is fully established before the application of remedies, it usually goes on to complete its course, and in that case the remedies are palliatives only. And if remedies be applied in the incipient stage, an uncertainty hangs over our diagnosis, for the supposed pleurisy may have been rheumatism, and the supposed croup may have been catarrh, or laryngismus of Dr. Good; for even the physical signs require a certain maturity of developement in disease, to render them satisfactory. Leaving then, as undecided, the question of positive duration in acute inflammations, we do not risk much in asserting that their character is often essentially modified by treatment, so that they are more easily supported by the patient, and the apparent danger attending them, diminished. We must wait for the modern spirit of *accurate* inquiry to furnish a further light on this subject.

NOTE K.

As examples, it may be stated that the salivation produced by mercury gets well of itself, provided the original cause is discontinued. An issue made by caustic or otherwise, gets well after the original cause has ceased to operate; but if an accessory cause is present, such as the pressure of an irritating foreign substance, it then fails to heal. The local atmosphere may be considered as an original, or an accessory cause, in those diseases which are benefited by change of climate or situation. A long train of diseases might be mentioned, which

are brought on, or kept up, by injurious habits of life, and are relieved or cured, not by medicines, but by a removal of the habit, under which they have been, or continue to be, induced. Such are the diseases which attend on sedentary life, intemperate indulgences, lactation, insalubrity of diet, &c. Sometimes a disease, the cause of which is not removed, may disappear in consequence of a new habit, by which the system becomes capable of bearing with impunity the influence of this cause; as in sea-sickness.

A

DISCOURSE

ON

SELF-LIMITED DISEASES.

DELIVERED BEFORE

THE MASSACHUSETTS MEDICAL SOCIETY,

AT THEIR ANNUAL MEETING, MAY 27, 1835.

BY JACOB BIGELOW, M. D.

Fellow of the Massachusetts Medical Society, and Professor of Materia Medica in Harvard University.

BOSTON:

NATHAN HALE....WATER STREET.

1835.