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REPORT OF COMMITTEE ON PATHOLOGY AND
SURGERY.

BY

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After a survey as complete as the circumstances of the case will permit, the following conclusions may be pronounced:

I. All true authority resides in the mind capable of correctly interpreting nature.

II. All correct surgery coincides with, rather than opposes the normal energies of the body.

III. Hence, a conservative is the only legitimate surgery.

IV. When the principles underlying a thorough and correct apprehension of a really conservative surgery shall have been understood, correlated and taught, ninety-nine per cent of the necessity for surgical manipulation will have been annihilated.

V. So long as an injured part, soft or bony, is capable of being supplied with fresh arterial blood, it may be resuscitated; but just so far as this supply is permanently prevented from entering the territory involved, necrosis is sure to supervene to increasing extent, if the points first devitalized be not promptly removed.

VI. All advance is made through the things we suffer.

VII. Medicine and surgery, no less than dentistry, owe much of their present elevation to the reckless blunders of their practitioners.

VIII. Any agent capable of unfavorably modifying physiological activity is a *poison* in the exact ratio of its power to do

this; when favorably sustaining physiological action, it is a *food*; and when it neutralizes pathological agencies, it is an *antidote* — a medicine.

IX. The time is fast approaching when we, as dental surgeons, will conserve pulps and parts of pulps as anxiously and successfully as the other organs and parts of organs of the human body.

An exhaustive report upon even a single example of pathological manifestation involves the focalization of all knowledge, of not only pathology, but also real physiology, or normal function; and, so far as ultimate or primate actions are concerned, is now quite among the impossibles to even the highest scholarship of our most indefatigable workers to demonstrate to ordinary apprehension.

What, then, shall be done? Shall we listlessly fold our impotent hands and do nothing, because we cannot accomplish the most magnificent results by a single effort at solving the entire protean problem of disease?

In all ages, men have been inspired with the desire to secure perpetual youth — in a word, to find the means of immunity from pain and perpetuity of pleasure; but that grand catholic — the universal panacea — has pronouncement, as yet, only in the magnificently bewitching ideal! It is frequently said to be of little use to be able to recognize a disease for which we know not the remedy. In the abstract, this would be true; but, as it is usually meant, it is far from it, for it signifies a remedy in the shape of a medicine specifically adapted to antidoting the mischief, and not a knowledge that the disease had a certain course to run, and then die by exhaustion of the power of the virus causing it, or the susceptibility of the system to respond to it. Poisons expend themselves by limitation resultant upon entering into combination with the tissues, or by diffusion and dispersion to remote distances in the fluids favoring their escape from the

body by profluvia, or their infinitesimal attenuation. Some poisons act with such potent energy as to destroy life instantly, in an incomprehensible manner; while others lay the foundation of pathological states that may lay dormant throughout a lifetime — nay, a whole series of generations, only awaiting the favoring conditions to break forth in all their destructive energy in the over-fed and under-worked, and under-fed and over-worked, or under-rested, progeny who have inherited the molecular disability. Thus, it is apparent that foods become poisons and poisons foods, according to the circumstances of the system into which they are introduced. This will be more and more clearly seen as we progress with the detail of the physiological principles and movements out of which our apprehensions of pathological manifestations take their origin and means of ad-measurement and differentiation.

At the suggestion of the Chairman of the Committee on Pathology and Surgery, I will endeavor to say something upon the past and present apprehensions of the profession respecting syphilis.

Probably the great underthought of all the past and most of the present, is, that this disease owes its existence to a poison, ("materies morbi" — "virus,") varying in degrees of intensity and quantity of power! That it is, in the main, propagated by unclean contacts is indisputable; but that these alone are capable of originating it in an otherwise healthy organism, leaves us in the dark as to its origin in the first case. Just what is meant by intensity as opposed to quantity is not so easy of comprehension and definition. For susceptibility of the system upon which it is inoculated is involved in the inquiry no less than many other conditions of temperament of the body, temperature of the part, and many modifying circumstances, without a knowledge of all of which we are unable to diagnose a case or calculate its character, progress and termination.

It will probably be most in accordance with prevalent ideas to treat it as a germ—a seed—the stages of evolution of which makes its character and presence known by the effects produced in the body. All germs require a favorable nidus in which to display the powers of the typhal force which formed them and is holden in their mysterious grasp.

The grains demand at least three conditions, viz: light, heat and moisture, and flourish best in good air and plenty of soil.

Just in what the physical body of the germ of syphilis consists we will not pretend to say at this time; but that it holds specific relations to the neural-(mucoid-)sea, in the soft and hard parts of the body we have the tangible testimony of sight and sense.

Whether the so-called stages of primary, secondary and tertiary "syphilization" are due to the specific character and strength of the virus, or to the varied resistant powers of the diverse tissues it invades, admits of some dispute. Lest some objection be made, I will state here that the term "syphilization" will be used to denote the *saturation* of the system by the virus, or *malign presence* upon which the disease denominated "syphilis" depends, and not to signify any technical methods of inoculation or number of repetitions thereof necessary to exhaust the susceptibility to the infection of syphilis or other cachexia for which inoculations were or might be invoked.

Were this germ proven to possess specificity of size, form and solidity, it were an easy task to calculate the highways and byways through which it could pass with ease or with effort, and the degree of vigor with which it would coincide with or differ from and supplant the normal nutrient movements of the parts into whose territory it was admitted. But until we are blessed with this insight into the incubation and development of this potent presence, we must content ourselves with annotations of such results as do come within reach of our present

power of cognition, setting them down as parts of the process of the demonstration so certain to be fully pronounced in due process of procedure.

Syphilis, at present, is recognized alone by the ravages it effects. The regularity and similarity of these, as they present to the observer, are relied upon as testimony to the identity of the cause producing them. Uniformity—identity of manifestation—is necessary to diagnosis; hence the value of the diagnosis is exactly commensurate with the degree of intelligence of the observer.

Chronothermal conditions have such modifying influence upon functional manifestations that a general rather than a strictly special identity and uniformity is alone attainable, upon which to base our diagnosis that "these ravages depend upon syphilitic poisoning." The important effort at generalization in nosological arrangements, reducing all disease to a unitary origin and type, so ignominiously scouted by the many, is nevertheless worthy of the gravest consideration.

Let us inquire, then, "Is syphilis the unitary *door* and *type*" through which all disease enters, and toward which every pathological manifestation points for primal and ultimate solution, explanation and successful treatment.

If all "solids arise from and depart through liquefaction," and "all oils (liquids) are but concentrated gases; and these condensed ethers; and these but spirit in like constraint," we ought to be able to deduce the tremendous equation that "all things differ but in degree," of differentiation of spirit-affinity! This would, if clearly apprehended, unravel the whole mystery of "chronothermality," "infection," "disinfection," evolution, culmination and decadence or death (extinction) of all bodies and of disease: No less than that, all cure, and truly scientific management of bodies laboring under aberrant currents of force, depend upon modifications effected in the unseen "typal-spirit-presence," constituting the motive energy of all bodies

seen and unseen. Just so soon as this knowledge is fully attained, by plodding detail of observation, or by instantaneous inspirational obedience to that which energizes all, a word, a touch will be (shall I not rather say *is*), all that is necessary to exorcise the malign presence, and then the body spontaneously returns to a state of health.

If then, most interior spirit-affinity, contact and blending be the only source from whence arise the rôles of functional activity denominated *ease* and *disease*, with what sedulous care ought we to study our physical, mental and spiritual natures; so that by the knowledge of these equal affinities and necessities, we may be able to conserve goodness of use and avoid the deteriorating contacts and blendings which have thus far held the dominion among the mass of mankind. From which dominion of contacts and blendings arise, individual being, suffering, development and dissolution of personal bodily presence in prolonged horror of inharmonious detail, in all departments of existence, each struggling for the uncontradicted autocratic—instead of the common-concurrent-jurisdiction of the field of action.

It is currently reported that the “fear of disease” is a potent restraint upon otherwise reckless characters. Let it once be firmly established in the minds of men, as it is indisputably written in organology, that all associations remote as well as near leave their unmistakable impress upon the whole being to the competent apprehension, the more occult the more insidious for the time, and dangerous in the outcrop, and we will no longer see searching scrutiny into the origin, cause and character of pathological manifestation ignored by those who profess to have a mission to make, or modify the destinies of individuals and communities!

That these intensely heterodox and “hated pronouncements” are not the “chatterings and tergiversations of a mind diseased,” permit the proof out of the mouths of those who most

strenuously oppose them, by referring to the "real orthodoxy" of the present, in which it is everywhere said that *infection* and *disinfection* obey the laws of *thermal motion*, and have their range of action between 32° and 212° of Fahrenheit's scale — above and below which they are "nil" in their ability to manifest themselves! This doctrine is the sum of the whole labor upon the intensely interesting question of "Quarantine!" and proves that currental *inflections* and *deflections* make and mar the condition of man in health and disease!

A specific poison, capable of deranging currental equipoise in the human body, enters the periphery of the mucoid-sea beneath the attenuated dermal sheath, near the mucous openings: And dies by conversion into accelerated normal nutrition, or rapidity of diffusion, or changes local molecular movements producing stasis in the sea, and accumulation of her waters in a bleb in the areolar tissues, which is incipient chancre or pock (*pocket*) in which the germ rapidly multiplies in the form of pus globules and fluid pus on all sides of this cavity: Inviting influx from the juices of the flesh in the immediate neighborhood, extending stasis and induration farther and farther until the outer wall of the bleb or cavity bursts from tension or external violence — scratching or other mechanical interference, thus displaying the unmistakable character of "lues venerea," or syphilitic chancre. "And dies by conversion" into normal nutrient force, "or by rapidity of diffusion" throughout the mucoid sea, modifying nutrient actions so little as to only slightly change the character of the great fountain of the vital pabulum, upon which the system subsists, which change is so very insignificant that it attracts no attention, and hence passes insidiously into every possible variety of derangement of nutrient activity, laying the first stone in the base upon which a multifarious Pathology is built — so difficult to satisfactorily trace to this unitary origin of evil!

It is thus seen that there is no safety to susceptible persons

in any contacts of this virus; for although there may be no perceptible pock, or primary local affection, the "diffusion" of the "evil" may be yet more destructive to the well-being of the organism, than in case of regular primary infection, and regular development of the more common (according to past and present doctrines) effects of the virus; by originating ambiguous derangements, hard to be understood, and therefore difficult of cure.

The unitary primal necessity to infection, is local debility of dermal and hypodermal cells, the change in whose walls permits the ingress and egress of substances which the normal state would effectually exclude, or convert into normal force; and thus their interiors become increased or reduced in size, so as to destroy the proper tension to favor equality of the currental movements of the modifications of force, the exactitude of which constitutes normal nutrient activity.

Pus, tubercle, and cancer, are but *irregular* modes of obliterations of primates (filaments and cells) in forming and nourishing tissues; the origin of all of which we ought, now, to be able to trace to *incongruity* of copulative conjunctions in cells, tissues, organs and systems, of the currental forces that produce and sustain all these in individual and associate existence.

Where the contest for dominion of the nutrition of the part is exactly balanced in the force or power of the diverse energies battling for the field, they mutually neutralize each other, and death (necrosis) of the territory infected is the consequence. Instance the sloughings of territory invaded by swellings in bubo, so common, and so tedious of restoration to health.

When vital energy of a part is in its highest state of functional activity, the virus has no affinity for the already harmonious currental movements; and in such cases infection does not "take," as the phrase is. But where inharmony has already partial residence in the locality, affinities for diverse (poisonous) currents do exist, and will display themselves whenever

circumstances bring a virus within the proper distance, or sphere of influence.

Under such circumstances of debility in nutrient force, the virus is readily admitted, and rapidly diffused throughout the sea of pabulum, in which a modified digestion thereof takes place under this new dominion, and a syphilitic cachexia is set up throughout the extent of its ethereal territory, thus impressing the constitution with the *primary effects* of the poison, without the intervention of the digestion of the altered pabulum in the circumscribed sea, of a bleb, blister, or incipient chancre, as is the more common observation in practice.

Thus the whole sea of the juices of the flesh (mucoid sea — neural sea) is made to glow with the rife fermentation of the chancrous poison, instead of the insignificant interior of the little pock(-et) at the point of contact of the inoculation of the infectious presence. And we thus have the so-called "secondary" manifestations of syphilitic poisoning, involving the soft parts and skin in general, and the glands in particular.

The next stage is nothing more than the expression of this one just described, confined to the mucoid sea in the porous and cancellous portions of the bones of the body, and is the so-called "tertiary" form, and is long in running through its course, and varies much according to circumstances of constitution, age, sex, treatment, etc., etc.

Of that form of venereal disease variously denominated "syphiloid," "chancroid," "soft chancre," etc., etc., the oral surgeon has but little concern, and so it is thought best to keep out of the muddle of that controversy; although close attention to what has already been said will indicate a correct classification and understanding of this form, also.

In reply to the question, why certain poisons and cachexiæ prefer particular tissues and localities in the bodies they infest, it must be acknowledged that the range of recorded observations is as yet too meagre to enable us to demonstrate satisfac-

torily the analysis and synthesis upon which the proof of the philosophy depends. However, the facts are abundant and will soon find explanation, if each will but record and expose to others the views that spontaneously arise respecting both the facts and the philosophy, instead of continuing to perpetrate blunders of the head and hand and conceal them lest others also see the weakness, not to say wickedness, that stands in the way of advancement to higher morality and better ability!

If new and improved apprehensions of pathology and appropriate surgery based thereon, are not generally accepted by those supposed to be competent judges of such matters, we need not despair, for all present orthodoxy was once in the same dilemma, and it has been able to work its way to recognition.

It may be pertinently asked, by those who advocate the old ideas of primary, secondary and tertiary "forms" of syphilis, how it comes that identity of treatment of these conditions does not result in equal promptness and certainty of cure, if indeed these manifestations are but the "primary" effects of the poison in the *various tissues*, as indicated in this paper?

An intelligible, complete reply to this query would constitute the very essence, germ or basis of all knowledge upon the momentous questions of healthy and diseased actions and their proper management, and would reveal the peculiarities and possible differences in the occult movements in every form of cell, tissue, organ and system.

The attempt to perpetrate this equation in our own strength and acquisition of learnings in the recorded observations of our predecessors would smack of egotism or foolhardiness. Therefore let the attempt be made in deep humility and implicit reliance upon (the intensity and clarity of mind resultant upon) the *inspirations* that are born of our painful necessities,—the source and fountain of all perceptions, past, present and future, of the learned and unlearned inquirers,—for help to

reduce facts to the philosophy by which alone they can be satisfactorily explained. Will you permit me to make this *basal statement*, viz: The germs from which healthy bodies are capable of being evolved are *produced* by the *satisfactory* equation of plus and minus quantities of force within an amorphous solution of *sun-and-earth* presence, called chaos, which is true planetary substance, and the first step or stage in individual bodily presence or *existence*. When the equation of force is not *quite* satisfactory, an imperfect or unhealthy germ is the product, and the body capable of being evolved from it will possess an hereditary tendency to pathological manifestation, requiring the best possible regime to overcome or keep in latent state.

The *nourishment*, as well as the *reproductions*, of tissues, organs and beings, is effected from this same fountain of pabulum (or chaos), under the guidance of tygal power, which had its origin as stated above, the conditions of which made it healthy or debilitated, and limited it in possibilities of duration, size, generic, specific and other characters. It is evident, then, that concurrent jurisdiction or dominion of sun-and-earth energies constitute the measure of health, and that any discordance in this working together in the body, soul and spirit, will institute poisonous or pathological states of the being in whom they occur.

As there is a difference between the healthy and unhealthy constitution of germs, so, too, there is a difference between sickening and death of the bodies capable of functional action. Debility renders infection (demoniac dominion) possible, and *disinfection* (exorcism) is most promptly effected by antidoting the poison and supplying nutriment to the weakened organism. It may now be asked why mercury has thus far been *the* remedy in syphilis; the answer to which should simply be, because it has been known to have the power to break down, deoxidize the debilitated, poisoned cell-structures into an amorphous, chaotic state, thus rendering purgation of the juices of the flesh

an easy effort to the system, ridding it of the malign presence beneath the skin in the mucoid sea by the profluvia, diaphoresis, ptyalism, catharsis, etc., etc., following its administration. When this purgation is complete, it only remains for the vital energies to heal the local lesions of dermal parts, and the effects of the poison have no further active agency. But, when the poison has found lodgement in the deep glandular and osseous structures, effecting death of cellular interiors, the mercury is not alone able to cause the solution and removal, by profluvia, of the dead and debilitated primates, and hence the so-called secondary and tertiary indications which result from obstructions, causing abscesses in glands, which must be discharged or encysted, and also causing necrosis in bones, which must be dissolved and washed away, or continue to be a source of irritation until removed by mechanical means. Thus it is clear, that the irritations and tedious consequences of the failure on the part of the systemic powers, or the surgical attendant to remove necrosed parts in glands and in bones, depends upon this inability or neglect, and not the specific virus of syphilization.

The remedies relied upon to remove these obstructions in glands and bones as the results of syphilis, viz: the iodides of mercury and potash are as potent solvents and deobstruents in cases of the so-called non-syphilitic as syphilitic necrosis of glandular and osseous tissues.

And now, from all that has been said, is it not easy to deduce the correct treatment of syphilis, viz:

For incipient chancre, the abortive extirpative treatment by caustic, scissors or knife. (As a caustic the saturated solution of pure iodine in creosote is preferred.) And good and sufficient feeding to secure pure and abundant arterial blood to renovate and sustain the system.

For fully developed chancre, add to the abortive treatment constitutional mercurialization (the protiodide of mercury is preferable) and a nourishing regimen.

For glandular obstructions and eczematous eruptions, push vigorously the mercurialism and decided increase of the good feeding coupled with scrupulous cleanliness.

For periosteal and bony obstructions, heroic doses of iodide of potassa, and prompt and decidedly deep incisions to evacuate local obstructions beneath the periosteum, and in the corium of the shafts of the long and other dense bones, following up the supporting regime.

There are two distinctly marked advances upon "orthodox," general and oral surgery, viz: First, the conservation and rapid reproduction of bones when involved in injuries that formerly predetermined their ultimate loss; and, second, the conservation of bruised and inflamed soft parts, by local relief, induced by free incisions to remove extravasations; and support, to favor fresh influx of pure blood, by which rapid repair is effected.

In the practical expression of the first, it is only requisite to remove so much of the already necrosed bone as is fully deprived of the circulation of fresh blood, by enucleating it from the soft parts. After freeing so much as desirable by the spud and saw and file or forcep, proceed to rasp, file, or scrape away all the dead and dying parts until the fresh, living bone is invaded, which is known by the oozing of the bright, arterial blood from the cancelli and haversian canals. Then proceed to wash out the debris and blood, after which a solution of chloride of zinc, 20 grains to the ounce of water, should be injected to arrest the bleeding and induce an exudate of blood plasm with which to unite the severed parts by the colloid mass out of which the new tissues take their origin.

One word more about dressing: Be careful to do no more than remove effete matters that may appear in the locality. For, if not careful to only do this, the plasm and soft granulations will be liable to be washed away by the force of the jet from the syringe, and thus retard the cure by an over-treatment, which is, if anything, worse than under-dressing, both of which should be sedulously avoided.

The second example of advance in doctrine and practice consists in that which has been denominated "abortive treatment of inflammations" by mechanical and medicinal means.

Dr. W. W. Allport, of Chicago, has reduced this to a definite and comprehensible manipulative proceeding, so far as exposed pulps and cornua of pulps are involved, in his admirable method of extirpating the exposed part with the rapid, delicate cut of a peculiar instrument, freeing the lips of the wound from attachment to the surrounding dentine, by which procedure the lips are allowed to fall into contact by the resilience of the tissues, thus securing union by the first intention. This process is eminently conservative of the life of the pulps submitted to it, as is now verified by a number of cases, which have proved successful in preserving them for the performance of their proper function, whatever that may be. At least one case of loss of half the bulbous portion of the pulp of a superior incisor has resulted in not only conservation of the remaining portion of the pulp, but the force resident therein has thrown out and organized a complete protection of secondary dentine. This is testified to by Dr. Allport himself, Dr. M. S. Dean and Dr. L. P. Haskell. I myself, saw the same case at the point, when the plasm out of which the calcigerous protection has been evolved, was occupying the chasm across its deepest portion, in contact with the living, pulsating pulp, which could be distinctly seen through the beautifully transparent shining colorless mass which has so condescended to be wrought into the much coveted and now attained calcareous protection to the delicate tissues beneath.

There are but two methods of resisting the advancement claimed, viz: First, to deny the facts, and, second, to say "they are nothing new."

It is well known how discourteously the writer of this has been treated by those who counted themselves the embodiment of knowledge, for no other reason than that he advocated the *possibility* of that which is now so triumphantly proven.

REPRODUCTION OF THE ALVEOLAR PROCESSES.

BY

W. H. ATKINSON.

[*Read before the A. D. A., at Boston, 1866.*]

These bodies, like all the tissues and organs composing the living human organism are constantly being destroyed and reproduced in their integral parts.

And he who best understands this process — called *destructive* and *constructive* assimilation — will be best able to comprehend the possibilities and probabilities of the same process when it is expressed in larger territories than is common under the ordinary circumstances of the growth and nutrition of these in normal waste and supply.

The primal necessity of vital activity in any part, is supply of the arteriose and neural bloods, in whose joint communion alone the primates of organs can be formed and sustained.

Wherever, then, the supply is cut off, death, proportionate to the privation, will ensue. When the territory of a single cell alone is thus circumstanced, it is readily removed and replaced by enlargement of the adjacent cells, or the reproduction of a new one to take its place or converted into a mere filament of scar or connective-tissue by the collapse of its wall and the escape of contents into the neural sea (juices of the flesh), in which it is either converted into pabulum by the digestion peculiar to that place, or it is carried into the general circulation and disposed of as effete matter. And thus the system is happily rid of this dead body whose presence was intolerable to its living neighbors.

Let an indefinite number of contiguous cells be in the cir-

cumstance just delineated, and we have incipient abscess. Just so soon as death and disruption of this cell-territory, or rather cells of this territory, take place, a digestion is attempted of this material, which, when it succeeds, becomes the nidus in which new cells proliferate to restore the part, and repair is effected by the first intention, and so our incipient never becomes mature abscess. But, in case of inability of this digestive effort to perform its intent, a lower form of vital activity, called chemical, steps in and digests the matters into sanies, pus, etc., and then true abscess has declared its dominion in that territory, and is present in proper form and pronouncement. When this abscess is evacuated by natural or artificial means, the same process of repair goes on to complete the cure, and is now called reproduction by the second intention of the kindly guardian whose mission it is to care for the parts involved.

Thus it will be readily seen that the two forms of reproduction called first and second intention, are but differing degrees of the identical forces at work in caring for the body as a whole by attending so assiduously to the primates of which it is composed and upon whose integrity and well-being its own health and vigor so absolutely depend!

The only barrier in the way of absolutely successful treatment of these cases by the surgeon, is want of sharpness of vision, corporal and mental to detect them in these stages of pronouncement. The necrosed cells, dead bodies, in the second example of privation of supply are the cause of the necessity for local or surgical interference.

The sanies and the pus corpuscles are incapable of being wrought into healthy pabulum; hence the imperative necessity for their removal. I would never wait for the slow process of nature to open an alveolar abscess, but would boldly plunge into its most interior just so soon as it was cognizable, thus saving loss of substance and loss of time in the cure, no less than entering an efficient caveat against unlimited extension into the processes and surrounding parts in poorly constituted

frames. If the territory over which stasis has been pronounced be vigorously incised, even into the bony processes, the necessity of "reproduction of alveolar processes" will have been annihilated.

But where from neglect, or any cause, the supply has been so long prohibited from entering the territories of soft parts or bones, that death (necrosis) has actually already ensued, we need not despair of success most marvellous and complete, if we are only humble and earnest enough to observe the law and effect the work indicated by kind nature's lead. That is, remove the dead and dying territories, and encourage, by judicious support, the disconsolate, mangled neighborhood from which they were forced, until a fresh colony of cells can be induced to occupy the ground so perfectly, as to defy minutest survey to detect that they were not the very original cells and lineal descendants which primarily occupied that territory.

There are two distinct forms of death of the alveolar processes, both of which are amenable to cure by simple incision, if done at the proper time and stage of development. I refer to solution of the lime and animal basis in which it is lodged; and necrosis, properly so called; both of these conditions result from interruption of the circulation which supplies these thin processes and trabeculæ.

Traumatic lesion may produce *necrosis*, but never immediate *solution* of these bones.

Constitutional vice, resultant upon the introduction of a poison (virus) into the system, can alone so derange the nutrient activity as to induce rapid solution of the alveolar plates *in situ*. Mercury carries the palm in this respect, especially in the free margins of the alveolar process, or edges of the sockets in which the teeth are held; and the thin, hard palatal process of the superior maxilla forming the fornix or roof of the mouth, anterior to the palatal bones proper.

These last yield very often to syphilitic poisoning, and injudicious or heroic mercurialization. In fact it is common, under

such circumstances, to see all the bones of the head and face defaced and dissolved through their whole extent: worm-eaten, gnawed, frail and fetid.

Recovery in such cases can only take place under the best care and treatment, the principal of which consists in abundance of highly nutritious food to support the system, while administering heroic quantities of the iodide of potassium. This remedy has the effect of washing out the virus (and debris of broken down osseous and soft structures), whether syphilitic or mercurial.

Mercury should not be continued after the second stage of syphilization has been partially controlled by it, unless the iodide of potassium also be given at the same time; as, when mercury is relied upon alone, and continued after the secondary symptoms have subsided, it is so very apt to coincide with the disease in preference to antidoting it, as it did in the former condition.

Dentists usually do not see cases until the death of the bones has so far progressed as to call attention to alveolar abscesses resultant upon the necrosed processes. Hence, the oral surgeon will not need to administer mercurials to the majority of cases requiring the assistance he is supposed to be able to give; but he must be able to prescribe the proper supporting and depurative treatment constitutionally, or fail to get the highest benefits of his local manipulations and dressings, be they never so skilfully and scientifically applied.

A rich diet to support the drain upon the blood column, by suppurative discharge and by normal exudation into the pocket out of which the new structures are to be built, is as absolutely a part of the cure as is the antidoting of the blood poison that wrought the destructive mischief.

Cleanliness of mind and body, sunlight and plenty of fresh air are also prime necessities of a sound cure in complete reproduction of the lost alveolar processes. A few directions about the removal of dead and dying processes and proper dressings, and we close this imperfect paper.

Where separation of dead portions of process has already taken place, a very simple procedure is necessary, viz: Enlarge the fistulous openings already present in such a way as to preserve the best form of pocket in which to hold the amorphous plasm from which we are to derive our new bones and other structures. After which, one simple dressing of a solution of the chloride of zinc, twenty grains to the ounce of water, then wine of opium in full strength, say twice a day for the first few days.

The great thing is to treat just enough and not too much. Many failures to get good processes reproduced where they are gone, are, I am quite sure, attributable to over-doing the cases by the anxious, young oral surgeon.

The sole object of treatment is to change the pus-producing surfaces to plasm-producing agencies, so that we may have good material in the proper place, to be wrought into the new structures we are so anxious to see spring up. Where the line of demarkation between living and dead tissues is not well defined in narrow limits, the question arises, shall we wait for exfoliation and separation of the necrosed parts, or shall we anticipate extensive destruction by at once removing all that part already dead? By peeling off the soft parts with a well-adapted, blunt instrument, like a flat-pointed burnisher, called a spud, and narrow files passed through the processes in two or more places, freeing these dead parts from all attachment; afterwards filing or rasping with suitable instrument, rasp, burr, file, or scraper, until the living territories are invaded, which will be known by the peculiar living feel, and the flow of arterial blood oozing from the fine haversian canals and cancellous structure. We should most unhesitatingly give adherence to the latter procedure; even dry lint or cotton dressings, after having thoroughly cleansed out the debris of file or other instrument with warm water, in which a few drops of tincture of arnica are thrown, will, in the majority of cases, secure a nice pocket which will fill in a few days.

But in cases where much pus and sanies still ooze from the chasm from which we have removed, or thought we had removed, all the dead parts, it will be well to look more closely lest some necrosed parts yet remain. If we do not discover, by our best research, that such is the case, then we should dress the whole tortuous, winding chasm or chasms with a saturated solution of iodine in pure creosote, on cotton pledgets that will nicely fit the cavities and represent the size and shape of the pocket we desire to hold the material out of which to reproduce new parts. These dressings should remain in place twenty-four hours and then be nicely and completely removed, and their places occupied with others wet in a weak solution of chloride of zinc; these also to remain in place one whole day. Afterwards, wine of opium on cotton, or dry cotton or lint, should be inserted, and removed twice in twenty-four hours.

Each successive dressing will be less than its predecessor, until the whole cavity is filled up, in all cases that are properly dealt with locally and constitutionally.

Having advised the syringe to be used in cleansing the chasm, after removal of the dead parts, it may be necessary to caution the inexperienced oral surgeon against too much violence in using the syringe. I have seen many cases much prolonged in treatment from this cause alone, by breaking down plasm and granulations and washing them away by the force of the stream. And of course the cure must be retarded by such loss of the very things we need to close up the space with new structure.

Being aware of the ambiguity of verbal instructions alone, permit me to advise each one who wishes to be up to the best skill, and to make advances rapidly thereon, to call upon those who are already competent to treat these cases, and get the eye and hand educated as well as the ear and brain. The more earnest minds focalize upon any one subject the more rapidly will it advance to its limits of capability for good to the race and the profession.