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Antiseptic
Medication.

Dr. COOKE.



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A TREATISE

ON

Antiseptic Medication

OR

DÉCLAT'S METHOD.

BY

NICHO. FRANCIS COOKE, M. D., LL. D.,

Emeritus Professor of Special Pathology and Diagnosis in the Hahnemann
Medical College and Hospital of Chicago.

"So, naturalists observe, a flea
Has smaller fleas that on him prey;
And these have smaller still to bite 'em;
And so proceed *ad infinitum*."
— SWIFT in 17th Century.

CHICAGO:
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1882.



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TO
THE MEMORY OF
GAYLORD D. BEEBE
THE GREAT SURGEON
WHOSE GENIUS
FORETOLD
ALL THAT IS HEREIN DEMONSTRATED
THIS BOOK IS DEDICATED
BY HIS
LIFE-LONG FRIEND AND COLLABORATOR
THE AUTHOR

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PREFACE.

I OFFER no apology for this book. It springs from the urgent need of the hour. I may be allowed to say in extenuation of faults of style which may mar the production, it has been brought out under singular difficulties in the midst of a practice, which, to say the least, is engrossing. Nearly the whole of it has been dictated to a stenographer. I am loath to let it go from my hand without those "final touches" which might give it some air of finish, but it would be wrong to delay it a day. Happily the MS. has had the benefit of a swift supervision by my talented friend, Prof. Clifford Mitchell, M. D., who would let no serious chemical, as he could let no glaring literary, blunders escape his *tactus eruditus*.

To Dr. Déclat I acknowledge obligations unspeakable.—Beyond the fact that the method owes to him its existence I must confess to piracies from his works on a scale of liberality that would deface nearly every page with quotation marks but for this credit *en gros*. It is but just to state that my book has been undertaken without his authority, knowledge, or consent. I have wished to spare him the proscription which any

association with an avowed medical sectarian might inflict upon him. But I have been his pupil. I rejoice in his friendship, and, with him, I loathe and defy the spirit this very minute rampant in a neighboring city, which would put a barrier between men actuated by a common desire to serve their fellow creatures. Let narrow spirits wrangle as they may. Let them revise and re-revise their "code." There is a "higher law" than any they can enact—a law of attraction for *Guérisseurs* which no legislation can control.

There is a bit of history connected with the "phenic acid craze" which may properly find mention here: Although the method had been known and taught for more than twenty years in France, it had but slowly gained a footing in America, until Dr. Déclat brought it with him to New York in the summer of '81. He had been commissioned by his government to investigate the progress of antiseptic medication in America, and especially to study its practical application to the treatment of yellow-fever. In the course of eight months so employed he had interested a few leading spirits of the old school of medicine in his method, which had been but timidly mentioned in the "Medical Record" until the very able (but also very cautious) article by Dr. J. F. Corrigan in its issue of March 11th

last, opened the eyes of the profession to its possibilities. The hospitals of Bellevue and St. Francis, of New York, had admitted the system to a successful trial, when in the last of March Dr. Déclat winged his flight across our continent to the Pacific coast. Friendship followed introduction. Soon I was at the eminent physician's feet—a learner. I immediately put my newly acquired knowledge to such account that I felt authorized to insist—as I did by telegram after telegram—that he should return by way of Chicago, and witness the triumphs already achieved by his method. Not only had great successes attended its employment in my hands, but others to whom I had communicated the good tidings had been also successful. Especially was this true in the practice of C. F. Ely, M. D., and Geo. A. Hall, M. D. Of the latter it may almost be said that “he came to scoff and remained to pray.” His keen perceptions seized quickly upon the salient points of the method which his large surgical practice enabled him at once to test on a liberal scale. It is but fair to let both these gentlemen speak for themselves. Their testimony will be found at pages 87 and 91.

To a few other friends, of both dominant schools of medicine, I had imparted the same knowledge, some of whom had made use of it, and with success. It was at

this juncture that Déclat, paying heed at length to my entreaties, diverged from his route at St. Louis and reported to me in Chicago. In connection with a leading old school physician of this city, I arranged for a medical reception to the distinguished *savant*—which was given him at the Grand Pacific Hotel on Friday evening, May 12th. The non-sectarian character of this reunion was, as had been intended, a marked feature. The most eminent old school surgeon in the city occupied the chair, while a prominent old school physician, of his own nationality, acted as interpreter for Dr. Déclat. But no one could interpret the torrent of eloquent enthusiasm with which the speaker elaborated his theories. The reports in the morning papers were therefore meager, and at the request of Hon. Jos. Medill, I spent a portion of the day in translating phrase by phrase to a short-hand writer the interview which appeared in the *Tribune* of May 14th. The session of the Illinois State Homœopathic Medical Association began on the Tuesday following, and voted to me a special order for the consideration of this subject on the following day. The attendance was large and the interest manifested was intense. The daily press reported the proceedings *in extenso*, and the *craze* was fairly inaugurated which has spread over this country like a prairie fire.

From that day to the present many newspaper combatants have attacked the system who have all shown a wonderful lack of acquaintance with the subject. By whatever mysterious dispensation of Divine Providence it is permitted to men (and women) to feel called to make a public display of ignorance—the spectacle exists!

Pasteur, Déclat, Koch and Tyndall! patient and indomitable laborers in the fields of science—with whom a fact may mean the result of years of profound study and experiment—must you be contradicted by those whose single public appearance has but proved their incompetency to begin the study of science? Even as I write, the morning paper brings the following from that calm homuncicide, Prof. Delafontaine:

CHICAGO, June 9th, 1882.

To the Editor of the Chicago Tribune.

It seems to me that if the doctors who write letters against the germ theory of diseases want their opinions to be given more weight than even that of Tyndall, who "cannot tell the condition of a man's pulse or prescribe for the sick," they must show that they are familiar with the works of those whom they oppose, and prove that their own practical knowledge of experienced methods qualifies them for pointing out fatal defects in the results of others. Pooh-poohing solves no problem.

Now as to consumption. The question is not as to whether it is contagious or not. Nobody claims that; in fact, very few diseases are really contagious. What is now demonstrated is that tuberculosis like syphilis or glanders is a specific, transmissible disease. And some of the conditions of transmissibility are now well understood. The history of that discovery runs pretty much as follows:

Villemin published in 1865 the results of experiments showing the inoculability of consumption. Many objections were offered, and counter experiments made, which were ultimately

disposed of when Chauveau (1868) imparted the disease by feeding animals with a small quantity of tuberculous lung substance. Klebs, Gerlach, Bollinger, and others did the same in Germany.

Villemin's first method consisted in inoculating the fresh tuberculous matter. Others thought that they induced consumption by merely inoculating animals with putrefying matter, wounding them, putting raw meat under their skin, or blowing dust and quicksilver into the air passages. It was easy enough to show that the result was simply pyæmia, septicæmia, metastatic abscesses—not the true consumption. Villemin's views are now generally accepted by those who have impartially followed the debate.

Koch carries us one step further. Tubercles contain a number of different things, fluid and solid, among which are microscopic forms capable of living and multiplying in appropriate liquids. He separates them and shows that the disease-breeding power resides in the latter; his experiments seem faultless and conclusive.

M. DELAFONTAINE.

The object of this book is to place before the profession one additional weapon against disease and death. It is not intended or hoped to set aside other and well proved measures. All the good that belongs to these is conceded—nay, it is claimed. To those who can test with fairness and zeal, this system will prove a tower of strength. To such I commend it with entire confidence.

NICHOLAS FRANCIS COOKE.

58 State Street, Chicago.

August 1882.

INTRODUCTION.

ANTISEPTIC MEDICATION is but the outgrowth of the germ or parasitic theory of disease. The latter arises naturally from the theory of fermentation demonstrated by Louis Pasteur so long ago as 1859, and now universally accepted as an irrefragable fact. This theory is termed *panspermism*.* All former theories vanish before the invincible experiments of the great chemist who, endowed by the French government with a munificent annual allowance of 50,000 francs "for his labors in the laboratory" in addition to a life annuity of 20,000 francs previously granted him as a national recompense for his labors, has been enabled to continue his observations on a grander scale until from discovery to discovery the new science has reached the point of preservative inoculation against charbon, readily applicable to entire herds with positive prevention. When we remember that France alone has lost by charbon, sheep, cattle and horses, estimated at 20,000,000 francs annually, it is easy to comprehend the importance and future extent of a class of discoveries absolutely in its infancy.

In this doctrine of panspermism, we have the satisfaction of witnessing a properly arranged order, in which living as well as inorganic transformations are foreseen,

* This is the death-blow to the "spontaneous generation" nonsense; and the atheists have fought it bitterly and loudly.

pre-established and immutable. The microbes of fermentation fulfill a predetermined mission. They are agents of decomposition. In order to take part in the banquet of life they must extract from organic matter the oxygen necessary for their subsistence, and thus they induce subsequent transformations and become agents of molecular chemistry.

It is now evident that epidemics are merely due to an invasion of morbid microbes, which propagate from group to group.

“So,” says M. Pasteur, “when we consider the horrible evils that may result from the contagion of transmissible diseases, it is consoling to reflect that the existence of these diseases is unnecessary. Destroyed in their beginning they are destroyed for ever. At least all those which result from microscopic parasites. Like all creatures these parasites are at the mercy of blows which may be dealt them.”

According to Pasteur, every existence is surrounded with other hostile existences against which it is in constant strife. So long as the victory is easy it is health, when it is difficult or uncertain it is disease, when it is impossible, it is death.

The antiseptic doctrine is no less important to medicine than to surgery. Diseases of known parasitic origin are very numerous. They embrace not merely those communicable diseases which are termed *zymotic*—but other diseases which are not transmissible—such as intermittent fever. It is now conceded that the atmosphere of swamps contains a variety of microbes, termed *palmellæ*; also that malarial fevers are promptly cured only by antiseptic medicines.

Formerly when a physician was asked why quinine and arsenic cure these fevers, he invariably answered:

“Because they are febrifuges.” Now he can reply with confidence: “Because they destroy the morbid germs.”

Says Dr. Ferran (from whose brochure I have drawn freely for facts relating to M. Pasteur and his theories):

“Phenic acid—recognized as an antiferment of the first-class, is also a febrifuge of the first-class, *surer and more active than quinine*, if properly administered by the *hypodermic method*, for, in potion, its effect is nearly always quite insufficient. The cases of this kind reported by Dr. Déclat and his disciples are now so numerous that they would make an immense volume.” My own experience is directly confirmatory of the above. In the number of cases of malarial fever where, having failed to arrest the progress of the malady by ordinary methods, I had resorted to the phenic acid preparations *per vias natural*, with little if any modification of the temperature—the use of subcutaneous injections (usually of *Ammonia-phenate*) was invariably marked by a gradual fall in temperature and amelioration of the other symptoms. Sceptical at first, this coincidence has happened too many times to leave me longer in doubt.

Dr. Sensaud, who practices in one of the most malarial regions in France (*St. Germain-les-Belles, Haute-Vienne*) where intermittent fever is endemic, reports a series of 150 cases all perfectly cured by this method alone “without an atom of quinine.” He declares that since he has used phenic acid he has never had to prescribe quinine. “I have practiced medicine forty years,” says he, “in a country where quotidian, tertian and quartan intermittents are epidemic from May to November—often of the pernicious type—and have often treated from two to three

hundred cases per year. With a practice so long and so vast I pretend to know something about fevers: Well, I declare upon honor, that I lament not having learned sooner the treatment by hypodermic injections of phenic acid. I have done some good, perhaps—I might have done much more! Medication by quinine is to phenic medication as 1 to 10. Under the latter there is scarcely one relapse in ten. Under the former there is usually one in three. The action of phenic acid is more prompt, more energetic. Under its influence the organism rapidly resumes its functions. Circulation and nutrition are re-established with an incredible force and rapidity. There is no period of convalescence. The patient passes from disease to health without transition."

Surely such experiences, published so long ago as 1878, ought to be more generally known to the profession than appears to have been the case! Especially since the vast majority of American physicians have first heard of the treatment within the past three months!

M. Dumas asserted in the Institute of France, on April 7th, 1873, that "if one understands how to use phenic acid he can go through the most deadly epidemics with impunity." These brief words embrace the sum total of our present knowledge of cause and effect of diseases and the method of curing them. In effect it says that epidemics and consequently all diseases that prevail at certain seasons of the year from influenza, hay fever, bronchitis and whooping-cough to phthisis, variola, croup, peritonitis, typhoid fever, dysentery, intermittent fever, yellow fever, and even cholera, arise from different germs which, entering the blood, change it in various ways, each producing a different disease. Phenic acid (say its advocates)

kills these germs—therefore “if one understands how to use phenic acid” he may kill the germs and thereby prevent or cure all diseases. The assertions of Dr. Déclat and his supporters are no less broad than this, and it is this which he claims to have demonstrated in his various works.

How shall we employ phenic acid as a preventive or as a cure? To answer this question it is necessary to understand that the germs can only enter the blood in three ways: First, by respiration; second, by the skin; and third, by the food. We must take the phenic acid internally in order to destroy the germs which have entered by the food, by the pulmonary cellules and by the pores of the skin. For pure phenic acid is volatile, and the instant it is swallowed it penetrates without resistance through the walls of the stomach to the blood, where it encounters the elements of the malady—destroying them or preventing their reproduction and their injurious effects. If these elements are too active or too numerous, if the blood is in a condition too favorable for their development, the hypodermic method must be adopted, thus introducing the agent directly into the blood. It is useful also to pursue the germs into the lungs, by means of an emanator or by the vapor of glyco-phenique atomized in the air of the room, etc. It is a very useful addition to the toilet in the proportion of a tablespoonful to a pint of water, for gargles, washes, enemata, etc.

I cannot too strenuously insist and warn my brethren of the profession—no less than the “lay prescribers” already springing up on every hand, that any preparation of phenic acid taken into the stomach must be absolutely pure, or it is not free from danger. The syrup of pure nascent phenic acid is of the

requisite purity only when it is *colorless*. Any shade of pink or red stamps it as impure, and therefore poisonous. All the preparations bear the name of the maker, and while none of them are secret, all of them are "proprietary" in the sense of being prepared according to formulæ and methods imparted to the Company by Dr. Déclat. It is clearly to the interests of the profession no less than the public that this monopoly should exist—at least for the present. It renders certain the purity of the drug where purity is of literally vital importance! The only disadvantage of the monopoly is the expensiveness of the various preparations. After all, this is merely an additional guarantee of excellence, for the monopoly would soon cease to be of value if the preparations became unreliable. The rules given elsewhere will enable the merest tyro to test the genuineness of each preparation sufficiently well to guard against imposition, *videlicet*:

1. Syrup Phenic acid—colorless.
2. Syrup Ammonia-phenate—bluish.
3. Syrup Sulpho-phenique—yellow with black precipitate.
4. Syrup Iodo-phenique—nearly colorless.
5. Glyco-phenique—colorless, but capable of becoming slightly reddened without becoming useless, as it is designed for external use only.

The preparations termed anti-diabetic are merely syrups prepared with glycerine instead of sugar. They are identical in their properties with the saccharine syrups.

Nearly all maladies—says Dr. Déclat—are contagious. Some of them universally, like croup, whooping-cough, typhoid fever, variola, etc.; others

in a manner less recognized but no less certain, like phthisis, skin diseases, cholera, yellow fever, etc., etc.

By the simple fact that the disease of one person may develop itself in another with more or less intensity but always the same, it is not doubted that the principle of this disease is a grain or a germ which produces: the one whooping-cough, the other variola, the one croup, the other typhoid fever. Now this living principle, animal (vibriones, bacteria, monads, etc.) or vegetable (algæ, fungus palmellæ, etc.) is infallibly killed if it be brought in contact with phenic acid. Therefore it is best for those exposed to contagion to take a tablespoonful of syrup of phenic acid night and morning and to charge the air of apartments with glyco-phenique from time to time by sprinkling it upon the floor, upon curtains, in vessels, etc.

Déclat asserts—and his numerous disciples seem equally confident—that one may walk unscathed through the most malignant epidemics of all transmissible diseases provided only he make persistent and judicious daily use of phenic acid as a prophylactic. We are bound to remember that these assertions, new perhaps to the great majority of physicians outside of France, are not new in fact. They have been shouted in clarion tones—so to speak—from the very house tops, for more than twenty years. They have been promulgated by books, pamphlets and periodicals; they have been the subjects of reports to the French Academy, of memorials to the French Government, whether imperial, revolutionary, or republican. The great multitude of the profession even in France have turned a deaf ear to its claims.

During the memorable siege of Paris testimony of the wonderful efficacy of this method in the treatment of wounds and their results accumulated “Pelion upon

Ossa." It embraced the whole range of septicæmia, pyæmia, erysipelas, gangrene. It compelled recognition, and now it is being adopted even by the multitude of the profession who (homuncules ever!) pretend that they are but following a familiar practice which seems to have sprung up in all parts of the world at once. Let Dr. Déclat speak here: "Why, at first, this disdain, this hostility? And why afterward this injustice? Hostility? Because the new method in its simplicity is within reach of all and devotes to food for worms the mountains of books in which poor brains have tortured themselves to elaborate theories that no one can comprehend—not even those who have imagined them. All those irritations, those inflammations, those asthenias, those hyperasthenias, those degenerations, those formations of cellules—primary, secondary, tertiary, monocular, bilocular, multilocular—which none has ever seen, still less explained (unless by the aid of an ill-regulated imagination). All these have developed into thousands of tomes which have no *raison d'etre* since the new doctrine. They must be thrown overboard. All these treasures, all these lucubrations of minds as nebulous as pretentious, and as unjust as nebulous. Living germs which we breathe in vitiated air—and often in apparently pure air—are introduced into our organs, and there developing induce diseases. This is the new *pathology* in two words. To hinder these germs from entering, or to destroy them when they have entered our tissues—this is the new *prophylaxis* or *therapeutics*. I prefer to call it *curative*, because every one knows what that means.*" It speaks badly

* *Traitement Des Plaies au moyen de L Acide Phénique et des résultats que la nouvelle méthode a donnés pendant le Siege de Paris, par Le Docteur Déclat. Paris, 1873.*

for human nature, or rather for that modification of human nature which must be qualified as *medical*, that the author of this system is put to great and most constant trouble in defending what he terms his rights, outraged with as much perseverance as bad faith.

The two principal contestants against Dr. Déclat for priority in the discovery of the phenic acid method are *Lemaire* in Paris, and *Lister* in Edinburgh. The former of these two gentlemen has really succeeded in infusing a mystery into the controversy which is far from belonging to it. The evidence against his claim is conclusive; originally a pharmacist, he became acquainted with a preparation known as *Le Bœuf's Saponified Coal-tar*, experimented with it, and finally dropping the name of its inventor, advocated its use as a surgical antiseptic, publishing, in 1863, a book in support of its claims. But Déclat's public experiments with phenic acid had been made in 1861, in the presence of Dr. Gras and Prof. Maisonneuve. It was at the hospital of St. Jean de dieu, where these experiments had been performed, that M. Lemaire learned that the efficacy of coal tar was due to the phenic acid it contained. Thereupon he republished his book, substituting phenic acid wherever the words coal tar appeared! Thus, although Dr. Déclat's book was not published until 1865, his claim of discovery is in no way invalidated by the work of M. Lemaire. Indeed such has been the decision of the French Academy and of M. Pasteur himself. The latter expressly says (in full knowledge of the claims of Lister and Lemaire) "Dr. Déclat has created a new system of medicine, founded on the employment of one of the best known antiseptics (carbolic acid), etc., etc.*"

* Etudes Sur la Biere, 1876. Page 44.

Now Lister's claim to priority is, if possible, more flimsy still. Its history is as follows: Prof. Maison-neuve — delighted with the successful experiments of Déclat — *made publicly in his presence in the hospital of St. Jean de dieu in Paris, in November, 1861*, communicated them to Sir Jas. Y. Simpson, of Edinburgh, who in turn communicated them to Lister. Out of it the latter made what he could! In settlement of so much as may now remain of this question I quote the following extract from a published letter of Pasteur, addressed to Dr. Déclat, bearing date Paris, April 2, 1874: "In the letter which I have received from Dr. Lister, dated the 10th of February last (1874), he expresses himself thus: 'of the antiseptic system which, *for the last nine years*, I have endeavored to bring to perfection.'" This marks the year 1865 as the beginning of "Listerism". And now comes W. Watson Cheyne, M. B., F. R. C. S., of London, who mars an otherwise noble work, entitled "Antiseptic Surgery," by the most petty and malignant spite against Dr. Déclat obviously in the (mistaken) interest of his friend Lister, to whom by the way, his work is dedicated, "as a mark of the author's admiration and gratitude." He takes his poor revenge — does Mr. Cheyne — in these words: "In 1865 Déclat published a work on carbolic acid in which he claimed priority over Lemaire. This work contains no observations of any value (*sic.*), and his claim of priority is absolutely without foundation, for Lemaire began his work before Déclat, and Déclat was well acquainted with Lemaire's work before publishing.*" Could prejudice further go? And then as if fearful lest Lemaire might diminish the honors due to his hero he

* Antiseptic Surgery, Its Principles, Practice, History and Results. Page 616, London, 1882.

belittles the poor pharmacist and calls him "an advanced treater of wounds with antiseptics, nothing more."* But whom are we to believe in this matter? The French Academy of Sciences or Mr. Cheyne? M. Louis Pasteur, whose opportunities for knowing are as good as his painstaking is notorious, or Mr. W. Watson Cheyne, who seems to know nothing but unreasoning prejudice in this controversy? But let the "recording angel drop a tear". * Mr. Cheyne sins in the cause of friendship — almost a virtue, nowadays!

Not since the great Hahnemann shook the medical world from foundation to turret has such consternation, such revolution, been wrought therein as have attended the discoveries of Déclat. Behold the lad, studious, thoughtful, almost sad with the weight of coming responsibility, striving in his native city of Nevers, at the concourse opened by the Municipal Council to the youth of the entire city. The prize competed for was grand. It was no less than a complete classical and professional education for him who should outstrip all competitors in the final examinations, not merely, but in scholarship for a period of four years. It was the young Gilbert Déclat who was the successful aspirant. In his literary course he rises above his fellows. In the medical classes, he has no peer. He fledges his wings in his native city; he soars to Paris; he makes the acquaintance of Pasteur, the chemist, and the twin discoverers progress side by side, hand in hand. The one revolutionizing organic chemistry, discovers morbid microzymes — the cohorts of the destroying angel. The other, the practicing physician, revolutionizing practical medicine, discovers the true weapons for their annihilation. Does Pasteur

* Op. cit. p. 356.

arrange, classify, even produce these cohorts at will, it is Déclat who encounters them single-handed and declares "Thou shalt not interfere with the life of man." Does the one almost create, the other almost abolishes.

In 1861 Déclat produces phenic acid chemically pure. He terms it phenic acid—a mere synonym of carbolic acid—in order that he may divest it—the chemically pure article—of the horrors with which the name carbolic acid has been associated. How different it is from the bastard product, to which we have been accustomed, by its genuine characteristics! Pure carbolic (phenic) acid crystallizes in long, slender needles. It has no action upon litmus paper. It is extremely volatile, being rather an alcohol than an acid—rather a gas, than either. I may say, in passing, that it is impossible to transport pure carbolic acid. It immediately deteriorates; it becomes contaminated; it gathers moisture from the atmosphere; and when it becomes deliquescent, it develops cresylic acid, an active poison. Therefore, it must be combined always in its nascent state with some agent that will fix and retain it in its purity. Introduced into the economy, it seeks every means of escape—by the lungs, by the skin, by the kidneys, by every route of egress. So it permeates every tissue. It circulates in the minutest capillaries. As it goes, it destroys—what? Only the microzymes, which work injury and death, while harmless toward those larger and individually more powerful living organisms—the red corpuscles of the blood.

And here confronts us another fact more startling still. The red corpuscles of the blood—living organisms, did I say? Yes, for it is another discovery of these remarkable men, deduced partly from analogy and partly from observations not yet published to the

world, that the blood corpuscles are living beings. Indeed, were it otherwise, how could they be capable of self-production — of self-multiplication? Food for thought is here, and plenty of it. I cannot pursue the subject further in this connection, but I ask you, members of the profession, does not this demonstrated fact throw floods of light upon accumulated mysteries in your experiences? Can you not recall the wan faces of those whose spirit-like forms you could not renew with vigorous existence, even though the diseases which laid them low had long ceased their manifestations? Does it not appear clearly to you now, that either by the dose or kind of medicament — alas, too often by its infamous quality — these vital germs had been destroyed and none among them left with the power of reproduction? Is not this what we call “inanition,” “paralysis of the heart”, “anæmia”, or, most convenient of all, “decline”?

In 1874 Déclat published a grand volume of 1070 pages. In 1860, however, he had published a work on “The Hygienic Management of Children.” While I have not been able to obtain copies of all his works, some of them being out of print, he has been quite a voluminous writer — I have quite a number of them. The volume published in 1874 is entitled “Treatise upon Phenic Acid, as Applied to Medicine,” and is dedicated in the following touching words :

“To the members of the Municipal Council of the City of Nevers: Thirty years ago the Municipal Council of the City of Nevers had the generosity (by means of a demi-bourse) to place in my hands an instrument. It is just that I show to you the use I have made of it. I pray you, therefore, to accept the homage of this work until I can give you other testimony of my profound gratitude—if my health permits me to pursue my labors.

DR. DECLAT,

“Boursier of Concours 1841.”

The instrument which the City of Nevers had placed in his hands was simply his education !

But just at this period of his career, when, if ever, he needed the sympathetic encouragement of his fraters, it was then he was made to realize that which every great discoverer has to learn : The base ingratitude of little men. As the little men by thousands and thousands outnumber the large men, so their stings are both numerous and base. Stung beyond endurance by the Lilliputs, our hero turns and shows his natural aptitude for killing nuisances. As he had done to the animalcules, so did he likewise to the homuncules. A good example of his powers as a homunculicide is the following from his work on "The Cure of Some of the Most Common and Grave Diseases," published in Paris, 1873 :

"The physicians who verify deaths note among other details in their mortuary lists, which they are obliged to keep in Paris, first, the name of the disease to which the deceased person has succumbed ; second, the name of the physician who treated the deceased during his last illness. These two facts are described as all there is upon the registers of the civil list. I announce in the present work that a host of serious zymotic maladies—typhoid-fever, for example—may be cured in proportions hitherto unknown. I announce only to have lost during the last eight years of my practice two cases of variola, and those during the siege, and but one case of typhoid fever, and then the patient was already dying when I was called to him."

To this assertion Déclat adds a challenge. It is to prove that no other physician—official, professor, or academician—can show by books regularly kept that he has so extensive a practice as Déclat (which at that time was the largest in Paris, confessedly) ; has not lost a single case of measles, of scarlet fever, of croup, of typhoid-fever, of puerperal fever in eight years, and but two cases of variola. "I appealed to my confrères," he says, "urging them to apply a method attended by so great benefits. My appeal was

not heard. I called to witness the verifying physicians and inspectors, of whom one at least — the austere M. Tardieu — has never been distinguished for great benevolence towards me, to contradict my assertions, to dispute my successes. They have no more replied to my challenge than they have listened to my appeal. They have simply contented themselves with applying to me what was intended to be the opprobrious epithet, 'Guérisseur' (the curer)."

But see him now as he makes his triumphant entry into foreign countries. Municipalities and kingdoms rush to do him honor. This man, whom his detractors thought to silence with the epithet "Guérisseur," has proved indeed his right to the term in its literal acceptation. He bears more decorations from his own and foreign Governments in his capacity of "Guérisseur" than any other living man, though to meet him one would think him so far as any words of his are concerned, one of the most modest men on the face of the globe. When I asked him to see these evidences, these credentials of his fame, however, he showed me upwards of 100 diplomas and decorations from foreign governments and many from his own as a discoverer and as a curer.

According to its distinguished discoverer, as applied to medicine, phenic acid never can interfere with any other known drug or remedy that one chooses to give in connection with it. The homœopath may prescribe his pillules and the allopath may prescribe his boluses. It is not incompatible, but it will not unite with anything else but water and glycerine, so far as known. Even so powerful combinations as iodo-phenique, sulpho-phenique, ammonia-phenique, and the many other combinations Dr. Déclat has made — even those very substances do not really combine; they merely

associate themselves with it, and the carbolic acid leaves them just as soon as it finds a chance, whether it is on the ground, on the floor, or on the person.

If there be one strong characteristic of the true homœopathic physician, it is his open-mindedness—his readiness to examine and test whatever bears a reasonable promise of good, under whatever flag it may come to him, or whatever previous notions the new truth may destroy.

IT WAS IN THIS SPIRIT THAT THE GREAT AND LAMENTED BEEBE SOUGHT AND VIGOROUSLY DECLARED, TO THE DAY OF HIS DEATH, THAT HE HAD FOUND A REMEDY FOR CANCER AND ALL PARASITIC DISEASES IN CARBOLIC ACID.

Amid some indisputable successes, he met, alas! with many failures. Undaunted by his failures, but stimulated by his successes, he groped and almost fought for some substance which in combination with the great antiseptic would render it less dangerous to administer by the mouth, by sub-cutaneous injections, and upon denuded surfaces. How little he suspected, how little any of us supposed, that the dangers, the fatalities resulting from its use were in no way chargeable to the carbolic acid, but only to the terrible impurities with which it was always contaminated! Thus it has cost this country alone many most valuable lives. We have but to know, as we do know to-day, that the best carbolic acid this country ever produced contains in two pounds but five ounces chemically pure, to see the complete vindication of Beebe from all insinuations of his enemies, and we have but to know, as we do know to-day, the wonderful achievements rendered possible by the substitution of pure for impure carbolic acid, to behold the triumphant establishment of his claims. How well do I remember when the first copy of the United States Dispensatory

edition of 1870 came under my eye. I called my beloved colleague's attention to the appendix, page 1,704, article "Sulpho-carbolates, etc:" "This is a class of salts just introduced into use as a convenient means of obtaining the effects of carbolic acid in the treatment of diseases supposed to have parasitic origin, as cholera and the zymotic diseases generally." And how well I remember our mutual joy, as we both supposed that we now beheld the promised land! It would be simply droll, if it were not sad, to note that the sole claim of this wonderful agent to harmlessness was the almost utter absence of carbolic acid from the salt. Yes, humiliating as the admission most certainly is, in all our loving fondness for this wonderful drug — in all our manful resistance to the onslaughts of enemies, we have been doing battle in behalf of a false and dirty thing — a wretched salt of sodium, with only a trace of impure carbolic acid. And yet the stuff did good, thanks to so much of the carbolic acid as the stronger sulphuric acid had left uneaten.

ANTISEPTIC MEDICATION.

ANTISEPTIC MEDICATION.

The theory on which this treatment is based is stated in general terms in the introduction.

Our design being to make a practical treatise, we shall say little hereafter of the theory, only strenuous for the cure of these diseases, and not profoundly solicitous whether having cured them, we have done so by the destruction of living organisms, or the disinfection of a *materies morbi*. At the same time we are bound to keep in view the fact that the wonderful successes achieved by the treatment have been attained through the assumption of the germ theory—thus going far to demonstrate its correctness. Also, that the almost daily revelations of science are all in the same direction. For myself I am inclined to admit that the

truth of parasitical origin of disease seems irresistible. Phenic acid has been selected as the chief remedy among many other antiseptics, such as

(I.)—PHYSICAL :

Alcohol,
Benzine,
Charcoal,
Creosote,
Fats, and various oils (empyreumatic
and volatile),
Quinine,
Salicylic acid,
Sugar,
Tar,
Thymol

and many others.

(II.)—CHEMICAL :

Chlorine (its preparations and
combinations),
Iodine,
Sulphurous and the mineral acids,
Various Salts: Permanganate
of Potassium,
Sulphate of Iron, etc.,

and many others, in consequence of the discovery that pure phenic acid can be employed successfully for the cure of all maladies in which it is indicated, with absolute impunity to the individual treated by it. The same is true, to a limited extent, of the protochloride of iron, which, destroying the morbid germs, nourishes the histological elements, without which there can be no living tissue. Rabuteau, of Paris, a member of the Academy of Sciences, first brought before that body his discovery that all forms of iron, which are incapa-

ble of undergoing transformation into the protochloride by the small quantities of hydrochloric acid necessarily present in the stomach, pass unchanged through the intestinal tract. He therefore ordered from the manufacturing chemists the pure protochloride of iron, but never obtained it. Like those of us who made the earliest experiments with carbolic acid, and continued them through a series of years, placing faith in the statements of the vendors, that they supplied us with the pure drug, so Rabuteau put faith in the statement that he was supplied with a pure protochloride of iron. This was equally a delusion. Any tyro in chemistry can make the protochloride of iron, but it oxidizes in a few hours and becomes worthless, unless by some means in its nascent state this process can be prevented. As has been done with carbolic acid, so we can now do with protochloride of iron—we can associate it at its birth with agents harmless in themselves, which will prevent the process of oxidization. Rabuteau prescribed 6, 10, and 12 grains of the oxidized mass at a single dose, while of the pure protochloride, preserved as above indicated, but a single grain is the maximum dose that can be borne. The discovery of the process is due to the experiments of Prof. F. J. Boudreaux, Professor of Chemistry in St. Louis University. It was a timely discovery, for the rapid disorganization of the blood in zymotic diseases—notably in diphtheria, in pyæmia, in septicæmia, etc.—showed not merely that an antiseptic was desperately demanded, but pabulum also for the languishing red corpuscles of the blood. This is readily found in minute doses of protochloride of iron. Entering the laboratory of the discoverer, and finding him engaged in the preparation of this protochloride of iron, Dr. Déclat addressed him thus: “You are producing one of the most

powerful destroyers of parasitic germs—of microscopical beings—that produce illness and death. But at the same time you are feeding other organisms, far larger and individually more powerful than these—the red corpuscles of the blood!” *

The preparations of phenic acid, thus far introduced by Dr. Déclat and employed in medicine are named by him as follows :

- (1.)—Phenic Acid (pure nascent).
- (2.)—“ Ammonia Phenate.”
- (3.)—“ Sulpho-Phenique.”
- (4.)—“ Iodo-Phenique.”
- (5.)—“ Glyco-Phenique ” (for external use).

These are variously prepared with syrups, with glycerine, and with distilled water, etc., according to the mode of application—forming about 18 or 20 different preparations to be studied.

Dr. Ferran, in his pamphlet entitled *Les découvertes de Louis Pasteur* (page 15), says: “The name ‘Phenic acid’ is a misnomer, for, according to Berthelot and other chemists, it is not an acid but a *neutral* substance, like alcohol, glycerine and camphor, in consequence of which it can be associated with other medicinal substances *without combining* with them, and consequently without losing its properties.”

Phenic Acid.

For internal administration this is prepared at its birth with pure simple syrup, in the proportion of about 2 per cent. In this form it can be preserved for an indefinite period, and is administered directly in doses of from one to four teaspoonfuls. For purposes

* It is asserted by Déclat that the life of the red corpuscle is a demonstrated fact.

of subcutaneous injection, the same agent is diluted, while in the nascent state, with distilled and redistilled water, from which all the air has been expelled, and which has been especially prepared for the purpose. So prepared, it is safe to use subcutaneously. It could not be safely prepared by any other than a chemist, with full knowledge of the process.

Ammonia Phenate.

Phenic acid readily dissolves and associates itself with a substance highly renowned in therapeutics, but very difficult to introduce into the economy—ammonia gas. It forms with this gas a solution endowed with the action of both substances, each preserving its properties, and counteracting the possibly injurious effects of either. Thus, phenic acid renders the blood more plastic, while ammonia renders it more fluid. Phenic acid prevents gangrene; ammonia produces it. Déclat described this curious combination to the French Academy of Sciences on the 29th of September, 1873, predicting its service in cholera, yellow-fever, carbuncle, typhoid fevers, and all zymotic diseases, especially at their acute or ataxic period, when the blood, under the influence of fermentation, is at a high temperature, and when thickened by this heat and fermentation, it circulates with difficulty in the vessels and occasions a passive congestion of the brain, or of the lungs, giving rise to what is termed a complication, cerebral or pneumonic; but which in reality is only the intensity of the disease, with stasis of the blood in the brain or in the lungs. Phenate of ammonia has proved to be indispensable in therapeutics. Dr. Déclat has demonstrated its efficacy in asthma and whooping-cough.

Sulpho-Phenique.

The association of sulphur with phenic acid is efficacious against bronchitis, catarrh of the bladder and diseases of the skin.

Iodo-Phenique.

Iodine and iodide of potassium equally associate with phenic acid. The syrup of "iodo-phenique" is especially employed against lymphatic engorgements, whether scrofulous, syphilitic, or cancerous. It is very useful to children of delicate parents, who are either anæmic or have any constitutional vice. It is the most powerful depurative known. It is about the only preparation, containing a great proportion of iodine, that can be readily supported by the most delicate stomachs.

As already stated, phenic acid, phenate of ammonia sulpho-phenic acid, and nearly all the compounds of phenic acid become changed or decomposed if they are not immediately incorporated in syrups prepared in advance. It is therefore important to test them before taking them, by observing the *color*, as follows :

Phenic acid is absolutely colorless. If reddened, the syrup contains either deteriorated phenic acid, or foreign substances. The deteriorations of phenic acid are usually rosaniline or rosacic acid. These two substances are injurious if taken internally. They are both *red*.

The syrup of the phenate of ammonia is a blackish blue.

The syrup of sulpho-phenique is yellow, with a black precipitate.

The syrup of iodo-phenique is very slightly discolored.

None of the preparations must be *any shade of red*.

All these preparations are made also with glycerine instead of sugar, in such a manner as to render them tolerable for diabetic patients and those who do not like sugar. They are sweet, but not saccharine, and of precisely the same therapeutical indications as given for the syrups.

Phenated Cod-Liver Oil.

This is an excellent quality of Norwegian oil, prepared with one per cent. of pure phenic acid, unchangeable by climate. The taste and odor of the cod-liver oil cannot wholly be removed without an essential change of its properties, but both are very much modified by the incorporation of phenic acid.

In hereditary diseases of the lungs, the recent observations of Koch appear to have demonstrated what has been for twenty years asserted as a theory: That hereditary consumption, at least, is the result of a specific microphyte—an animal parasite. The combination of phenic acid with cod-liver oil is one of the most powerful agents for the repair of the disorders occasioned by the passage of these parasites. Phenated cod-liver oil would not be sufficient in itself to cure a serious case of consumption, or of bronchitis, but in connection with the complete treatment by phenic acid and its several combinations (syrups and sub-cutaneous injections), it is a powerful accessory. Uncombined, cod-liver oil is but an excellent nutrient. In the preparation here indicated, it is applicable in all states of exhaustion, lymphatic diseases, white swellings, etc.

HOW TO TAKE PHENATED COD-LIVER OIL.

No oil is agreeable to drink, but there is a way of taking cod-liver oil almost without knowing its taste. Place in a tapering wine glass (the shape is all-impor-

tant) a little water, milk, soup, coffee, or chocolate. Moisten the edges of the glass. Then pour in a teaspoonful (very rarely two) of phenated cod-liver oil. Take a mouthful of water. Then slowly turn the contents of the glass into the mouth, so that the oil, entering the mouth first, passes thus between the fluid which is contained in the mouth, and that which is in the glass. Swallow immediately, while holding the breath, and follow with a glass of water or any beverage.

Glyco-Phenique.

It cannot be sufficiently impressed upon the reader that phenic acid changes the more quickly in proportion to its purity. It can only be preserved unchanged in a special syrup, or incorporated with glycerine. Further, phenic acid whether crystalized or fluid, according to temperature, is always caustic, and dangerous to handle. These inconveniences disappear on dissolving it in hydrated glycerine, in the proportion of 10 per cent. This may become slightly reddened, without becoming injurious. It is the best preparation for external use. It is the only preparation with which water, unless specially prepared as already indicated, should ever be employed. With this, however, water may be used in all proportions. Both patients and physicians can use glyco-phenique without danger. It contains only pure phenic acid and hydrated glycerine chemically pure, so that in using it every one knows what he is using. I will enumerate a few of the cases in which this precious depurative, disinfecting, anti-epidemic and curative agent can be employed.

The compiler of this book himself took by mistake a tablespoonful of glyco-phenique, believing it to be syrup, thus making an involuntary *proving*. No accident ensued—simply a light feeling of giddiness and

some slight burning at the throat, wholly removed by plentiful draughts of water. Glyco-phenique is specially applicable in diseases of the skin, in burns, in recent or old wounds, erysipelas, gangrene, bites and stings of insects, itching, etc., and is a preventive against epidemics and contagious diseases. It should be employed for the latter purpose twice or thrice each day, in the proportion of a teaspoonful to half a tumbler of water for rinsing the mouth, for gargling, for rectal and vaginal injections, and especially against leucorrhœa, hemorrhoids, etc. We will presently indicate the mode of employing glyco-phenique, and the various syrups, in the most common diseases, so that they may be readily consulted in emergencies.

Physiological Action of Phenic Acid.

EXTERNAL ACTION.

The topical action of phenic acid upon the skin of the lower animals is entirely similar to its action upon the skin of man, allowance being made for the difference in the tissues and thickness of the epidermis. It is a veritable caustic, and, like all caustics, it produces an action proportioned to the mass upon which, and to the time during which, it acts. It has, however, some special characteristics as a caustic, which it is very important to understand. Applied to the skin in very light touches, it occasions a white coloration resembling a light, albuminous coagulum, which has, in fact, been erroneously so considered. The surface thus whitened is surrounded by a red areola, preceded by sharp pain which lasts ordinarily about fifteen minutes. The redness lasts much longer—24, 48 hours, or even more. The white spot disappears by dry exfoliation of the epidermis, leaving the surface more or less red-

dened, gradually turning to reddish-brown, or brown. The latter appearance continues for weeks—sometimes for months.* The white spot, which resembles coagulated albumen, is, like the latter, uninfluenced by water, but disappears immediately when bathed with alcohol, proving that it cannot be albuminous. This spot is occasioned by a temporary combination of phenic acid with the epidermis, or with the moisture of the skin—a combination destroyed by the affinity of alcohol for phenic acid. This hint will prove valuable to those who accidentally burn themselves with phenic acid. The part should be immediately bathed in alcohol, and afterward freely washed with water. The white spot should never be removed mechanically, because the irritation which follows is frequently the occasion of a sero-purulent or even purulent secretion.† The caustic action of phenic acid, while presenting the general characteristics described, varies according to regions, manifesting differences which merit some attention. Upon the hand, this peculiarity is observed: That the fall of the epidermis and the disappearance of the spot take place much more promptly upon the palmar surface than on the dorsal surface, although the epidermis is much thinner upon the latter. Upon the face, the following peculiarities are noticed: The duration of each of the phases above indicated is much more rapid. The pain is briefer. The white spot changes to brown in a few hours, before the falling of the epidermis, which takes place from the eighth to the twelfth day, and leaves no discoloration. On the contrary, the subjacent surface is whiter than before. This constrictive and consecutive action upon the capil-

* An excellent symptom for a "keynote" in syphilitic cases.

† This would point, homœopathically, to its remedial action in eczematous affections, where, in fact, it is supreme.

laries, constitutes, therapeutically, a fact of special interest. If, however, the process be interfered with by detaching the epidermis mechanically, this interference is followed on the face, as elsewhere, by irritation and sero-purulent or purulent secretions, and the brown patch remains longer. Another region merits special attention. The least application of phenic acid to the prepuce, in the immediate neighborhood of the glans, may cause a sharp pain and even provoke an obstinate suppuration. An interesting case is cited by Dr. Déclat on page 132 of his *Traite de L'Acide Phenique applique a la Medecine*, Paris, 1874. A physician who was in the habit of using phenic acid quite freely, placed some drops in his *vase de nuit*, and so by accident, during micturition, brought the prepuce in contact with the caustic. He immediately experienced a sharp pain and washed the part freely with water. This treatment produced no effect. The pain persisted very severely for at least an hour, and did not wholly disappear for many hours. It was followed by inflammation and a very superficial ulceration, which continued fifteen days. Had he bathed the part with alcohol, even somewhat diluted, he would have escaped these consequences.

I have myself met with a similar fact in the treatment of a gentleman for whom, in the stage of recovery from chancre, I ventured to apply the glyco-phenique, in the hope of expediting the process of healing. So far from this a three-weeks' suppuration at the corona was the result! The ulceration was extremely superficial.

I have here spoken only of light, superficial applications. When applied in larger quantities, and for a longer time, the resulting phenomena are more intense, but always similar. Carried to the point of producing

sphacelus of a portion of the skin, the action of phenic acid remains local, the eschar continues dry and falls at length without suppuration. A physician of Paris carried in his trousers' pocket a flask of phenic acid maintained in the liquid state by about 10 per cent. of alcohol. The cork became loose and about 15 grammes of the acid were distributed upon his thigh and the gluteal region, burning him fiercely. The eschar which followed was seven or eight centimetres in extent. He experienced a keen smarting sensation, and thus describes the phenomena which ensued: "A dry eschar which seemed confined to the papillary body; no suppuration was manifested; after the fall of the eschar, a slight oozing of adhesive serosity. The parts returned to the normal condition by excessive exfoliation. The accident caused me little trouble and did not prevent me from following my habitual occupation. To-day more than a year has elapsed, the skin has returned to its normal state, and all trace of the cicatrix has disappeared. There remains simply a little redness."

Such are the local phenomena produced upon the skin by the application of pure phenic acid. These phenomena are the same, it appears, when the acid is mixed with a small quantity of alcohol; but, mixed with other substances, the acid has not the same action, as will be seen hereafter. On the mucous membrane, the action of phenic acid is the same, to detail with certain evident modifications unnecessary in this connection.

INTERNAL ACTION.

Taken internally, phenic acid is poisonous to all animals. The physiological phenomena vary from the slightest functional disturbance to the destruction of life. Different observers have studied these effects in

the dog. Dr. Déclat has studied them in cattle, horses, sheep and swine, and especially in man. A dog affected with mange, to the extent of losing all his hair, was anointed with a mixture of one part of phenic acid to two parts of glycerine. In a few minutes he fell back unconscious, was seized with convulsions and seemed about to expire. Lotions of soap and water, and baths of cold water were without effect. The symptoms persisted during some hours, then abated, and the animal recovered.

Three grammes of phenic acid dissolved in twenty times its volume of water, were administered to dogs. In two minutes the dogs fell backward in violent agitation. Saliva escaped in abundance. Nearly all had fits of coughing. The muscles of the breast, abdomen and limbs were convulsed. The sensibility of the skin was diminished. That of the conjunctiva and cornea was abolished. In one experiment, where the dose was somewhat larger, anæsthesia was complete. The sciatic nerve was uncovered and seized with forceps without any expression of pain. None of the animals vomited. There were no evacuations of the urine or feces. In all, the phenic acid was strongly present in the breath. When the agitation had abated, the animals attempted to rise, but the limbs were paralyzed. Little by little power returned. With some, the fore legs recovered first; with others, the hind legs. In twenty to thirty minutes most of the formidable symptoms disappeared. Then the dogs stood up, walked with staggering steps, and in twenty-four hours they took food and seemed to have entirely recovered. The dog above referred to, however, as having taken a larger dose, died three days afterward of pneumonia. The post-mortem examination of this animal was conducted with great care.

There were no ulcerations either of the stomach or intestines.

The liver, spleen, and kidneys were absolutely healthy.

The respiratory organs presented the following lesions:

The trachea and bronchi were the seat of purulent inflammation, with FALSE MEMBRANES.*

The lungs contained disseminated nodules of pneumonia.

Numerous observations upon other animals, both ante- and post-mortem, are given in Dr. Déclat's exhaustive work, but we hasten to record the provings upon man.

A man of 65 swallowed a considerable quantity of phenic acid. He died in fifty minutes. The following symptoms were observed:

All the parts touched by the acid had assumed a white tint and a certain induration due to the cauterization of the epidermis and epithelium. Irritation or paralysis of the vagus had produced exaggerated secretions which had filled the vesicles and bronchi, preventing the aeration of the blood and causing death in less than an hour. The following is a résumé of the physiological symptoms, or, as we homœopathists prefer to say, "PROVINGS."

1. THE NERVOUS SYSTEM.

As with other animals, the nervous system is, in man, habitually the first, as it is the most seriously affected. "Having never given," says Dr. Déclat, "nor having known of any person prescribing toxic doses of phenic acid to man, we have never seen the physiological phenomena carried to their last degree, not even to the point of producing convulsions; but it is highly

* Homœopathic to diphtheria and croup.

probable that these convulsions would take place under the influence of strong doses, as they have in all the mammalia upon whom experiments have been made." What would add weight to this supposition, aside from analogy, is the symptom—universal when large doses are given, and often even in moderate doses—of headache, usually slight, affecting the whole head but particularly the frontal region, frequently localizing itself upon the occiput. In some persons this localization is constant, and if the doses be a little increased, the pain acquires great intensity. The occipital localization seems to be particularly manifested when the acid is administered by the rectum. In the case of a person tormented with pin-worms, an injection containing twenty to thirty centigrammes of phenic acid in a quart of water, arrested instantaneously the insupportable itching. The relief lasted several days, but, as the exciting cause persisted, the parasites were reproduced, and each time the injection was followed by the same effect. They were thus administered during a period of several months, with intervals of six to eight days. Each time they produced a pain *strictly limited to the occiput*—a pain ordinarily of moderate intensity. But on five or six occasions it was extremely intense, the patient having increased the dose in the endeavor to get rid of his inconvenient guests at a single blow. However, even in these cases, he carried the dose of the acid to a little less than a gramme. The same subject, if he took the phenic acid in moderate doses by the mouth, never felt the occipital pain. The pain never continued severe more than from six to eight minutes, then diminished by degrees, and ceased entirely at the end of fifteen minutes. This is the ordinary duration of phenic acid headaches. The doses being renewed, the pain always returns, and might thus

be rendered permanent. Besides headache, a large proportion of persons experience a transient dizziness and some tingling in certain points, or upon the whole surface of the skin. What is still more frequent than dizziness is a sort of intoxication analogous to that of alcohol. As with the headache, these phenomena last but fifteen to thirty minutes, if the dose be not renewed. A "characteristic" then, of phenic acid symptoms is their EVANESCENCE.

M. Lemaire relates that a child of 3 years, who had taken twenty centigrammes of phenic acid in a glass of sweetened water, became excited to such a point that his parents, believing him delirious, were obliged to keep him in bed for some hours by force. The same observer adds: "A little girl of 8 years, attacked by diphtheria, presented these same symptoms on several successive days after the employment of thirty centigrammes of the acid dissolved in 200 grammes of water." Dr. Déclat disparages these two observations, doubting whether these symptoms were not the delirium of illness, rather than the effect of phenic acid. It must be admitted that the observations need confirmation.

VASCULAR SYSTEM.

No special influence upon the vascular system has been observed. The movements of the heart are neither accelerated nor retarded—neither increased nor diminished in force. In certain morbid conditions phenic acid evidently has the effect of facilitating the aeration of the blood. "But," says Dr. Déclat, "as the transformation depends upon the action of the acid upon the morbidic ferments which hinder the oxygenation of the blood, it is not probable that the same action would be manifested in a healthy subject."

RESPIRATORY SYSTEM.

All animals, even of very different species, to whom have been administered strong doses of phenic acid, have had bloody sputa. They have also had convulsive movements of the muscles of the breast and other regions. How much should be attributed to the thoracic violence, and how much to the direct action of phenic acid upon the pulmonary cellules is not clear. All animals, like man himself, exhale by the respiratory passages the greater part of phenic acid that they have absorbed into the system. Thus, when the quantity absorbed is great, the very irritating property of the phenic molecule suffices to excite the escape of blood through the delicate walls of the air cells. The symptom has not been observed in man, which arises, doubtless, from the fact that the doses administered have not been toxic, the acid, therefore, reaching the lungs in too dilute a form to have an irritating effect. Not only has the sanguinolent expectoration not followed the administration of phenic acid in man, but not even the least symptom of pulmonary irritation has been noted. On the contrary, these symptoms, when present, have nearly always been more or less ameliorated.* The property of phenic acid, of being largely eliminated by the respiratory passages, depends, doubtless, upon its volatility, in common with alcohol, ether, chloroform, etc.

CHYLOPOETIC SYSTEM.

Although the odor of phenic acid is not attractive to most persons, it has never been known to produce any unpleasant effect upon the stomach. On the con-

* Homœopaths can readily see why phenic acid should be, as it is in fact, a most admirable remedy in pneumonia, bronchitis and other pulmonary affections.

trary, it relieves nausea and often arrests vomiting, promotes digestion and stimulates the functions of the stomach. A slight warmth at the stomach, when the dose is large, or not sufficiently diluted, is the only symptom by which phenic acid betrays its presence. It may be set down as a fact, beyond dispute, that whenever phenic acid produces nausea, vomiting, or any repugnance on the part of the stomach, it is on account of its impurity or association with some foreign substance. Phenic acid never reaches the large intestine without having been absorbed or changed. Its presence is never observed in the feces, even the odor of which is not modified by it. However, in several diseases, phenic acid is known to disinfect the fecal matters and so change the odor when morbid.

GENITO-URINARY SYSTEM.

The same physical reason which causes phenic acid to be abundantly eliminated by the respiratory passages, explains why it escapes only in very feeble proportions by the grand eliminators of non-volatile substances—the kidneys. That a certain quantity so escapes, however, is readily distinguished by its odor in the urine, the natural odor of which, however, is not thereby destroyed. The kidneys and bladder do not appear to be influenced by the passage of pure phenic acid, which gives no sign of its presence except the odor in the urine. The genital organs of man, at least, do not share in the indifference of the urinary organs. The sexual desire is sensibly diminished, possibly owing to the influence of the agent upon the spermatozoa. It is said that the diminution of the sexual appetite lasts only so long as the phenic acid treatment is continued. No definite observations have as yet been made concerning its effect on women.

Prof. Clifford Mitchell M. D., eminent as a urino-pathologist, has analyzed the urine of several of my patients who were undergoing the phenic acid treatment. In the one where the treatment had been most thoroughly pursued, he found the quantity of sulphates about normal. In none of the cases was any *dark coloration of the urine observed*.

The pathogenetic effects of phenic acid vary according to the method of administration. It has already been remarked that occipital headache is particularly developed by rectal enemata of phenic acid—a symptom not produced upon the same subjects when administered in other ways. It has long been known that medicines administered by the rectum, act more energetically than by the stomach. This is explained by the fact that in the rectum the agent finds a naked membrane which immediately absorbs what is presented to it. If the substance be non-irritating, and of the requisite physical qualities, it is then absorbed immediately. It reaches the heart and even the nerve-centers almost without irritation, so to speak, in the mass. So it manifests its effect suddenly. Medicines which are taken into the stomach, even when empty, encounter gastric fluids, mucus, saliva and other matters with which the drug is mixed by the incessant movements of the stomach. A small quantity then comes in immediate contact with the absorbing membrane; the remainder little by little, on account of the mixing process. This explains in a very satisfactory manner why medicines taken by the mouth act less energetically than when introduced by the rectum. It also accounts for the immediately stimulating effects of certain properly prepared enemata in enfeebled conditions of the system. By sub-cutaneous injections, phenic acid acts as promptly as by rectal injections; but in no

case has it been known, when thus administered, to occasion the occipital headache. The symptom of headache has indeed been less frequent than when given by the mouth. By inhalations, Dr. Déclat has succeeded in obtaining most excellent results in diseases of the respiratory organs, by means of an apparatus which he terms an emanator. This is simply a large, wide-mouthed jar, charged with crystals of pure phenic acid, associated with a certain proportion of metallic iodine. Hermetically sealed by an ingenious arrangement when not in use, this simple apparatus will preserve its properties unchanged for years. I find it valuable in my office in the treatment of these cases. I also use extensively, especially in cases of nasal catarrh, the ordinary atomizer charged with glyco-phenique in the proportion of 1 to 6, 8, 10, etc., of water. I find the best results follow the administration of atomized phenic acid by the posterior nares, using for the power a large receiver of compressed air.

THERAPEUTIC ACTION.

The therapeutic action of a medicine consists in restoring the diseased organism to the state of health. How it operates in this happy transformation, upon whatever tissues or in whatever manner, is beyond all question secondary in importance. The principal point is the cure. The *quomodo* is too often a matter of speculation. As homœopathists, we imagine ourselves able to explain the *modus operandi* of drugs whenever their action is curative; but there is a wide field for philosophical research yet open. We are not of those who believe that there is but one way of curing disease, though strenuous as may be for the law of *similia similibus*.

As to the law regulating the action of phenic acid, while believing it to be in direct accordance with the

law of cure, so well established with us, we are not quite able to prove it to the satisfaction of skeptical minds. We are therefore content to style it at present simply a curative — a curative *par excellence*. It may be termed a parasiticidal curative, because we know positively that it is by killing parasites that it cures certain maladies, and we have excellent reason to suppose that by the same property it cures many others. This may be termed its *modus operandi*.

MODES OF APPLICATION.

External or local. — Phenic acid as a caustic is limited in its action to the points where it is applied. The pain excited by it is moderate and transient, and there is no suppuration of the subjacent parts, except as cited in the case of application to the prepuce. It produces rather a dry eschar, which regularly falls off on the fifth to the eighth day, according to the part cauterized, or according to the individual. Thus, phenic acid is the most valuable, as it is the most convenient, of caustics, not only for the armamentarium of the surgeon, but for that of the dentist. The special qualities of phenic acid, used as a caustic, permit of its application far beyond the limits imposed upon other caustics, though it never can replace them in the destruction of extensive portions of tissue. Non-caustic, local applications of phenic acid are more valuable still, if possible. All or nearly all suppurating surfaces are treated with great advantage by the different preparations — ordinarily by glyco-phenique, reduced with water, which is the most simple of all the preparations. These local applications, so reduced, completely arrest suppuration, prevent gangrene, control decay, abolish offensive odors and hasten cicatrization, while hindering infection either of the patients themselves or

those who attend them. I have recently succeeded in associating the pure phenic acid with cosmoline in such a manner as to please greatly the eminent founder of antiseptic medication who immediately christened it "Dr. Cooke's Petrolin," under which title it is being extensively prepared by Messrs. Gross & Delbridge of this city.

INTERNAL OR GENERAL APPLICATIONS.

These may be made in different ways, constituting so many different methods, to be considered separately:

First, by the mouth. — The administration of medicines by the stomach is for many physicians the only method, other modes being rarely chosen. The subcutaneous method has caused an immense change in therapeutics in this respect, and, I believe, an immense progress. Nevertheless ingestion preserves its pre-eminence in all ordinary cases, and should be studied with the greatest care. The advantages of the administration of medicines by the stomach are numerous and important. The first of all consists in the facility of ingestion. The patient can himself take the remedy prescribed in one or more doses, according to the indications that the physician proposes to fulfill; and thus the continuous influence of the curative agent may be maintained. These advantages are of great value in diseases where the course is not rapid, and in all cases where medicines are administered as prophylactics, or for long periods. But aside from these advantages, there are certain inconveniences which become serious in certain cases. Thus the stomach may not retain the substances administered. This inconvenience is radical. We do not need to enumerate the

various cases where ingestion of even the mildest medicaments is inconvenient, if not impossible.

Second, by the rectum. — This method presents the advantage of a more prompt and sure absorption. That is to say, the medicaments are less exposed to modification. But these advantages exist only when the large intestine is in a state of integrity, which is far from being always the case.

Third, by the air passages. — Pulmonary inhalations have not only the object of producing general absorption of the medicaments, but also a local action which, in affections of the respiratory organs, fulfills a special indication.

Fourth, endermic. — Administration of medicine through the skin, denuded of its epidermis, has enjoyed at times considerable favor in the exhibition of small doses of certain extremely active drugs. Its absorption, however infinitesimal, has always been attended by more or less danger resulting from the degree of irritation of the denuded surface. It was not only a defective, but very naturally an unpopular method, hence, now but little, if at all employed. It may be considered, however, as the precursor of the hypodermic method. Demonstrating, as it did, a facility of absorption, it easily gave a hint for the employment of the medicaments *underneath* the skin, and so led to the invention of the simple means of accomplishing this by the hypodermic syringe.

Fifth, the hypodermic method. — “It is an entire chapter, a volume indeed, that I would have preferred to consecrate to this important method,” says Dr. Déclat. “It is with keen pleasure that I would have traced the complete history of one of the greatest advances in therapeutics; for it is by the method of subcutaneous injections that the cure of several of the

gravest and most frequent diseases which harvest the human race has been rendered possible. I would have written this history with so much more interest and pleasure, as it is to phenic acid that the hypodermic method will owe the immense extension in store for it. Before my experiments in sub-cutaneous injections of phenic acid, so judicious and progressive a spirit as Prof. Yourdes had been able to write, truthfully, 'its proper place is in the second rank.' To-day, thanks to the happy intervention of phenic acid, such a statement would be positively erroneous. It is not in the second rank that should be placed the therapeutic method of subcutaneous injection, but in the first, higher than all others, not, it is true, by the universality of its application, but, what is more important, by its efficacy, which I do not hesitate to pronounce admirable." The principal advantage of hypodermic medication consists in the rapidity of the absorption of the injected substance. This advantage becomes immense in diseases of a rapid and fulminating course. It is by it that the plague, yellow fever, and cholera in man will doubtless be conquered as typhus and carbon have already been in animals. In cholera, an additional advantage is joined to the *rapidity* of absorption. It is the *certainty* of absorption! In this terrible disease, experience has demonstrated that the absorption of medicine by the digestive routes is nearly or completely null. There are stages of other maladies in which this phenomenon has been observed by all physicians. Who does not remember the consternation with which he has uttered the words, "absorption is no longer possible?" Happily, sub-cutaneous absorption is always possible until the circulation is suspended—that is to say, until life has ceased. Not only does sub-cutaneous absorption cease only with life, but

that absorption is complete. This admits of graduating the doses almost mathematically.

A fourth advantage pertains to this method. It is that medicine can be absorbed without alteration — an advantage only applicable to sub-cutaneous injections. Ignorance of this fact has been the occasion of nearly, if not all the accidents that have arisen from hypodermic injections. Let it be borne in mind that a much smaller dose is effective in this form than in any other. Much unnecessary scare has resulted from the presumed entrance of air into the veins, or even the direct injection of the medicament into the smaller vessels. The shape of the injecting needle alone furnishes an almost perfect barrier against these accidents, which, for the rest, have been exaggerated in their importance. Déclat asserts, and none can doubt truthfully, that he has administered many thousand hypodermic injections without a single accident. For timid spirits, however, whose nervous apprehensions on this subject are great, it suffices to introduce the point of the needle in a direction opposite to the current of the blood in the veins, to render such accidents simply impossible. The only means of avoiding the effects of overdoses is to administer the medicament in minimum doses. Each individual may be said to have his own standard of dose. It is the province of the physician to ascertain this for each of his individual patients. So it is a fact of common observation that many persons can support without embarrassment the sub-cutaneous injection of one-fourth to one-half grain of morphine, and that, too, without habituation to the drug. The latter dose is sufficient to kill about three average mortals sub-cutaneously administered. Numberless accidents have arisen from the simple circumstance that the last hypodermic dose of morphine has been “the

straw that breaks the camel's back," producing just the cumulative effect demanded by the grim monster. How often are we not urged to administer opiates in this manner in cases where the evidence shows that opiates and other sedatives have been administered by the mouth for days together! It is simply an invitation to commit euthanasia! Suppose another case: A man laboring with the dyspnoea of advanced heart disease assures you that he has not slept for many days and nights and entreats you tearfully to afford him the relief which he knows so well would follow a hypodermic injection of morphine. He does not know that he is inviting you to kill him. He does not know that it is the necessity of voluntary efforts at respiration that keeps him waking. Relieve the embarrassment of the circulation and he would be asleep, and soundly, in ten seconds. Produce the sleep of opium, and you produce the sleep of death as certainly as though you had sent a bullet through his brain. Euthanasia of this sort is not infrequent. The last hypodermic injection of morphine gets the credit—and justly!

For homœopathists this method of administering medicine possesses a value hitherto not appreciated. There is not a remedy in the whole *Materia Medica* that cannot be so administered when properly prepared—I may almost say, that should not be so administered in a great number of instances. In various forms of poisoning, in the unconsciousness of apoplexy, the delirium of acute illness, in the slow return of the blood in many cardiac diseases, the method of hypodermic injections ought never be overlooked. I would counsel, however, the use of distilled water which has been kept in a glass-stoppered bottle previously rinsed with distilled water and to which 1-1000 per cent. of pure phenic acid has been added. This can in no

way interfere with the most attenuated homœopathic doses, while it prevents the possibility of introducing septic germs with the water.

It has been foolishly alleged that the effects derived from medicines so administered are not permanent; doubtless, they are more quickly eliminated than if taken into the stomach; but in repeated doses there is nothing to show that the effects are not as persistent as by any other route. The only accidents inherent in the method are local. These are said to be sometimes inevitable—pain, erysipelas, inflammation, abscesses, induration, nodules. But are these accidents really inevitable? Perhaps in the use of certain substances they may be; but it is certain that they have *never been observed in injections of phenic acid*. This gives rise to the query: Why should not a very minute quantity of phenic acid prevent the effects that follow the administration of irritating substances?—a hint which is offered gratis to our old-school brethren, who are in the habit of torturing their patients in this way, but which for us is of little consequence. I do not wish to be understood as making the assertion that local accidents by hypodermic injections, even of phenic acid, if improperly administered, are impossible. I see the results of such accidents daily. I had one or two of them in my own earlier use of the instrument. Thus it is possible, by throwing the injection into the rete mucosum, to destroy the integrity of the skin, the seat of the injection becoming a round, superficial ulcer, with defined edges having a thin pellicle and a slight sero-purulent secretion. One such stares me in the face as I administer the diurnal injection in the abdominal walls of a gentleman recovering from cancer. This accident was produced many weeks ago. It has not, however, proved of any special inconveni-

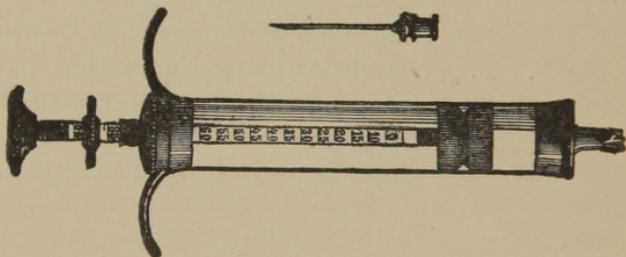
ence. A case of pyæmia at the end of protracted necrosis, given over to death by the attending surgeon and restored to life by the phenic acid treatment, the injections being administered by a student of medicine improperly instructed, presents to-day the astonishing spectacle of a tattooed man, being covered with these eschars, each the size of a quarter of a dollar, having the characteristics above described and being set as thickly over the abdominal region as space would permit. It is hardly necessary to state that this result is due to a defective introduction of the needle. As already stated, the fold of the integument should be lifted clear from the muscle and the needle plunged deeply. This avoids such a result completely. That the needle-canula should be as sharp and as small as possible is self-evident. It makes all the difference in the world whether one employs a beautiful Déclat needle, or even the best of those furnished by the trade. The one penetrates without resistance; the other sometimes breaks and often bends in the introduction. An accident, to which the writer must plead guilty in one instance, is the breaking of the needle sub-cutaneously. The patient jumped aside suddenly as the injection was being administered, and broke the needle under the skin. He was unwilling to submit to an incision for its extraction, and carries it still without the least inconvenience. To make the introduction slowly, pushing the piston gently forward so as to cause a progressive dilatation of the cellules of the connective tissue, is of elementary importance. A certain proportion of patients complain of a burning pain so soon as the first few drops (eight or ten) have been injected. Many, mistaking this for the point of the needle, are wont to accuse the operator bitterly. Some experiments upon my own person satisfied me concerning the

nature of this pain. It is occasioned by the forcible dilatation of the meshes of the cellular tissue. Experience has taught me to wait a few seconds until this pain passes away. Then, in the majority of instances, the injection can be completed without further complaint; but in a very small proportion of cases, three or even four suspensions of a few seconds each, are necessary in injecting the full volume of eighty minims. It is not uncommon for a patient who has had many previous injections without experiencing the slightest pain in the operation, to complain bitterly at the very beginning of an injection. In such a case, I withdraw the needle at once and introduce it into another place. It is a matter of experience that, in such instances, no amount of waiting, or change of direction of the needle or the force of injection, has much influence upon the suffering. It is best to change the location at once.

Résumé of Instructions for the use of the Hypodermic Syringe.

While it is not of vital importance it is almost essential for the success of the treatment—certainly it is for the comfort of the patient—that the Déclat syringe be used. The retail price (\$6) is not extravagant when compared with the price (\$5) of the best instruments hitherto sold. The largest of the latter hold but little more than half the required dose, thus necessitating the re-introduction of the needle or leaving it *in situ* while the barrel is refilled. Besides, the needles are coarse and difficult to insert. Some care is necessary to avoid imposition. I have seen a num-

ber of wretched imitations imposed upon physicians as well as laymen by very respectable houses. In one instance a miserable veterinary syringe had been altered by the addition of finger rests to resemble the Déclat syringe quite closely! Note, then, that the case containing the instrument has the trade mark of the "Déclat Manufacturing Company;" that the syringe is graduated, on the piston, to the full capacity of 80 minims and that the needle is fitted without a screw. The following cut is an accurate representation of the instrument.



The abdominal region is selected in preference to any other for the subcutaneous injections solely on account of its more abundant supply of connective tissue and the consequently greater ease of distribution of the large quantity injected. As more or less soreness usually results from repeated injections, this region is, moreover, the least inconvenient part of the body to submit to such invasion. The choice is not imperative, however, and is frequently varied to suit the requirements of individual cases.

The choice of the sub-cutaneous injection fluid having been made (whether pure nascent, iodo, sulpho, or ammonia-phenate) the barrel of the instrument without the needle is introduced into the fluid and filled by drawing out the piston so far as it will go.

A small globule of air usually remains which is of no consequence but can be readily expelled if desired. I have found it of some advantage to warm the fluid before making the injection. In my office I have a device by which the several injection fluids are kept at an even temperature, but it is sufficient to immerse the instrument when filled in a small quantity of warm water, just before using. The temperature may be 98° to 101° F. The advantages are: less pain during the injection and less liability to subsequent swelling and soreness.

A fold of integument as thick as can be grasped between the thumb and finger of the left hand, must be lifted so far as possible from the level and, the needle having been firmly attached to the instrument, its point should be placed lightly against the surface at the middle of the fold. Tightening now the grasp of the thumb and finger, to give a firm resistance, the needle may be plunged to its full depth. When properly managed this part of the operation is often painless. The instrument should be held naturally between the fore and middle fingers of the right hand, the thumb resting on, but not pushing, the piston-rod until the needle has been fully introduced. The observance of this direction will avoid the awkwardness of changing the hold of the syringe from first to last of the operation.

Having slowly and with proper intervals of rest (which are always regulated by the expressions of the patient) made the full injection, a finger of the left hand must be pressed upon the skin beside the needle and the latter swiftly withdrawn. This avoids an unpleasant pulling of the skin which may adhere slightly to the needle. It is not necessary, but sometimes

gratifies a whim, to oil the needle before introducing it.

Having completed the little operation the operator should remove the needle from the instrument, blow smartly through it, and immediately thrust the wire through it, leaving the latter in place until the next employment of the syringe. It is well to have a number of extra needles, that patients so desiring can have their "own private needles," although the antiseptic properties of phenic acid are such as absolutely to prevent the possibility of infection from this cause.

Tuberculosis.

This scourge of the human race — now of acknowledged parasitic origin — never fails to respond favorably to the method, provided the correct remedies be chosen and the treatment properly conducted. Neither of these conditions is difficult to fulfill. It is nearly always best to begin the treatment of a case of phthisis pulmonalis, for example, with syrup of pure nascent phenic acid in teaspoonful doses, alone, or on alternate days with syrup of sulpho-phenique. The doses may be repeated three or more times per day. For hypodermic injection the pure nascent subcutaneous injection fluid may nearly always be selected and administered once or (generally better) twice daily. Glyco-phenique as a gargle should never be omitted in this class of cases, and generally an *emanator* should be used. If not able to procure this the glyco-phenique may be inhaled as evaporated from hot water or an atomizer. In the first and second stages of the malady a cure may be confidently expected. In the more advanced stages arrest of the disease occurs in perhaps one out of three cases, and palliation in 90 per cent.

Case I. Mrs. J. E. F. (already reported in my paper before the Illinois State Homœopathic Medical Association) phthisis pulmonalis. Large vomica in right lung. This case was examined with me by Dr. Déclat. The improvement continues. Patient considers herself cured and continues the treatment at home, merely “as an act of obedience” to her physician,

feeling confident herself that she is too well to need treatment. Well, strong and getting fat.

Case 2. Mr. A., age 36 years. Miliary tubercles in both lungs. Fever, emaciation, night sweats, distressing and constant cough. Some diarrhœa. Recovery by calcification of tuberculous matter, as shown by expectoration.

Case 3. J. G. (also previously reported, loc. cit.) This case continues to improve. Gain in flesh and strength. Attends to business regularly.

Case 4. Mrs. L. R. McC., age 40. Many years an invalid. "Broke down 7 years ago." A clearly marked case of abdominal phthisis. Emaciation great. Hectic fever, night sweats, chronic diarrhœa, chills, etc., etc. After the fourth sub-cutaneous injection she reported herself as "better in many ways." Now, after two months' unremitting treatment she is at her home in another city greatly improved in health and promising her family and delighted friends a renewal of her sweet existence for an indefinite period.

Case 5. John Wellfare, age 48. Foreman sheet-iron and copper shop C. B. & Q. R. R., at Aurora, Ill. Sent to me by Dr. Van Liew. Disease of 18 years' duration. Tuberculosis, complicated by necrosis of superior maxillary and by septicæmia. Sulpho-phenique syrup three times a day, iodo-phenique hypodermically once daily. The improvement of this gentleman has been simply marvelous from the beginning of his treatment, May 23, to the present time. He has gained in strength, flesh and spirits, and has barely a trace of his disease. Still under treatment.

Case 6. Mrs. F. L. D., of Waukesha. Pulmonary tubercles with complicating troubles (nasal polyp, etc.) This case improved steadily. Flesh, appetite and

color were regained as by magic. She writes me that she is "well all but her cough." Aug. 1, she again writes: "Cough has gone I hope never to return." I ought to state that *stannum 3^x trit.* has been taken in addition to the phenic treatment.

Case 7. Mr. F. Phthisis pulmonalis (advanced). Says he felt no change until after the fourth treatment. Then he suddenly felt relieved of his pain, dyspnœa, etc., and jumping from his chair went waltzing around the room with his wife. Improvement has been progressive. Still under observation.

Case 8. Consultation by letter with Dr. F. A. Bishop, of Hannibal, Mo. Phthisis pulmonalis acuta. A regular case of "galloping consumption." Improvement followed swiftly upon the following medication, viz.: 1. "Syrup of pure nascent phenic acid (Déclat) a teaspoonful every two hours. After \bar{z} viii have been taken, syrup of sulpho-phenique, a tablespoonful every four hours. Then report." "2. Glyco-phenique, a teaspoonful in $\frac{1}{2}$ tumbler of water, as a gargle, thrice or more times daily. Inhalations of 1 to 6 of water, eight, ten, or more times per day." 3. "Sub-cutaneous injections of pure nascent phenic acid every morning and of sulpho-phenique every evening." The last letter from the Doctor represents the young gentleman as looking about to see what watering place he will choose for the summer. Time under treatment about seven weeks.

Case 9. Mr. Cavanaugh, age 49. Phthisis pulmonalis. Improvement slow, and finally after two weeks' treatment he has "backed out."

Case 10. G. H., age 33. One of the most interesting cases ever observed. Malarial fever of long standing followed by a swift deposition of tubercles in

both lungs, extreme and obstinate prostration, emaciation, night sweats. Evening temperature 101° F. to $104\frac{1}{2}^{\circ}$ F. Morning temperature 99° F. to 100° F. Nothing did good till we tried the hypodermic method with the ammonia phenate. Although this remedy had been given by the mouth persistently there had been no amelioration. Immediately after beginning its sub-cutaneous use there was improvement, which continued so long as we continued it, and ceased whenever we stopped. The venerable Dr. A. E. Small was associated with me in the management of this most critical case, which afforded us extreme anxiety. It was only by the persistent use of the ammonia phenate that we finally conquered, not merely the outward manifestations, but even the physical signs of a malady which by all known experience must have terminated fatally if trusted to *anything in this world but phenic acid*. The patient sailed for Europe so soon as able to travel to rejoin his family there, going by the same steamer with Dr. Déclat (July 5), whom he was prepared to greet as his preserver. He was provided with the syringe and solutions and directed to continue the treatment indefinitely.

Case 11. John Kelley, of Hyde Park, age 32. Advanced phthisis pulmonalis. Vomicæ in both lungs. A dreadful case. I was actually afraid he would die in the first operation and used to beg of him to stop his visits to my office, but he persisted and actually gained strength and any amount of courage. I finally refused to treat him further.

Case 12. Mrs. L. An advanced case of phthisis pulmonalis. Cavities in both lungs, extreme emaciation and hectic. Very greatly improved and *too much* encouraged after a few treatments. Continues the remedies at home. No report recently.

Case 13. W. F. W. Advanced phthisis pulmonalis. Has had "seven large hemorrhages and several small ones." Weak, thin and despondent. Improvement immediate with great bracing of the *morale*. Stopped coming after about 30 days treatment.

Case 14. Mrs. —. A bad case of phthisis pulmonalis. Brought to me in consultation by Julia Holmes Smith, M. D. Treatment continued by Dr. Smith until patient was well enough to return to her home in the country, whence she writes to the Doctor the most astonishing reports of her improvement. Under treatment about 5 weeks.

Case 15. Miss Annie R. Hammond, of Highland Park, Ill., aged 19. Goitre (extreme case). Incipient phthisis. This is a case of very rapid growth. Improvement immediate and persistent.

Case 16. A young gentleman of 21; student. Phthisis. Turned the sharp corner instantly under the treatment. Both the improvement and treatment continue.

Case 17. A young Miss of 17. "Catarrhal phthisis." Rapid recovery.

Case 18. Miss Lizzie O'B. General tuberculosis. Could not leave her home in Highland Park and was treated at "arm's length." The case terminated fatally, but life was indisputably prolonged by the treatment. A singular feature of this case was that a dicrotous pulse became regulated after the first hypodermic injection.

Case 19. A reverend gentleman afflicted with laryngeal phthisis improved so rapidly after the first few days of treatment that he *discharged himself* as cured.

Case 20. Joseph Kneal, news agent. A large vomica in left lung. Pectoriloquy and extreme dyspnoea. Improvement rapid.

Case 21. James C. Croke, age 34; compositor on *Chicago Tribune*. Physical examination reveals marked percussion dullness over left clavicular region. Tubercular creaking at apices of both lungs. Interrupted expiration, especially in left lung. Marked mitral murmur. Rapid emaciation. Pure nascent phenic acid syrup internally. Daily hypodermic injection of iodo-phenique, varied occasionally with sulpho-phenique. Glyco-phenique as a gargle and wash. Petrolin to the palmar surfaces of hands. (A remarkable feature of this case was that an *eczema palmarum* which had resisted treatment for more than 7 years, preventing the closing of the hands for that entire period, yielded at once, curing itself entirely after the third injection!) Improvement has progressed as by magic. The patient is to all appearance and for all practical purposes *well*. Good flesh, good color, good spirits.

Case 22. Mrs. H. Phthisis pulmonalis. Extreme emaciation and debility. Well into second stage. Recovery rapid and apparently complete.

Case 23. Mrs. Fannie H. Rexford *nee* Huntington, age 28. Married in '79 to a gentleman in fair health who had never manifested any signs of pulmonary disease. The evidence seems conclusive that he contracted the disease by transmission from his sister, who died of consumption, and for whom he cared during her illness with the devotion of a mother. His wife (who came from a race free from consumption by heredity) contracted the disease directly from him, and when I saw her in Blue Island in May she was advanced

well into the third stage of phthisis pulmonalis. She was terribly emaciated, had night sweats, vomicae in both lungs. Hectic very marked. I saw the patient but once. Inaugurated the treatment by hypodermic injections, and internal and external applications of the remedy. She is improving very solidly. Drives out daily. Gains flesh and strength.

Case 24. A young married lady very far advanced in phthisis pulmonalis. Visited her in the country and declared the case hopeless. She used the treatment, however, and with marked benefit for a time. Then the improvement ceased and she grew to "hate the sight" of the syringe. Treatment abandoned.

Case 25. A young lady teacher in a public school. Gave out a few months ago with clearly established phthisis pulmonalis. Emaciation, hectic, diarrhoea, cough, purulent expectoration. These symptoms must now all be eliminated from a truthful description of the case.

These twenty-five cases of tuberculosis have been taken at random from my notes. They are in no sense selected cases. I could cite more than one hundred cases fully as favorable as these. Perhaps, as many more have been too easily discouraged and have abandoned the treatment. Some from ill-founded fears of the "severity of the treatment," some, over-wise in their own conceit, have decided to continue the treatment *partially*, and not a few have been dissuaded by gloomy and silly—though, alas! interested—forebodings of ignorant physicians. In a few (very few) instances I have had to acknowledge defeat. In this connection I may say that unless a marked benefit is derived during the first two weeks of systematic treatment, I ordinarily advise its discontinuance

Cancer.

It will be conceded that an average of one cure in fifty cases of unmistakable cancer would be an encouraging record under any method of treatment hitherto known. Well! Let us take a few cases as they occur in regular order on my books—not skipping a single one.

Case 1. Married lady. “Quite ill for a year.” Vomits every day. Cancer of pylorus. Tumor well marked. Been mistaken for aneurism of aorta,* likewise for “floating kidney,” likewise for “intestinal obstruction.” This patient’s improvement was regarded as miraculous. She gained in flesh at the rate of 2 to 5 pounds per week. Ceased vomiting and “grew happy.” Became discouraged at relapse brought about by imprudence in eating and changing physician.†

Case 2. J. M. B. Reported in my paper of May 18th, read before the Illinois State Homœopathic Association. Aged 36 years. Epithelioma of left side of lower lip. Rodent ulcer of mouth back of lower front teeth. Emaciation. Bad cachexy, etc., etc. The definitive cure of this patient—though retarded by some unforeseen accidents—is fully in sight. No cancer and no ulcer remain to plague us, but chronically diseased lungs and a tendency to caries of bone are not wholly forgotten.

Case 3. Mr. D., of St. Joseph, Mo. Epithelioma of lower lip. Glandular complications. Treatment

* This was a very natural mistake, as the tumor was pulsatile. The error was readily detected by placing the patient on her hands and knees, when the tumor, falling away from contact with the aorta by its own gravity, ceased to pulsate. This is a diagnostic hint of great importance.

† Since dead—having resisted two weeks of heroic treatment. Autopsy sustained the diagnosis.

promises complete success. He writes: "I am getting well slowly, but surely.

Case 4. Wm. Burns; aged 60; flagman R. I. R. R. Had cancer removed from lower lip 18 months ago. Now has two large tumors of lower jaw—one at the ramus on right side—the other at symphysis. Improving rapidly.

Case 5. Cancer of pylorus in a lady of 45. vomiting incessant. Confined to bed. Bad cachexia. Obviously sinking fast. Treatment immediately successful. Vomiting ceased. Strength and flesh returned slowly. Able in three week's treatment to go to Minnesota for the summer, where both the improvement and the treatment continue.

Case 6. A case of scirrhus of left mamma. Lady of 60 years. Subsided fully 75%. Pain gone, happiness and flesh restored. Only a slight point of induration remains after two months' treatment.

Case 7. Mrs. H.; aged 47. Sarcoma of right mamma. After two weeks' treatment a good constitutional but bad local result was obtained and the breast was extirpated by Dr. Geo. A. Hall one week since. Doing nicely under the phenic acid treatment. Will recover.

Case 8. A lady near seventy: Attended through her physician after a consultation. Pronounced carcinoma of liver by several physicians. Indeed there was no room for doubt—the acme of characteristic sufferings being reached. There were extreme emaciation, sweats, prostration, dropsy, etc., and no one expected to see her out of bed again. She has apparently almost recovered under the phenic acid method. Time of treatment, three months.

Case 9. A case of ulcer of lower lip, with much loss of tissue, singularly irregular and overhanging edges with bad cachexia—yielded so rapidly to treatment that the patient now avoids expense by “acting as his own doctor.” Only three treatments.

Case 10. An advanced cancer of inferior maxillary following the extirpation of an epithelioma of lower lip. The bone was extensively destroyed—the soft parts of the mouth considerably broken down—the tongue indurated and painful. Improvement was very marked after the first few days treatment, and the patient returned to his home, in another city, encouraged and pursues the treatment there. I am without recent intelligence from him but fear the worst. There are still other cases under treatment *all* doing well.

Case 11. SENATOR BEN HILL. It is with a sense of extreme delicacy that I mention this case—minding me of the house of woe in Atlanta where at this moment (Aug. 12) the noble orator is perhaps breathing his last. But the papers have been misinformed and are giving out that the “French system has failed.” It is therefore proper to quote the following from a letter of his devoted son B. H. Hill, Jr., July 26:

“I most earnestly insisted upon the vigorous trial of the Déclat remedies, but the physicians thought he could not stand them. They were persisted in about two weeks and *I thought there was some little benefit.*”

The italics are mine. With no disposition to censure anyone it is evident that no sufficient trial was given the system. Conceding an honest determination to follow my carefully written instructions, only a half-hearted and timorous trial could be expected from those who had neither experience nor faith in

the method. It is almost a consolation to reflect, however, that the great patient was too far gone to warrant hope long before the Déclat remedies were commenced.

Case 12. Mrs. B., aged 66. *Carcinoma uteri* far advanced. Under the full phenic acid treatment—hypodermic, internal and local, a complete auto amputation of the larger portion of the uterus has occurred, and the patient bids fair to make the most astonishing recovery on record.

While I have not thought it best—or have not found it necessary—to cite cases from the works of Dr. Déclat, preferring to draw upon the material so richly supplied me at home, I cannot resist a brief résumé of Dr. Déclat's experience in cancer, so long ago as 1874. He cites * thirty-nine cases, which he divides into three classes, as follows :

“1st. Twelve cases—mostly slight, or but little advanced, in which the diagnosis, at least in some of them, might be somewhat uncertain. All these have been cured after a resistance of a few weeks to a few months.

2d. Thirteen cases, of which two should be set aside, one having abandoned the treatment at the end of twenty days, in a condition of pronounced improvement, while the other abandoned it more promptly still, without improvement. Of the eleven others, in which there could be no doubt of the diagnosis, one desperate case, where a frightful operation was proposed, obtained an amelioration which continued, as well as the treatment, for many months. In the re-

* *Traité de l' Acide Phénique appliqué a la Médecine.* Paris, 1874.

maintaining ten cases, which were all very serious, the cure was absolute.

3rd. Fourteen cases, in five of which the treatment failed. The nine others have not yet followed the treatment long enough to reach definite results, but—all—even those who have been under treatment but a few weeks or a few days, have derived obvious benefit.”

In this connection I repeat that the phenic acid treatment is surprisingly different from all other forms of medication in this: It gives no uncertain note of its intentions, so to speak! If it is going to help, in any case, it indicates it unmistakably almost at once. In my experience with the remedy, if it does *no good within the first two weeks of treatment* in any disease, it may as well be abandoned. If, on the other hand, any amelioration, even the slightest, has been derived, it may be regarded as a demonstration of its power in the particular instance under observation. We are evidently on the threshold of great developments. The cure of cancer rendered possible! Why, suppose but one case in a hundred were cured? Nay, one in a thousand? Does not the fact plead eloquently for the possibilities of the antiseptic medication of the future? I make the assertion boldly and I challenge contradiction: That CONSUMPTION AND CANCER—HITHERTO THE INVINCIBLE DESTROYERS OF THE HUMAN RACE, ARE CURABLE IN AT LEAST AS LARGE A PROPORTION OF CASES AS ANY OTHER SERIOUS DISEASES WHICH ARE CLASSIFIED AS CURABLE. It is evident to my mind that the time is rapidly drawing near when they will be robbed of their terrors, at least for those who submit to treatment before so great structural changes have occurred as are incompatible with life.

Septicæmia.

Case 1. On May 20th ult., J. H. Wattles, M. D., a well known physician of Battle Creek, Mich., consulted me by telegraph in his own case, which I condense from his description: "Inoculated in the hand while dressing an erysipelatous wound, May 13th. Within twenty-four hours there appeared a small vesicle upon an indurated base, the size of a filbert. Pain of a burning, smarting character, redness, swelling of hand and forearm, involving the axillary glands, and the induration progressively increased until the 12th day. At this time sloughing began in the tumor which, denuded of cuticle, presented the appearance of a dark plum, discharging sanious fluid. Constitutional symptoms, as rigors, high temperature, severe pain in the lumbar and cerebro-spinal region had appeared on the fourth day. The extreme symptoms were reached about the 12th or 14th day, during which time the usual constitutional and local remedies had been faithfully used." It was in this condition of things that I prescribed for my suffering brother a local and constitutional course of phenic acid with the effect as described by himself: "To immediately change the character of the discharge to a laudable pus, while healthy granulations appeared within twenty-four hours. The extreme burning pain subsided. The cavity, at one time the size of an egg, filled up by granulations within two weeks. The constitutional treatment was continued for three weeks after convalescence was established. There are now (June 5th) no visible traces of the disease except the cicatrix."

* * * * *

J. H. WATTLES, M. D.,
Battle Creek, Mich.

Case 2. Mr. C. (of the circulating department of the Chicago *Tribune*). This gentleman was fearfully emaciated. Afflicted with boils and abscesses and so prostrated that he fainted in my office after the first treatment. Says he had never fainted before. He has gained in strength and flesh. Has no evidence of blood poisoning, and continues daily treatment with enthusiasm.

Case 3. Miss ———, aged 21. Had scarlatina twelve years ago. Septicæmia as a sequel—manifesting itself in the usual forms, but especially by an excessively offensive leucorrhœa, which “local treatment” failed to influence and which rendered life miserable. The discharge was profuse and exhausting. At no time was it less in quantity than would justify the expression “flooding.” A course of the internal use of the phenic acid preparations with glyco-phenique locally did some good, but the very first subcutaneous injection of pure nascent produced an almost magical change, which has progressively rewarded each daily use of the hypodermic syringe—resulting in a complete cure. Still under treatment to “make assurance doubly sure.” It is needless to add that the change in appearance and manner of this poor girl has coincided with the local improvement.

I have classed this case as septicæmia because the local trouble was so obviously the expression of constitutional dyscrasia.

Case 4. A lady of 45. Had three attacks of diphtheria. The last, ten years ago, left a “blood poisoning,” which has manifested itself by pustular eruptions, boils, abscesses, etc., emaciation, chills, sweats. Improvement rapid. Strength and flesh returning. Diarrhœa of long standing removed.

Case 5. Miss Janie S. Sanborn, aged 26. A long history, beginning with "typhoid fever" and winding up with neuralgias of various kinds, emaciation, hectic, etc., Brought to my office "more dead than alive"—unable to walk. She was regarded as a hopeless invalid. In two weeks' vigorous treatment she began to rally. Has been treated since at home, and so successfully that her recovery is now complete. Time under treatment five weeks.

Case 6. Luther Rossiter, Esq., of Lake Forest, Ill. This well known gentleman dates his blood-poisoning from an "impure virus" used in vaccination six months ago. Afflicted with pimples, vesicles, "small tumors and ulcers" ever since. In a letter addressed to Dr. J. E. Gross of this city, under date July 20, 1882, he says: "About three weeks ago I applied to Dr. Cooke for the phenic acid treatment. At that time there were not less than fifty tumors and ulcers on my arms * * * * Now they have all healed except two or three, and they have so near disappeared that they will be gone in two or three days.* * * * For twenty years I have suffered with sore nostrils, requiring the daily use of salves. They are so much better that I think the continued use of the phenic acid but a short time will entirely remove the trouble."*

Case 7. Miss Swan, aged 22. Ten years ago broke ankle joint. Had "typhoid fever" followed by necrosis. Now has extensive necrosis of left tibia and right femur. Several orifices. Cachexia bad. Pyæmia very evident. In less than a week the whole

* I examined Mr. Rossiter on July 31st. Every vestige of the malady had disappeared, only cicatrices indicating that there has been any trouble.

aspect of the case has changed. All the orifices but one have healed.* The fever has disappeared. Appetite and strength are returning.

Eczema.

This disease, in its almost protean forms, which has baffled the profession with an obstinacy that has well nigh earned for it the distinction of invincibility, and which some one has termed "as constitutional as the skin" has not in my hands yielded submission to phenic acid in all cases. If I have had some brilliant successes I must acknowledge some detestable defeats. Let me present examples of both:

Case 1. Eczema of the hands of long standing. An old patient of mine. Both of us began the treatment with enthusiasm and confidence. Not improved and treatment abandoned.

Case 2. Eczema fissum. Situated at the anus with deep furrows radiating like a starfish. The sufferings were horrible. The patient—a gentleman of 50—had a wild, almost maniacal expression, and assured me with great solemnity that he would "himself his quietus make" if this experiment—the last hope—were unsuccessful. Great relief the first day and cure in one week.

Case 3. Capt. J. B. H. A gentleman about 60. Eczema of both lower extremities. A fearful case of long standing. Improved slowly under the treatment, but had to be absent for some months. Although he continued the treatment as best he could, administering himself the daily hypodermic, etc., the improvement

* Since completely recovered.

has not continued. The case must be considered a failure, though I cannot but think that intelligent medical care may yet succeed.

Case 4. James C. Croke — already cited as a case of phthisis. Eczema palmarum of 8 years' standing. Recovered during the first week of treatment.

In all the cases of Eczema (about thirty) treated by me during the last four months I have used the syrups, pure nascent, sulpho-phenique, iodo-phenique, the sub-cutaneous injections of pure nascent, sulpho-phenique and (rarely) iodo-phenique. Local bathing with glyco-phenique (1 to 6 of water), then thorough drying and immediate application of petroline. It is best not to bandage the part, but to make frequent applications of the phenic acid as here indicated, leaving always a thin coating of the ointment upon the skin, in order to exclude the air.

The following treatment will nearly always succeed in modifying — often in wholly removing — the most obstinate cases of eczema. I have used it about twenty years and it has rarely disappointed me. It acts, evidently, on the antiseptic principle. Bathe the part affected and dry thoroughly. Apply, loosely, patent lint saturated in a solution of two drachms of bi-carbonate of soda to the quart of distilled (or rain) water, and envelope the entire part with oil silk (best) or very thin sheet rubber, secured by strings, so as to ensure its remaining in place without compressing the part. Let this remain 24, 48, or even 72 hours, only removing it to re-saturate the lint, and never suffering the part to become dry or exposed to the air.

Malarial Fevers.

The number of cases treated by me is limited by the fact that my practice is almost wholly confined to my office. From the few cases where I have personally attended at the bedside I report the following:

Case 1. A young lady exposed to sewer gas was seized with rigor followed by progressive rise of temperature, which in the second week attained the daily height of 104° to 106° . There were hyperæsthesia, peritonitis and rapid disorganization of blood. No medication was effective—not even syrup of ammonia-phenate freely administered by the mouth — until hypodermic injections of the latter were resorted to, when the fever immediately abated. There was an almost maniacal resistance to the needle in this case, and I several times omitted it only to find, in each instance, the same ominous rise in temperature. Recovery in third week.

Case 2. A little girl of ten. While convalescing from mumps she was exposed to emanations from the sewers distributed through the house by plumbers engaged in repairing the connections.* The most extreme symptoms resulted. Rigors, high temperature ($103-4-5-7!$) peritonitis, coma. Phenic acid was used in every way except by hypodermic injection. Recovery slow, anxious, protracted. It is my conviction that, had ammonia-phenate been employed hypodermically, the illness of months would have been reduced to one of days.

*While persons are lying ill or confined to the house for any reason it is tempting Providence to disturb the sewer connections even for necessary repairs. Such persons should be removed at all hazards before the operations are begun.

Case 3. This case is reported (see page 67) under article tuberculosis. G. H., age 33. Malarial fever. Temperature 104-5-6. Habit of mind and somnolence, but no delirium. First visited at the beginning of third week. In this case no improvement was had until the hypodermic employment of ammonia-phenate which had been faithfully exhibited internally. Coincidentally with each sub-cutaneous injection was an encouraging fall in temperature. I know not by what fatality hypodermic injections were suspended until their resumption was necessitated by the new phenomena already described. It is my conviction that, had they been continued well into convalescence they would have prevented the subsequent dangers.

Case 4. Child of ten years. Gastro-hepatic type. Vigorous saturation with phenic acid (ammonia-phenate chiefly). Rapid recovery. Ill eight days.

Case 5. C. D. L.; merchant, age 33 years. Had malarial poisoning for many years. Always tendency to relapse. Rarely prevented from attending to business, but always miserable. A full course of phenic acid hypodermically and *per vias naturales* has resulted in removing his trouble, and he now regards himself as "a well man"—though still subject to an occipital neuralgia, which he attributes to the long habituation to phenic acid.

Many more cases in which I have been consulted or in which I have directed the treatment through other physicians—nearly all with happy results—might be cited. It would be but an unnecessary confirmation of thousands of cases reported by Dr. Déclat and his numerous disciples. According to M. Sensaud, who has treated hundreds of cases (an average of 150 for each season reported) and whose opportunities for

observation have been simply unequaled, phenic acid surpasses quinine in value as an anti-periodic febrifuge in the ratio of 10 to 1. My own observations go further than this: If quinine is a palliative, phenic acid is a curative. Relapses after the quinine treatment are common. After the phenic acid treatment they are rare.*

Against the innumerable symptoms under the head of "chronic malarial poisoning" phenic acid is supreme. It is needless to detail them here. Their name is legion. Once they are recognized as "malarial" in origin, they can be promptly conquered by a course of phenic acid, whether they appear under the various neuralgias (cephalgia, prosopalgia, otalgia, odontalgia, cardialgia, gastralgia, pleurodynia, enteralgia, nephralgia, coxalgia) or what not. A mistaken diagnosis is the only possible explanation of a failure.

Diphtheria.

The best results may be confidently looked for from the full Déclat method if faithfully pursued in this justly dreaded scourge. In addition to the cases already published elsewhere I have notes of several successes both in my private practice and in consultation with other physicians. But, in place of the detailed description of these cases, which I had intended, I have deemed it best to insert explicit instructions for

* Like most other maladies, intermittent fever has its *cycle*, it tends to return in the septenary periods, but if no manifestation appears in six weeks after "the chills have been broken" it seems to require a fresh exposure to malaria to reproduce it. Six weeks, then, would appear to be the cycle of ague.

the treatment—antiseptically and dietetically—of bad cases of it. Neither I, nor those of my colleagues who have heeded my advice, have lost any cases of diphtheria since using this method, which is confidently commended to the profession as the best thus far presented.*

When called to treat diphtheria, if the case be at all threatening (as indicated by anorexia, swelling of submaxillary glands, fœtor of breath, more or less exudation in throat—though this is sometimes merely “filmy” at first—and frequently, though by no means always, a considerable rise of temperature) cause the following preparations to be made without delay: Fasten cords (a clothes line answers the purpose admirably) from the head of the bed to the footboard in such fashion as to form a sort of frame for a roof. Over this stretch sheets so as to form a complete box enclosing the bed, open only at one side like the door of a tent, and having a small aperture near the foot on the opposite side to permit ventilation. Now place a small gas or oil stove (or even a spirit lamp) upon a low table just within the open space or “door” and boil gently in a broad shallow pan a mixture of one part glyco-phenique to two parts of hot water. Cause the patient to breathe the vapor thus generated without intermission until the exudation has loosened or disappeared. I sometimes substitute lime-water for the pure water, but I cannot assert that it is of great importance. It in no way interferes, however, with the efficacy of the phenic acid.

* Notwithstanding all Dr. Déclat's enthusiastic confidence in his method, and my own remarkable success under it, I cannot speak of this frightful disease without an indescribable feeling of awe—nor can I approach the encounter with its most serious forms without a certain foreboding which it will require innumerable successes to remove.

Give a teaspoonful of the syrup of pure nascent phenic acid (Déclat) every hour.

Apply the glyco-phenique in full strength, by a swab or probang, directly to the parts covered by exudation, every four, six, or eight hours.

If the membrane extends, if hoarseness begins or increases, if, in short, there be any indications that the disease is increasing rather than diminishing, resort to hypodermic injections at once. Eighty minims of pure nascent, or, if there be much fever, ammonia-phenate may be injected every two to four hours while the urgent symptoms persist.

The patient should be made to take a tablespoonful of fresh milk every five minutes while awake and every fifteen minutes during sleep with a tablespoonful of pure whisky to a teacupful of milk every second hour. No other nutriment is needed during the first 48 or 72 hours.

Every hour or two immediately preceding the milk, a swallow of Boudreaux's protochloride of iron syrup in the proportion of one to six of water should be taken. Dr. Déclat insists upon this, which is doubtless best, as the ordinary muriate of iron conveys but little (if any) of the pure drug. Déclat claims that it is as necessary to nourish the blood globules in diphtheria as it is to destroy the germs. However this may be, I must admit that the best results have been obtained by a literal adherence to the eminent physician's instructions. Let no one charge me with a departure from recognized homœopathic principles in the treatment here indicated! At least not unless he can show that *one single case of malignant diphtheria has ever yielded to measures such as are popularly supposed to be strictly homœopathic!* I am seriously inclined to doubt

if one such instance exists in the annals of medicine. This is far from proving, however, that the measures here indicated are not homœopathic. On the contrary it is clear to my mind—as it should be to any one who has read this book attentively—that the success of these measures is, in itself, a demonstration of the homœopathic law.

Dr. Ely's Report of Cases.

The success of phenic acid having been an assured fact for a quarter of a century in Déclat's own country, its history now will afford little in the way of variety to those who are "up with the times," but its success in this country is an example unparalled in the history of medicine.

Whenever new curative powers are earnestly claimed for a medicament, it is but just that individual experiences bearing on the subject should be made known. Scientific research is aided by grouping the fruits of observation. The collective results enable us then to determine the status of the agent.

It is unnecessary to corroborate any statement of fact made by my confrère Dr. Nicho. Francis Cooke, but it has been my privilege to personally examine many of the cases he reports in this volume, and it is but just that I testify my surprise and delight at the rapidity and completeness of the cure of some whom I had deemed beyond help from any remedial agent.

Among my own cases I select the following:

Case 1. This was a young lady, about nineteen years of age. Her mother stated that two days previously she had complained of malaise, alternately hot

and cold sensations, loss of appetite, and sore throat. I found her in bed, with flushed cheeks, hot dry skin, inclined to drowsiness. The temperature was 103° F.; the pulse, 120. Inspection of the throat revealed the characteristic redness and swelling of acute inflammation, and thick diphtheritic patches on both tonsils. Enlargement of the neighboring lymphatic glands was present on both sides of the neck.

Syrup of pure nascent phenic acid, one teaspoonful every two hours with a gargle of glyco-phenic hourly were ordered. *Milk diet.*

On the following morning there was a marked diminution in the amount of the membrane—glands still swollen—temperature, 101° F., pulse 100.

Having never seen diphtheritic-membrane disappear so rapidly, in the commencement of an attack, I was much pleased to have my diagnosis confirmed later in the day by a professional brother.

Fluid food was taken without complaint. Remedies continued. Next day I found my patient with a temperature of 99° F., pulse 84, and a clear throat—every vestige of membrane gone. She was ordered to take the syrup three times a day and to use the gargle every two or three hours during the remainder of the week. She made a perfect recovery.*

Case 2. A merchant, about thirty-four years old, came to my office with the usual symptoms of moderately severe *diphtheria*. He was ordered to go home and to take syrup pure nascent acid one teaspoonful every two hours and to gargle every two hours with a solution of glyco-phenique—two teaspoonfuls in one glass of water. His temperature was 101 $\frac{2}{5}$ ° F.

* It is interesting to note that Dr. Ely visited this patient but three times. N. F. C.

On the following morning his throat seemed packed with membrane, both tonsils, uvula and soft palate being completely covered. Liquid food was taken with difficulty. Temperature 140° F. He was ordered to gargle hourly and continue the syrup every two hours. In six hours the membrane was found only in two small patches. Expectoration had been profuse. Temperature $102\frac{3}{5}^{\circ}$ F. Medication continued.

On the following morning found him with temperature 100° F.—membrane entirely gone, throat moderately sore. Solid food had been taken with relish. Up and attending to his business on the fourth day after his attack.

Case 3. A boy, of five years of age, was seized with rigor in the evening and immediately took to his bed. Headache, sore throat and aching of limbs were his complaints. Home remedies were used for a few hours, but growing worse I was called.

Found him with temperature of 103° F., pulse 120. Both tonsils greatly swollen and covered with diphtheritic membrane. Ordered syrup of pure nascent phenic acid a teaspoonful every three hours and gargle of glyco-phenique every two hours. On the following morning the membrane had extended considerably, involving uvula, soft palate and posterior wall of pharynx. Lymphatic glands of neck and cervical region greatly swollen. Temperature 105° F. Liquid food had been refused because it caused such pain and seemed to choke him. Ordered the syrup to be given hourly and the gargle to be used hourly.

That evening found marked diminution in the quantity of membrane. Temperature 102° F. Ordered remedies to be given during the night. On the following morning but little membrane could be seen.

Temperature 100° F. Food taken readily and with apparent relish. Lengthened interval between doses to two hours. On the next day my patient seemed as though another child. No membrane. Temperature normal. Wanting to be up and dressed.

Ordered continuance of remedies every three hours for three days. The fifth day after the attack he was walking about the house.

Complete recovery was made within eight days.

Case 4. A gentleman, about thirty-seven years of age, had suffered for sixteen years with caries of the femur, had been operated upon eighteen months before with temporary relief. For several weeks past had been growing more feeble and had a marked increase in the discharge of pus from two or three suppurating points high up on the hip. There had been within two weeks prior to my visit a still greater increase in the amount of pus discharged, amounting to three pints daily, also in the number of sinuses, some fourteen being counted between the hip and ankle.

One of the most distinguished surgeons in the North-west had been in attendance, and two days before my call had said the patient could not live over two days, as *pyæmia* had set in.

On the day of my first visit his temperature was 104° F. Pulse 130; very thready and intermittent. No discharge from the sinuses. Skin dry and hot. Great restlessness, and cadaveric appearance and odor, which was not encouraging to say the least.

Before phenic acid came into my hands I should have considered such a case hopeless. I determined to give it a trial, and ordered syrup of pure nascent phenic acid, a teaspoonful every three hours; hypodermic injections of the pure nascent every two hours,

and an application to the part of two per cent. solution of glyco-phenique.

On the following day the temperature had fallen to 103° F., the only change apparent.

On the next day the temperature was 101 $\frac{3}{5}$ ° F. Pulse 110, and not intermittent. As my old school friend had prognosticated that his demise would occur on this day, I felt encouraged to believe my patient would agreeably disappoint him. On the following day temperature the same, pulse a trifle stronger and a slight discharge were the encouraging symptoms.

From this date on my patient improved. Diminution in temperature being followed by large discharges of pus, which soon grew less in amount and at this date is trivial in quantity. The sinuses have all closed but two, and he is about on crutches, waiting for cool weather for an operation to remove the remainder of the diseased bone. The entire period of antiseptic medication in this case is about ten weeks. It is proper to add that Boudreaux's proto-chloride of iron has been administered with the express sanction of Dr. Déclat.

C. F. ELY, M. D.

Prof. Hall's Report of Cases.

CHICAGO SURGICAL INSTITUTE,

July 28, 1882.

N. F. COOKE, M. D.,

Dear Colleague:—In compliance with your request I cheerfully give you my limited experience with phenic acid since you first called my attention to Dr. Déclat's preparations, in April last.

First, then, let me state that I have been pleased to find that I can use it in many ways, and in many cases where I have been unable to use the carbolic acid of commerce. Since the 14th of April I have given over three hundred hypodermic injections of the phenic acid without a single unpleasant result save a slight soreness felt for a short time at the point of injection.

The ailments in which I have found it to be most serviceable are the following, viz. : Ulcers of all kinds, diseases in which there is disintegration or transformation of tissue. All troubles arising from septic conditions, glandular enlargements, zymotic diseases, pernicious fevers, etc.

The following are some of the cases in which I have seen the beneficial effects of its administration :

Case 1. My first case was one of osteo-malacia, of one year's standing, in a lad aged fourteen. Admitted to the Chicago Surgical Institute April 12. Had been bed-ridden for fourteen months. Limbs drawn up; unable to bear his weight on his feet. The pelvic bones seemed to be the most sadly deformed. The superior and inferior planes had approached to within one inch of each other, the coccyx resting nearly against the promontory of the sacrum. The boy was pale, sallow and emaciated, although at times he had a ravenous appetite. Assimilation very imperfect, attended with a low grade of fever. Great hyperæsthesia over the whole surface. April 15, we began the administration of phenic acid, which has been continued with slight interruption up to the present time. Patient has been rubbed daily with alcohol. General health much improved; able to walk around with aid of crutches.

In this case the phenic acid was given internally three times daily. June 15th patient was discharged convalescent. Since that time the improvement has rapidly continued.

Case 2. Frank D., aged nineteen. When quite young, suffered with rachitis and Pott's disease of the spine. The worst anugular curvature in the dorsal region I ever saw. The thoracic viscera were sadly displaced, apex of heart beating in the left lumber region three inches below the scapula. Came to the Institute the first part of May. Large abscess of the left hip joint. Has been under the influence of phenic acid for four weeks with improvement.

Case 3. A case of indolent ulcer of left leg of twelve years standing. Patient was an inmate of Hahnemann Hospital where she had been under treatment for three months with very little improvement. Six injections of phenic acid were given, followed by marked improvement in condition of ulcer.

Case 4. Came to Chicago Surgical Institute Nov. 19, 1881, suffering with pernicious osteo-myelitis. Both bones below the knees involved. Several fistulas between knee and ankle discharging a thin, ichorous, offensive pus. He was also suffering with morbus coxarius and Potts' disease of the spine. We had removed a section of tibia and fibula of the left leg, which demonstrated the nature of the complaint. This filled in by rapid granulation, but refused to heal. The 20th of April he was taken with diphtheria. Twenty-four hours after first symptoms, tonsils were enlarged and heavily covered with exudation. The uvula was enveloped as though a rag had been wrapped around it. The membrane arching up the back part of pharynx to nares—extending down the larynx so as

to interfere with voice. Act of deglutition nearly suspended. At this point we began the use of phenic acid internally and locally. At the end of twenty-four hours the disease was apparently arrested. At the end of the second twenty-four hours exfoliation of the membrane was well advanced. The patient was convalescent on the fourth day following. Considering the temperament, dyscrasia and general bad condition of our patient at the time of this invasion and the severity of the attack, we were both surprised and pleased with the action of phenic acid. After his return home he was under Dr. Weirick's charge. The doctor reports July 15th. "The limbs are entirely healed."

Case 5. Miss Dora M., servant girl. Very severe and rapid invasion of diphtheritic fever. Tonsils enormously enlarged covered with a dirty, yellowish-gray exudation. For two days under the influence of other remedies but steadily growing worse. Unable to speak. Phenic acid used, and in four days was convalescent. The acid was used internally and locally.

Case 6. Miss E., aged 14. Tubercula pulmonum. Right lung solidified—lower and middle lobes. Vomica in upper lobe of left lung. Hectic fever. Colliquative diarrhœa. Copious purulent expectoration. No change or benefit derived from usual remedies. Has taken nascent phenic acid three weeks. Expectoration changed, containing more mucus than pus. Night sweats diminished and diarrhœa improved. June 9th the patient went to Brockport, N. J., but the remedies were continued. July 15th the patient reports her general health much improved. No sweats, bowels regular, cough less day times but troublesome at night, expectoration less, gaining flesh.

Case 7. Mrs. D. Cancer of the breast. Came to Chicago Surgical Institute April 23rd, for operation, which was performed on May 9th. Right breast wholly removed. Patient placed under the influence of phenic acid. Wound healing rapidly. still under treatment.

Case 8. Mrs. G. F. T., aged sixty-nine. Carcinoma of right breast. Admitted to Institute May 19th. Breast amputated and under treatment of phenic acid. Wound healed. No evidence of return.

Case 9. Mr. W. G., aged fifty years. Came to Surgical Institute May 14. Carcinoma of the rectum, involving the gland and rectum. Too far advanced to warrant an operation. Phenic acid prescribed. Under its influence the general health was much improved. Pain which before was unbearable was much relieved, and the bowels which for sometime had been obstinately constipated became regular. So great was the improvement that he felt able to attend to his business, which had been long neglected. July 13th he was taken suddenly with cholera-morbus,—fell into collapse and died in 48 hours. In this case the nascent phenic acid was given four times daily and one hypodermic injection of sulpho-phenique given at bed time.

Case 10. Mrs. ———, aged forty-two. Psoriasis circinatus of two years' standing, involving the knees, sacrum and elbows. This case has obstinately refused the best directed efforts and carefully selected remedies for two years. She has been under the influence of nascent and iodo-phenique. The sores have been washed with the glyco-phenique and dressed with tar plaster and cotton packing. Under the influence of these remedies the case improved steadily until the sores disappeared leaving only livid spots.

Case 11. Mrs. E., aged thirty-eight years. For five years has suffered great pain from a tumor in the right hypochondrium. This tumor was about the size of a pippin apple and situated about midway between the point of the eleventh rib and the umbilicus. The bowels were obstinately constipated, the countenance pale and pinched and the appetite poor. Her mother died of carcinoma. April 20th began the use of phenic acid hypodermically, giving one each day. July 20th the tumor was diminished more than half its size. The bowels became regular after two weeks use of the acid and have remained so up to the present time. The appetite is better and the general health much improved.

Case 12. Mrs. R., aged thirty years. For two years has suffered with irritable ulcers, situated on either side at the base and on the frenum of the tongue. Many modes of treatment had been tried and failed. The ulcers increased in size, became indurated, and enlargement of the adjacent lymphatics became quite marked. June 10th she was placed under the influence of nascent phenic acid, three doses daily. In addition the ulcers were treated locally with glyco-phenique and a hypodermic injection of sulpho-phenique given once daily. July 27th the ulcers were entirely healed, the glandular enlargement reduced, and the patient's general health much improved.

I could add many more cases where I have witnessed beneficial results from the different pheniques. One feature that I have noticed I desire to mention: In all cases in which I have exhibited the remedy, if constipation has been present this condition has been immediately improved.

In short, I am sure we cannot dispense with this valuable agent in the treatment of many surgical diseases and operations.

Yours fraternally,

G. A. HALL, M. D.,

2131 Wabash Avenue.

In closing this work, which has already outgrown the limits originally intended, it would be pleasant to add a table of miscellaneous cases in which the system has demonstrated its efficacy far beyond our most sanguine expectations. It is believed, however, that its sphere of action is already plainly mapped out. In all ulcerations it is well nigh supreme. In tendencies to purulent formations it rapidly brings about the reparative process. In pyæmia it "works a miracle."* In degenerations of tissue, in diseases attended by rapid disorganization of the blood, in "blood poisonings," in the chronic results of mercurial and arsenical poisoning, in fistulæ, sinuses, etc.,† and in all surgical operations and their subsequent management, in short, wherever a parasitical cause can be supposed, there will be found phenic acid as the very ANCHOR OF HOPE.

* The surgical staff of the Alexian Brothers' Hospital, of Chicago report: "One very bad case of septicæmia has improved wonderfully."

† In this class of cases the pyogenic membrane has sometimes to be first acted upon by the caustic solution and the case afterward treated constitutionally.

Hay Fever.

This anomalous epidemic has been omitted from the body of the work, inasmuch as there was a lack of experience in its antiseptic treatment.

The unavoidable delay in the appearance of the volume may, perhaps, prove providential, as it enables me to announce the most gratifying results of the last fifteen days experimentation. The conclusion may be briefly summarized as follows :

Anticipating by a few days its annual recurrence the disease is preventable by the full Déclat method.

Well developed cases may be speedily cured by the antiseptic treatment. A partial treatment—dispensing with hypodermic injections—will often greatly relieve and, in a certain small per centage of cases will cure. This modified course, however, is not recommended.

In all cases where the partial treatment fails *the use of the hypodermic syringe is the only fair way to test the method.* Failure cannot be charged unless the full treatment is adopted.

A few cases of asthma have yielded magically to pure nascent and ammonia-phenate—internally and hypodermically.

APPENDIX.

Too late for insertion in the Introduction—where its great interest and importance would have placed it—I have received the following letter from our well known German fellow citizen, F. Baumann, Esq., Architect and Scientist.

PROF. N. F. COOKE, M. D., LL D.

MY DEAR SIR Prof Nægeli mentioned by Dr. Pettenkofer in his address, "*The Sanitary Relations of the Soil*," says in the preface to his works on "*The Lower Orders of Fungi*," that he has spent ten years of his life in the pursuit of this subject And that he was a man of letters, a scholar in natural sciences before he began these special studies, is told us by Dr. Hæckel, in his renowned work, "*The Natural History of Creation*" (German edition, 1873).

The work of Prof. Nægeli contains 285 pages, large octavo, and is profoundly interesting from beginning to end. It treats really of the one lowest order of fungi, which he denominates *split fungi* (Spaltpilze), and merely mentions the other two orders (mold-fungi and sprout-fungi) in their relations to the former.

I will endeavor to give, in my own manner, a few of the principal points contained in this work :

The split fungi are organic beings. They propagate with immense rapidity, doubling their number every ten minutes They are the toughest of beings, living hundreds of years in a dormant state (*contagional fungi*).

Their sizes are minute beyond ordinary conception, the smallest not being (as yet) observable under the most powerful

microscope. Their weight is extremely light, it being estimated that thirty millions times millions of the minutest of them would make up the weight of a gramme, while others might be three or four times heavier, if it be fair to employ here this term. To get a better understanding of the extreme smallness here mentioned it may be brought to mind that the weight of a sundust floating in the air, which is but just discernable by our vision, is estimated at twenty million pr. gramme, so that the weight of a split-fungus is but the millionth part of that of a sundust! *

Yet this (by our measure) infinitely small substance is not a molecule, as so repeatedly expressed by writers pretending to be scientific; it is a *living being*, a cell composed of millions of molecules.

There are thousands of varieties of these fungi, yet it seems impossible that there are really so many distinct orders. It seems more proper to assume that all spring from one order, changing conditions in accordance with circumstances which govern their *status nascenti*. The fungus, which is at the root of any one of the zymotic diseases, is substantially of the same order, developed under peculiar, though not yet observed, circumstances into the special form which shapes the disease. And since this fungus is ever slightly changed, as compared with its predecessors, it would follow that the disease of this year slightly differs from the same type of disease of the year previous. These constant changes are unquestionably ultimately the causes of diseases formerly wholly unknown.

The birth places of these fungi are the watery edges of sub-soil and the surfaces of swamps. When the water recedes they cling to the soil, to the reeds and grasses. They rise with the air currents, moving within the interstices of the ground, and, finally, get free into the atmosphere. Thence they may enter the lungs of some animal and generate or not generate disease, according as the conditions of the blood may govern, or else they keep floating in the atmosphere, there finding their end, in as much as they dry up and die.

They may enter the blood by way of sores or even the slightest abrasion of the skin, yet principally through the air

* 10,000 of these organisms could form a hollow square on the point of a cambric needle! or, the largest of them, could drive a coach and six (on the same scale) through the smallest pore of the finest leather without hitting a hub: N. F. C.

cells of the lungs. Within the blood they meet the blood-corpuscles. There, from circumstances not yet known, if they happen to be the more robust of the two, they cripple, step by step, and annihilate the corpuscles till death ensues. The status of the fever indicates the degree of the struggle. Recovery is possible only in case the energy of the body is heightened (as it naturally is), so that its blood corpuscles will sturdily overcome the advancing enemy, or in case the energy of the encroaching fungi is, through express treatment, positively decreased.

It is essential that the fungi enter the blood. They have no effect on the lining membrane of the stomach. Curdled milk, cheese and dishes of *haut gout* are crowded with fungi, yet they are eaten without the slightest consequences.

Carbolic acid is a means of stopping, not annihilating the life of the fungi. But this is all that is needed. If their propagating power were even merely impeded and not wholly stopped, the result would in a degree be the same—the blood corpuscles would conquer the fungi. Hence the immense benefit of the intelligent employment of phenic (carbolic) acid.

The split-fungi may be comprised under three distinct classes: (a) *Contagional fungi*. The smallest number may create a disease. Measles, scarlet fever, etc. may be brought on by inhaling a very few, perhaps a single one, of the fungi emanating from a diseased body. The same is true of cholera and typhus. A brief stay in the vicinity of a diseased person, or contact with his clothing may be fatal. (b) *Miasmatic fungi*. They must enter the blood in perhaps one thousand times greater numbers. Miasma is not transportable. In order to become affected with ague, a person must remain for a while on the spot where malaria rises. The fungi carried off in a current of air or with the bodily substances to which they become affixed, are too few to have any effect on the person by whom they might become inhaled. (c) *Rot-fungi*. They must again be in perhaps one thousand times greater numbers than the former to have any effect. Septic infection (pyæmia) is possible only when these rot-fungi enter the blood in quantities ordinarily perceptible.

The diseases made up by these fungi are of three distinct orders:

1. *Miasmatic Diseases*. These comprise the thousand different sorts of fevers engendered by inhaling, during certain

parts of the year, the fungi arising from a malarial bottom. There is no possibility of their being contagious.

2. *Contagious Diseases*, as small-pox, scarlet-fever, measles, diphtheria, etc. A few, or even one, contagial fungi of the class enter the blood and — if circumstances are favorable — create the disease. What the true nature of these circumstances is, can not as yet be told with any degree of certainty.

3 *Miasmatic-contagious Diseases*, as cholera, typhus, yellow-fever. A person must first have a certain miasma in this blood before the contagion coming from a diseased person can have any effect on him. This miasma is positively a product of the soil, and where there is a perfectly healthy soil, there can be, originally, neither cholera, nor typhus, nor yellow-fever. The city of Lyons, for instance, has a healthy soil from which no cholera miasma ever emanates. The result is that the city is wholly free from cholera. The disease may be brought there by refugees already having the disease and by other refugees coming in their contact having miasma already in their blood, but a person who has lived on that miasma-free soil is never attacked; contagion alone has no effect on him.

The Professor ridicules the belief that water has, or may have, the slightest infectious quality. He has made quite a number of interesting experiments which fortify his positive opinion, and he puts such belief among the mere superstitions of quacks. The fungi immersed in water can not and do not rise into the atmosphere, and if put into the stomach they have no sort of effect whatsoever. He mentions cities whose inhabitants drink, the year round, dirty, often stinking water, yet they keep hale and hearty. Many, very many, people of this country drink cistern water which is never free from quite large numbers of fungi, yet they like it and keep well. There is, however, this one reservation always in favor of *pure* water that among the healthy drinks it is unquestionably the *most healthy*.

There is yet a very interesting and instructive experiment which the Professor mentions, and which I can not refrain from describing, though I have extended this letter beyond the limits intended. The three different kinds of fungi are placed, each separately, in a solution carefully prepared. A drop from each of the three bowls is placed in a fourth bowl containing only a pure nourishing solution. The fungi seem to have here an

equal chance for growth. The fact is, however, that only one of the three kind multiplies. The mold-fungi and sprout-fungi do not grow, leaving the field entirely to the *rot-fungi*, until all the nourishment is consumed.

The experiment is repeated with this slight change that one half to one per cent. of tartaric acid is put into the nourishing liquid of the fourth bowl. Now the *sprout-fungi* grow and consume the nourishment at the expense of the other two kinds. The third experiment, with 4 to 5 per cent. of tartaric acid to the nourishing liquid of the fourth bowl, has the result that only the *mold-fungi* grow and eat up the nourishment, while the rot- and sprout-fungi get nothing.

There is a good deal of argument in these experiments which you will not fail to discover.

Very truly your friend,
F. BAUMANN.

Dr. Déclat sailed for France July 5th. Some days after his departure the following translation of his parting words appeared :

Phenic Acid in Fevers.

[From the New York Star, July 9, 1882.]

The subjoined answer to a criticism of the method of treating certain fevers by phenic acid, which appeared in the *Tribune*, was denied insertion in the columns of that newspaper. I appeal to you to give me the hearing which has been denied me by an assailant. It is surprisingly inexact to make me carry the theory that parasitic influence is the source of disease farther than my compatriot, Mr. Pasteur, for our studies were identical, and some of the experiments demonstrating the germ theory coincident. Whether the germs be, in most cases, the root and active cause of disease is no longer a problem of which Pasteur, Koch or I have the sole solution. Enthusiastic I may be in asking the enlightened attention of my profession to the subject, but I find that in this country seven-tenths of the current maladies are ascribed to malaria, and few physicians take the trouble either

to justify the assertion or to discover an agent powerful enough to grapple with the evil.

For me the discussion of these points is a threshing over of old straw. The incredulity of some of my American brethren was expressed in the early days of Pasteur's and my own discoveries in France. The experiments, however, conducted before the learned societies, were constant and conclusive, and European science no longer questions. There may be shades of difference as to the extent of the ravages produced by the parasites, and differences as to the universal application of the means I have suggested to combat them; but if any physician, desirous of relieving his practice from the charge of empiricism, will read the testimony of Pasteur, he will discover that the phenic acid and its compounds have been accepted by that savant as practically effective in destroying, root and branch, every form of germ.

Dr. Sands declares that carbolic acid has been in use in Germany, in the form of injections to counteract the symptoms of erysipelas; he himself uses Calvert's carbolic acid, which he holds to be satisfactorily pure. He further avers that it is absurd for me to claim that carbolic acid can only be used when prepared in my special way. This is a claim that I have never made. I only say that the acid must be chemically pure. He admits, however, that no doubt my acid is very pure, but that it does not produce favorable results. I will allow him all the weight that may attach to conflicting and inconsequent opinions of this sort. But he shows that, while using my discovery, he has not applied it scientifically or understandingly, or has replaced my pure preparations by imitations or bad ones. In fact, Dr. Sands uses phenic acid every day, and as I am the author of its application, he to that extent does honor to my investigations and labors, for it was I who introduced it into medicine and surgery. If, therefore, the Doctor admits the indispensable nature of the powerful antiseptic outwardly, can he consistently deny its efficacy in internal applications? The truth is that intelligent and educated practitioners now admit that exactly the opposite is the truth.

One of Calvert's preparations of carbolic acid is worth, in Glasgow, fifty cents, and he manufactures another which is worth \$3. These two acids cannot be equally pure.

Dr. Weir says: "1. I have observed at first some effect from phenic acid; but by and by its efficacy did not continue.

especially in septicæmia 2. As for tumors. it bore no good effect — only one case succeeded. but that patient was getting well spontaneously when Dr. Déclat took him under treatment. 3. I have four cases of cancer where this treatment is without effect. 4. The antiseptic method has no effect in erysipelas. 5. Dr. Lemaire preceded Dr. Déclat, and Dr. Lister propagated the method: Déclat, nevertheless has worked with it first."

I thank Dr. Weir for conceding this much at least, but I cannot accept sayings, for they are inexact First — Let Dr. Weir publish his observations, signed by those responsible for them and with a record of the daily temperature, and I will show him in what respect they are faulty Second — The patient who was getting well "spontaneously" of his tumor and his enlarged glands was to be operated on the 10th of January (so far as can be gathered from what the patient writes me), and it was on the 5th of January that I first saw him. It is the only patient whom I treated myself, and when I saw Dr. Weir with the invalid the Doctor forgot to tell me that the patient was getting cured "spontaneously". It is true that at that moment neither the tumor nor the ganglia had yet decreased in size

Let Dr. Weir publish the cases at Bellevue Hospital and I will show him the facts. For the moment let me cite one On the 5th of June I was requested to visit a physician of New York suffering from facial erysipelas for the fifth time During each preceding attack he had remained in bed for three weeks. Twice he had had abscesses. On the 7th of June, his wife wrote me of his wonderful improvement, and on the 9th or 10th he came to see me in my office to thank me for the complete cure that had taken place. The gentleman so soon, and to him so marvelously, cured, has given the details of the case in the *Courrier des Etats Unis* of the 21st of June.

Dr. Weir says that Dr. Lemaire preceded Dr. Déclat. I defy him to prove his assertion, or to publish a single authentic and incontestable fact preceding the 30th of November, 1881. On that date I made a public demonstration of the arrest of gangrene by the use of phenic acid in one of the hospitals of Paris, in presence of confrères and professors, most of whom are still living.

Dr. Peters urges that if phenic acid was of any good what soever it would have been known long ago and that it would have been used. Dr. Peters will allow me to relate a little story.

In the time of Louis XIV. there existed men, and even a few doctors, who permitted themselves to cure intermittent fevers by the use of Peruvian bark. There was great disturbance in the medical profession, a few cures having made quite a noise. A meeting was followed by a decree from the faculty which excluded from the medical body whosoever should use the Peruvian powder. Louis XIV. was attacked with malaria. His doctors not being able to cure him, a charlatan did so; and immediately a new decree, by order of the King, to all physicians to use Peruvian bark. Without being too sure, I think, nevertheless, that Dr. Peters would have submitted to the edict of Louis XIV., for I wager that more than once in his life he has prescribed that cure-all which is called quinine.

As for the opinion of the doctor who did not give his name, I will tell him that there is a doctor in Brooklyn, highly esteemed by all, who imposed upon himself the duty of preparing chemically pure drugs. His confrères appreciate very well his preparations. Would it be for me a crime to imitate Dr. Squibb in the preparation of some substances which I have studied for the last twenty years, and others, the combinations of which I have invented?

From the use of even the best carbolic acid ordinarily obtainable, very serious accidents might occur, and were I not to protest against its use, the responsibility for these accidents might be charged to me, and the work of my life might thus be destroyed. I think that I am perfectly justified under the circumstances in authorizing the preparation of the acid under my name, as the sole guarantee I can have of its purity,

The practical American good sense will answer for me. I would not like to think that in 1882, in the United States of America, the Greek expression noted down by Hippocrates, and which has been handed down to us from century to century, be still true and that one may say about me: *Invidia medicorum pessima.*

DECLAT.

The Germ Theory.

[From the Chicago Times, June 7th.]

The question of the germ theory of diseases raised by recent discoveries involves a great deal more than a mere quarrel among different schools of medicine. If that theory lacks

foundation, as some of the Chicago doctors want us to believe, it is quite obvious that we are squandering a great deal of money on boards of health, quarantines are useless, and our exertions against the spread of epidemics a foolish waste of time. But if the experiments of many able investigators show the truth of that which was until lately a mere presumption, it must be acknowledged that we are on the threshold of discoveries which will revolutionize our methods for the prevention and the cure of the most dreadful diseases. Therefore, a plain statement of the question in its present status may not be without interest to the public, and even to some of the disciples of Esculapius.

Stripped of all useless technicalities, the problem is this: Some diseases are transmissible from the sick to the healthy. How do they originate and what are the means of their transmission?

So long as it was not admitted that the functions of life are governed by laws as well as the other phenomena of nature, people recognized in disease the result of a direct intervention of the Deity, the manifestation of divine wrath, or a trial for the soul. The remedy? Sacrifices and prayers offered before the altar, and presents left at the feet of the priest.

After the revival of the spirit of inquiry, it dawned on the minds of some that after all even the most dreadful epidemics may be the effect of natural causes. That was a step in the right direction, but a fruitless one, since it gave birth to the notion of intangible, immaterial, almost unknowable forces called aura, contagion, and miasma, being beyond the reach of man. And to-day how is it? Well, in this month of June, 1882, let us go to Paris and knock at the door of that classical hot-bed of scientific discoveries, the High Normal School. Now, we are introduced to Pasteur, the half-paralyzed septuagenarian* who has revealed to our century the infinitely great role of the infinitely small, both as causes of disease and agents of decay and restoration to the atmosphere of all that which has lived. He shows us into a small, very warm room. A thousand or so of vials contain there the germs of virus of dreadful diseases, enough to kill all Paris, to start the dire scourge in the very heart of the gay city: a Pandora box, an Æolian cave. What is

* Apparently, not really. Mr. Pasteur is but 60.

he doing with such a collection? A visit to the kennel will tell you. Says Pasteur "Before me it was believed that hydrophobia is transmitted only through the saliva, and people were astonished that some dogs bitten by rabid ones should fail to catch the disease. I have found the virus in the nervous system, A drop of it introduced into the brains of a healthy dog surely gives him the disease, and he dies after fifteen days. In man the period of incubation is from thirty to forty days. Death never fails to follow the inoculation of pure and fresh virus. There may be an escape from it if the virus is altered by the bacteria of the air. In those yonder cages," continues the illustrious chemist, "you see roosters and hens, rabbits, guinea pigs, mice and monkeys. I inoculate them with all the diseases which may be epidemic. That rooster that hoots like an owl has got the cholera; here is a piteously-bleating sheep with the epidemic fever; behold the monkey swinging to and fro seemingly rejoicing at the misfortunes of others—we gave it the yellow fever two days ago; this dog wants to lick your boots—it is in the period of depression preceding the explosion of hydrophobia—its death will occur in four or five days; its neighbor will see the end of its sufferings the day after to-morrow." And Davaine, Chauveau, Villemin, Klebs, Buchner, and Koch paved the way for Pasteur, or are adding their quota to his results.

Now, what is this virus? Evidently not mysterious, imponderable fluids impossible to capture, since they can be bottled up. It consists of a liquid holding in suspension small particles of disorganized tissues mingled with microscopic living forms. In a masterly lecture, which every student should read and learn as a model of scientific method and sound induction, Chauveau shows that the morbid properties of virus reside neither in the liquid part nor in the debris of tissues, but only in the microbes or bacteria, as they are now called.

It must be understood that there seem to be numerous specie of bacteria so closely resembling each other that the microscope is not sufficient to distinguish them. But their physiological effects are characteristic. The common bacteria, which exists almost everywhere, is harmless; at any rate it is found even in the cavities of healthy animals and persons. The intestines contain a great many, which, working upon the chyle, must of necessity modify it, and we can easily conceive that an excessive multiplication of those beings may, to a great

extent, modify the nutrition of the body. I expect that some form of dyspepsia will be traced to that source.

In spite of what is said to the contrary, consumption is transmissible, and is the work of parasites. So is leprosy. Several other diseases are doubtful yet. Some of these germs may live a long time in the ground or at the surface. The atmosphere is a vehicle of transmission, but not the most potent. The start is given, many obscure points will be explained, and there is an encouraging hope that methods of treatment suggested by this theory may be more rational and efficient than those now used.

M. DELAFONTAINE.

Consumption and the Germ Theory.

[To the Editor of the Chicago Tribune.]

No sooner do the sages of Chicago and its suburbs annihilate one set of scientists than another more formidable still confronts them. The following from the *Comptes Rendus* of the French Academy of Sciences (session of May 22, 1882) now requires their attention: Page 1,391 "Experimental Pathology. Inoculability of Tuberculosis by the Respired Air of Consumptives. Report by M. Giboux "

"In a dissertation before the academy at its session of Nov. 25, 1878, I demonstrated, experimentally and clinically, the noxiousness of air expired by consumptives. Wishing to verify my first researches, I have continued my experiments with the view of ascertaining whether the infected air contains the disease germ given off by the consumptive, and whether it would not be possible to deprive it of that germ—that is, to render it non-infectious "

After carefully describing the apparatus and methods used in the experiments—which were made upon four young rabbits but a few days old, "born of healthy parents." (of which fact he assured himself by killing and examining the latter) Mr. Giboux continues: "From Jan. 15 to April 29—105 days—I daily introduced into box No. 1 20,000 to 21,000 c c of air expired by consumptives. . . . I served box No. 2 in the same way precisely, except that I caused the expired air to pass into the box through a wad saturated with phenic acid renewed at

each introduction of infected air. These experiments also lasted from Jan. 15 to April 29. During all this time the rabbits in box No. 2 exhibited nothing abnormal, while those in box No. 1 experienced loss of appetite, intense thirst, listlessness, diarrhœa, and emaciation." The rabbits in both boxes were killed on April 29 and dissected on the same day. "The two occupants of box No. 1 had tubercles in the lungs, liver and spleen, though the pulmonary lesions were much more advanced than those of the other organs. On the other hand, the rabbits of box No. 2, exhibited no organic changes. They were eaten at my table with relish by myself and family in full knowledge of the experiments which had been conducted. The flesh was as good as that of other animals of the same species."

The above experiments—referred by the French Academy to the "Committee on Medical and Surgical Prizes"—are hereby referred to those gentlemen (and ladies) of the profession in our Yankee land who strive to belittle everything they do not themselves understand.

They are especially commended to those professors in medical colleges who, too cautious to be caught in print, are daily declaiming in private to their admiring clients that the germ theory is a delusion and that phenic acid in safe quantities is not a germ killer.

NICHO. FRANCIS COOKE.

Reports taken from Medical Journals.

In the *New York Medical Times* (Homœopathic), for June, 1882, Dr. James R. Wood says: "Dèclat's experiments, continued for a quarter of a century, deserve a closer attention than they have received; for his efforts to destroy disease germs by direct attack met with brilliant success.

The best *carbolic acid* of our chemists being pronounced *impure and unsafe*, only Dèclat's solutions, prepared under his instructions by Milhaus, of New York, were used in the following cases:

Of its use in scarlet fever, wherein Dèclat holds it invaluable, little can be said in this paper, as the only case treated was of a malignant type in a child of indomitable will, who resolutely refused all food and medicine; the diphtheritic symptoms decid-

edly improved, but the child finally died from cerebral complications.

In malarial fevers it is certainly useful.

One patient who had suffered for more than a year, when seen during a paroxysm of intense fever with pulse 140 and violent headache, had 200 minims of a two per cent. solution of *phenic acid* injected under the skin of the abdomen; and within 15 minutes the pulse fell to 96 and a pleasant sleep followed. After this a tablespoonful of syrup of *phenic acid*, containing one per cent. of the acid, was given the patient three times a day, and within a week he was in good health, spirits and appetite, although remaining in a malarial neighborhood.

Another patient came under treatment, who for six years had been feeble and depressed in spirit from chronic malaria of the kind commonly called "dumb ague;" never having had a distinct chill or fever. He had visited Canada and various other places without benefit; 200 minims of the two per cent. solution were injected hypodermically in the cellular tissue of the abdomen for five successive days, using the syrup internally as in the previous case. At the end of this time he looked and felt bright and well. Similar cases were treated by a friend with the same result in each case.

In tonsillitis "*iodo-phenic*" gave relief and seemed to prevent suppuration.

Several cases of diphtheria made good recoveries where *phenic acid* was used with a local application of a 20 per cent. solution of *chloral hydrate*. Children constantly exposed to the contagion were kept under the influence of *phenic acid*. In one of these, although extensive membranes formed, yet no unpleasant symptom attended, the child appearing otherwise well.

In a case of axillary abscess "*iodo-phenic*," while not arresting suppuration, did much to quiet pain and fever.

By the use of the *phenic acid* influenza improved rapidly in several instances; also the dull headache from exposure to bad drainage.

Pulmonary diseases in some cases were benefited. A friend related a case with cavities, purulent expectoration, debility, excessive night sweats and cough, where "*sulpho-phenic*" promptly checked these symptoms, and the patient was able to return to business.

In cases of childbed and typhoid fevers, erysipelas, carbuncle, excessive suppuration, pyæmia, and the like, we may expect from it valuable help.

Where the temperature is not reduced by the simple *phenic acid*, the *ammonia-phenate* should be substituted.

This paper is necessarily crude, as the cases are of recent date. Another paper more carefully prepared will be given if this one proves of any interest. Better information may be found in Dr. Corrigan's valuable paper in the *New York Medical Record*, March 11, 1882."

In the August number of this same journal Dr. Wood continues: "While in chronic malarial diseases, phenic acid has proved of value, thus far in the trials of the last few weeks, its use in acute intermittents has been most unsatisfactory; being both tardy in action and temporary in effect, the fevers returning whenever the remedy was suspended. In one case, however, it gave an excellent result; an infant suffering from an intermittent fever with entire loss of power in both legs, was given fifteen drops of the syrup iodo-phenique every three hours, when both the fever and paralysis disappeared and the child improved in general health; but unfortunately for the purity of the experiment the little patient was thoroughly rubbed with salt water daily, and the homœopath is blind, indeed, who has not seen the efficacy of salt in intermittent fevers. During the administration of phenic acid in three cases of chronic malaria, distinct intermittent fevers developed. In the cases of long standing it has been very remarkable that the true marsh miasm has been without exception quickly cured; whereas, the cases originating in the city have been troublesome to benefit with phenic acid. In one case of severe erysipelas, the ammonia-phenate acted with surprising power. A gentleman, weighing nearly three hundred pounds, was found on the first visit in a deep stupor from which he could be aroused but for a few moments at a time—temperature 105, pulse 120, respiration 44, with erysipelas of one leg spreading upward. He was ordered the syrup ammonia-phenate. Contrary to directions, a desert spoonful was given every half hour for fourteen hours, so that the dangerous dose of about forty grains of pure phenic acid was taken by the sick man within fourteen hours; yet no symptom of poisoning appeared, except a cough with expectoration

of blood, which quickly disappeared by reducing the doses to once in three hours, and giving belladonna and phosphorus and plenty of water. Within sixty hours from the beginning of the attack, temperature, pulse and respiration were normal, and the erysipelas rapidly disappeared. The year previous a similar attack kept him confined for six weeks."

In a report of a clinical lecture at the St. Francis Hospital, N. Y., we find the following remarks on the use of phenic acid by the attending physician, Dr. Shrady: "In several cases in which an internal antiseptic seemed to be indicated, and notably in such as were the subjects of profuse suppuration with attendant constitutional disturbances, Dr. Shrady has used the acid phenique (carbolic acid) internally and hypodermically, according to the method of Dr. Dèclat of Paris with quite satisfactory results. He has employed mostly the syrup iodo-phenique (Dèclat) and the nascent acid phenique (Dèclat). The former in doses of a teaspoonful every two hours, and the latter in quantities of eighty minims injected daily in the cellular tissue of the abdominal walls. In two cases the effects were quite striking. One was a woman worn down by suppurating disorganization of the knee-joint, and who had irregular chills and high temperature and other symptoms pointing toward septic infection. The thigh was amputated under the most unfavorable conditions, general and local, with hardly a hope for ultimate recovery, and after the first forty-eight hours all the bad symptoms disappeared under the administration of the syrup iodo-phenique and the patient ultimately left the hospital cured.

The other case was one of long-continued and extensive suppuration from an open and burrowing iliac abscess. The patient has been bedridden for months, and altogether was in a prostrated and helpless condition. In the course of two weeks under antiseptic treatment, internally and hypodermically, his general condition improved, his appetite returned, and the discharge became very much reduced. At the end of six weeks he is able to hobble about the ward, the sinuses are healing, and the amount of pus secreted has been reduced from a pint to scarcely half an ounce."

Dr. J. F. Corrigan of South Grange, N. J., in an article in the *Medical Record* for March 11, 1882, speaks of phenic acid thus: "In zymotic diseases, in those terrible emergencies which arise sometimes from poisoning by animals, from dissection wounds, in congestive chills and in similar dangers, the most direct and logical course of arresting the fermentative process is by the immediate introduction into the circulation of an efficient antiseptic liquid. In 1861, Dr. Dèclat had begun his system of the internal administration of phenic acid in the Infirmary of the Brothers of St. Jean de Dieu, of Paris. In 1863 he solved the problem as to its hypodermic employment. It was there that the eminent surgeon Maissonneuve saw its application and results, and adopted it in his clinical school of La Pitié, and in the Hospital of the Hôtel-Dieu.

At that period the majority of physicians were firm in the conviction that the subcutaneous cellular tissue could not admit more than thirty drops of any solution whatever at one time and place. Consequently, as phenic acid, though really an alcohol, is somewhat caustic, it seemed that in that quality there dwelt a material impossibility.

To overcome this it became necessary to determine two questions: first, in what strength the solutions would no longer be painful and injurious, and second what quantity of liquid the same tissue would admit without inconvenience.

After numerous experiments upon animals and also on his own person, he ascertained that the subcutaneous cellular tissue would easily admit, in favorable parts of the body, as many as a hundred drops in a solution containing two per cent. (two grains) of pure phenic acid.

Two to three injections a day, sometimes only one, will often be followed by more marked results than when fifteen grains have been given by the mouth.

There is sometimes, though rarely, as an immediate effect of hypodermic injection of phenic acid, a temporary intoxication, passing off in a few moments. No dangerous results are known to have ever occurred where the remedies used were pure, the syringe clean and the injection properly made.

The parts most suitable for hypodermic medication are the inner sides of the arms and thighs, and the front of the chest and abdomen. The latter, however, is the place of election. The needle should be exceedingly fine, and have a flat, bevelled end,

so that the irritation from the puncture should be as slight as possible. It should penetrate far enough to reach the cellular tissue. Sometimes a small, hard mass may remain, occasionally tender, especially in stout patients, but the minor effects disappear in a few days.

To sum up the indications for the employment of phenic acid and its combinations: in slight sickness, in malaria, and in many chronic diseases the preparation of pure phenic acid should be used.

Whenever fever is present, as in zymotic diseases, the combination with ammonia is indicated, either alone or alternately with the simple acid.

The use of the combination with sulphur has already been referred to.

Hypodermic injections of the various preparations should be resorted to where a more rapid and thorough effect is needed, whether in adults or children. In many cases both methods should be used.

For external use the acid may be mixed with glycerine and water, the acid being in the proportion of ten per cent., and applied locally in diseases of the throat, etc. This preparation may be added to enemas, using fifteen to forty-five grains for this purpose, may be mixed with equal parts of oil and well shaken with it, forming a very pleasant and useful application in burns, etc., or may be further diluted with water in the proportion of one part to twenty or fifty of water, and thus employed for gargles, for washing inflamed surfaces, for vaginal injections, etc.

For inhalations, the dry emanations or water solutions in form of spray should be used, the latter not stronger than one-half to one per cent. of acid. There seem to be no counter-indications to the use of phenic acid, nor does it interfere with any coincident medication.

The very numerous cases given in foreign publications of the good effects of these remedies, attested by many physicians, encourage the hope that by their use a great advance may be made in the practice of medicine. *It is most respectfully suggested that the medical profession examine into the truth of the system, and report results, whether good or bad, that can be clearly traced to the action of chemically pure phenic acid."*

At a meeting of the New York Surgical Society held May 9th, 1882, a paper on the use of phenic acid was read by Dr. L. M. Yale, from which we make the following extracts, and would call the attention of the needy to the remarkable case of pyæmia following amputation of the leg cured by the use of this wonderful agent:

“The claims urged by Dr. Déclat for his preparations of phenic acid are probably familiar to all the members of this Society. During and since the visit of Dr. Déclat to this city, a few cases have been treated after his plan at Bellevue Hospital. The following case treated by Dr. A. J. Magnin, House Surgeon of the Second Surgical Division: one is a case of pyæmia, treated during the service of Dr. Weir; one a case of high temperature (probably septic) attending compound fracture, complicated by delirium tremens, treated during my own service; and the remainder are cases of erysipelas, treated by Dr. Magnin in the detached erysipelas service. With the exception of one case of puerperal septicæmia, one of erythematous erysipelas and one of lymphangitis, all were successful in result. These are all the cases treated in the Hospital, strictly according to Dr. Déclat's method, of which I am aware. Some cases have been treated partially or imperfectly. I have not considered these, because it seems only fair to any plan of treatment or its proposer that the method should be strictly followed.

The injections were given warm and introduced into the subcutaneous cellular tissue. When this detail was observed, no inconvenience followed in any instance. On a few occasions attendants unfamiliar with this point, gave the injections and abscesses resulted.

CASE 1.—*Compound fracture of leg—Amputation—Pyæmia—Recovery.*—Pietro D'Astee, aged twenty-five; Italy; laborer. Admitted December 12, 1881, to Ward 9. Patient was brought to city by train from Haverstraw, where he was employed, working as a laborer on the railroad. An embankment had given way, and he had been struck on the right leg by a heavy mass of falling stones and earth.

Examination.—Both tibia and fibula were fractured about 2½ inches above the ankle (right leg). A large lacerated wound situated on the outer side of the limb communicated with the site of fracture. There was some comminution, but the fragments were not displaced nor loose. The wound was rendered

as aseptic as possible; drainage tubes were inserted in such a manner as to insure evacuation of all discharge, and a full Lister dressing was applied. The limb was then placed in a fracture-box.

December 14th.—Temperature 101° . Discharge has come through. Dressing was renewed. Wound looks well. There is a large contused surface on inner side of leg, which looks as if it were going to break down and leave a large slough.

December 20th.—Since last account there have been variations of temperature from 100° to 104° . There is no reaction in the wound. A large slough has formed on the inner side. The foot is very œdematous and discolored. Several of the fragments have become loose and were removed. Frequent dressing, quinine, etc., do not control the temperature nor improve the condition of the patient. Pulse, 140, feeble and compressible. Sordes over teeth and lips. Has had considerable diarrhœa and profuse sweats. Lister is abandoned and open treatment resorted to, the wound being washed out with Bals. Peruv. four or five times daily.

December 24th.—Condition of the patient worse. The wound is one large slough. No reaction. Foot more swollen and discolored. Patient had a marked chill this A. M. Range of temperature from $99\frac{1}{2}^{\circ}$ to $104\frac{1}{2}^{\circ}$. Appearance of bed-sore over sacrum.

December 26th.—Leg amputated by Dr. Hartley. Open treatment resorted to. Transferred patient to Sturgis' Pavilion.

[The chart notes taken hourly from the day of amputation, December 26, 1881, to January 10, 1882, when the phenic acid treatment was instituted, give an unmistakable picture of pyæmia. The temperature averaged $102\frac{1}{2}^{\circ}$ to 103° F., the highest noted being $105\frac{1}{2}^{\circ}$ F., with two or three remissions. Once it was noted to be subnormal. In spite of the use of quinine, full diet, and the most vigorous stimulation, the condition became progressively worse. The history continues.]

January 10th.—Since last account symptoms have rapidly increased in severity. Patient had a marked chill on the 2nd inst., also the 5th, and a less distinct one on the 10th. Pulse is very feeble and rapid, despite active stimulation; countenance is anxious; teeth and lips covered with sordes; tongue brown and dry; stupor and muttering delirium are present. The stump is dry; no signs of granulations. Has had diarrhœa at intervals.

The skin is of a dingy, yellow hue. The bed-sore over the sacrum is very extensive, and covered with large, deep sloughs. Other sores have appeared over the crest of the ilium and trochanter on the left side. The patient has exhaustive sweats. It was decided on January 11th to transfer the case to a *medical* ward, the symptoms, according to Dr. Weir's opinion, pointing unmistakably to pyæmia. A fatal prognosis is given by Dr. Weir and confirmed by Dr. James R. Wood, who was called in consultation.

January 11th, 6 P. M.—Patient put under full Déclat treatment. Ordered 100 gtt. ammonia-phenate, hypodermically, q. 4 hr.; Syrup ammonia-phenate, $\frac{3}{4}$ ss. q. 3 hr.; whiskey, q. 1 hr.; Tr. ferri chlorid., $34\frac{1}{2}$ M xv. q. 3 hr.; Tr. digitalis, M v. q. 4 hr. Stump and bed-sores dressed with olive oil and glyco-phenique, equal parts, q. 12 hr. Ordered urine to be examined q. 12 hr. for sulphates. The hypodermics are to be warmed and injected carefully into the cellular tissue over chest and abdomen.

January 12th, 6 A. M.—Temperature, 103° ; pulse, 128. 12 M.: Temperature, 102° ; pulse, 130. 6 P. M.: Temperature, 103° ; pulse, 110. Same orders have been carried out. An extra injection was given during the morning and in the evening.

January 13th, 1 A. M.—Temperature, 99° ; pulse, 120. 11 A. M.: Temperature, $98\frac{1}{2}^{\circ}$. Same orders repeated. There is no change in the condition of the patient. The stump and bed-sores have not improved in appearance. The pulse is yet rapid, but somewhat firmer. 4 P. M.: Temperature, 100° . 6 P. M.: Temperature, $100\frac{1}{2}^{\circ}$. 9 P. M.: Temperature, $100\frac{1}{2}^{\circ}$. Pulse, 9 P. M., 104.

January 14th, 1 A. M.—Temperature, 102° . Hypodermics to be given q. 2 hrs. till further orders. 6 A. M.: Temperature, $100\frac{1}{4}^{\circ}$. 10 A. M.: Temperature, 101° .

The patient is stupid. No change in the condition of the wounds. Seems to experience some pain over points where injections have been given. Pulse, 130, and very feeble. No chill. Profuse sweats. Hypodermic continued, q. 2 hr. Other orders repeated. 6 P. M.: Temperature, 100° .

January 15th, 6 A. M.—Temperature, 101° . Same orders carried out. No improvement except that the pulse is stronger (100). 6 P. M.: Temperature, 100° ; 11 P. M., $100\frac{1}{2}^{\circ}$.

January 16th, 5 A. M.—Temperature, $99\frac{1}{2}^{\circ}$; Pulse, 112. 12 M., 100° ; 6 P. M., $99\frac{1}{2}^{\circ}$. This P. M. sulphates are absent from

urine, which is quite dark in color. Hypodermics to be given q. 4 hr. only. Other orders repeated.

January 17th, 5 A. M.—Temperature, $99\frac{1}{2}^{\circ}$; pulse, 112. 12 M.: Temperature 100° . 6 P. M.: Temperature, 100° ; pulse, 100. The pulse is stronger. Patient seems to be delirious still. He has one normal passage, copious every A. M. Sulphates are still absent.

January 18th, 1 A. M.—Temperature $99\frac{1}{2}^{\circ}$; 12 M., 99° . Sulphates have reappeared. Tongue is less coated than six days ago. Sweats less profuse. No change in the appearance of wounds, except that the sloughs over sore of the sacrum are clearing. 6 P. M.: Temperature, $99\frac{1}{2}^{\circ}$.

January 19th, 6 A. M. - Temperature, 99° . 10 A. M.: Temperature, $100\frac{1}{4}^{\circ}$; pulse, 100. The patient is less stupid. There is some discharge from the stump. Pulse still feeble. Orders the same. 11 P. M.: Temperature, 100° .

January 20th, 3 A. M.: Temperature, $99\frac{1}{2}^{\circ}$; 6 A. M., $99\frac{1}{2}^{\circ}$; 8 P. M., 100° ; 11 P. M., 101° . Hypodermics to be given q. 3 hr. Syrup, whiskey, iron, and digitalis as before.

January 21st, 6 A. M.—Temperature, 99° ; 10 A. M., 100° ; 6 P. M., 100° . Hypodermics have been given only q. 4 hr. since morning.

January 25th.—Since last account temperature has been continuously between 99 and 100° ; pulse, between 100 and 120. The sordes are disappearing. There is considerable discharge from the stump, where granulations are appearing. The bed-sores are free of sloughs. Digitalis is discontinued. Hypodermics given q. 4 hr. Syrup ammonia-phenate, q. 4 hr. Whiskey and ferri chlorid, as before.

February 1st.—It is considered safe for the patient to return to a surgical ward. The bed sores are beginning to heal; the stump is granulating; the tongue is pink and moist. Pulse, between 80 and 100; regular and quite strong. The glyco-phenique is replaced by iodoform dressings. Hypodermic ac. ph. to be given q. 6 hr. Syrup ammonia-phenate, $\frac{3}{4}$ ss. q. 6 hr; tr. ferri chlorid., M xv. t. i. d.

February 6th.—Injections are discontinued. Syrup continued.

At the present time the patient's condition is as follows: Stump healed; bed-sore upon the sacrum, which was twice as large as the palm of the hand, now about the size of a dollar.

Appetite excellent, not to say voracious. Has been sitting up daily for some time. One afternoon, about two weeks since, the patient was noticed to be ill. He speaks no English, and made no complaint. He seemed dull, and his temperature was 104° . His urine was found to contain an abundance of albumen. This had never before been detected. The next day the fever had disappeared, and the patient returned to his usual condition. With the exception of the continued presence of albumen in the urine, although in somewhat diminished quantity, the favorable progress of the patient seems to have not been interrupted. Whether the albuminuria has any connection with the previous treatment is not known. During the time it was carried out no albumen was found.

Two points are worth noting in this case. First, the rescue of the patient from what seemed impending death from pyæmia. Secondly, the amount of phenic acid tolerated. From the morning of January 14th until the evening of January 16th—two and one-half days—he received hypodermically 2 grains of ammonia-phenate every two hours, or 24 grains per diem. In addition, he took by mouth, in the syrup, 22.4 grains per diem, or $46\frac{1}{2}$ grains per diem in all. At the end of these two and a half days the urine gave warning of approaching toxic symptoms, and the dosing was diminished.”

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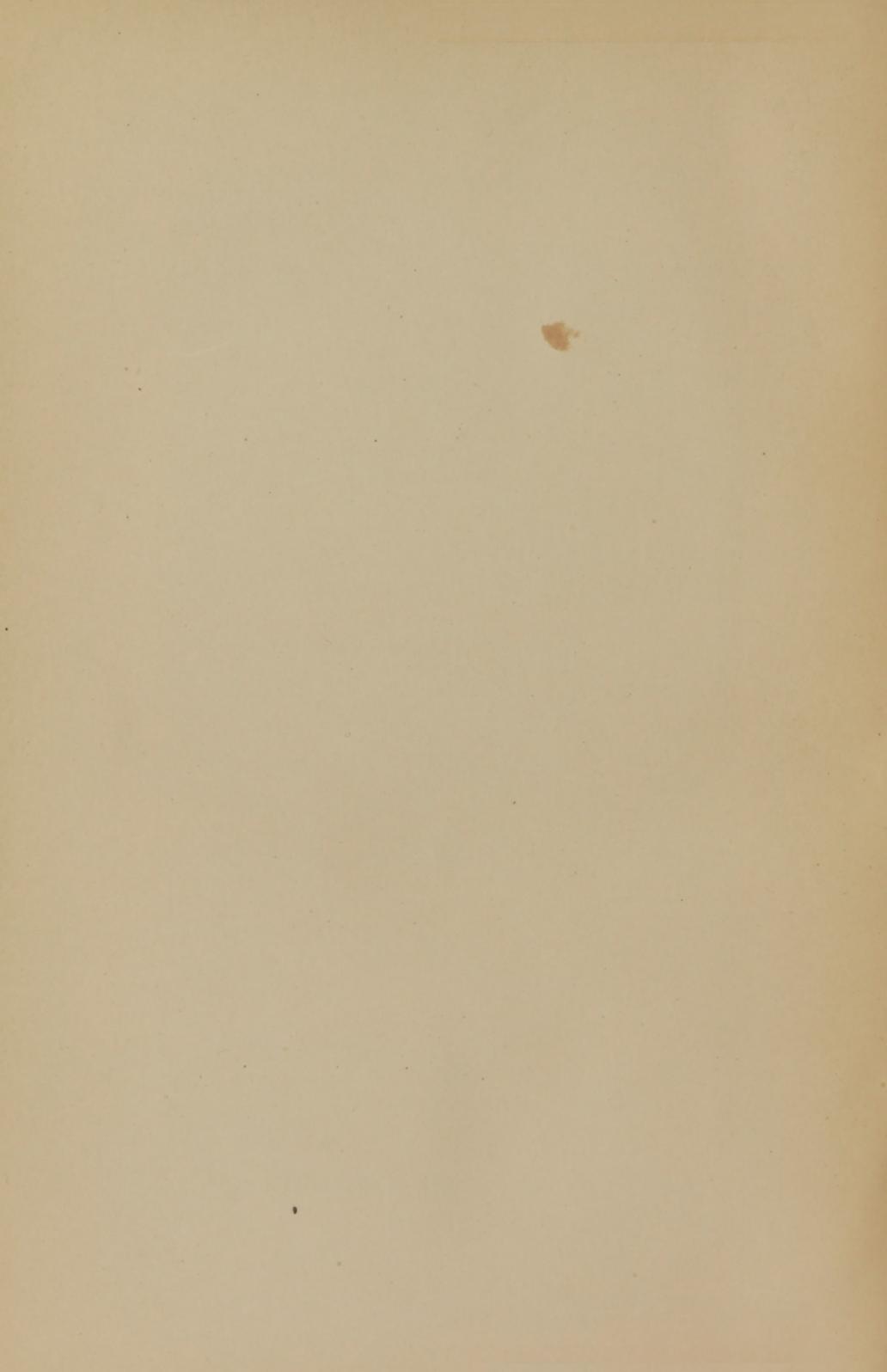
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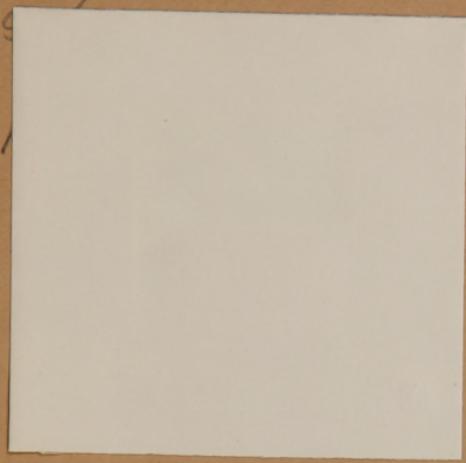
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