Address.

SPECIALISM IN MEDICAL PRACTICE; ITS PRESENT STATUS AND TENDENCIES.¹

BY F. H. DAVENPORT, M.D., BOSTON.

At the annual meeting a year ago the orator of the day gave some delightful reminiscences of this society, which had then completed fifty years of its existence. It was eminently appropriate that in a year which marked at once the society's life of half a century, and was at the same time the closing year of the nineteenth century, the address should have been retrospective and reminiscent. Its brilliant and sympathetic account of the men, now departed, who helped to make this society what it is, still remains in our memory. Since then we have entered upon a new era. A new century has begun with all its hopes and possibilities, and we stand as it were on a new height, looking back into a fruitful past and forward into an unknown future.

It is true that no violent convulsion of nature, no change in the harmonious laws which govern the universe, marked the birth of the new century. The closing day faded into the night, and the night gave place to the dawn, and the twentieth century had begun. Yet I venture to say that with the transition, however silent, there was in all of us a sense of change, a subconsciousness, if I may so call it, of a difference in our outlook upon life and its activities. Especially during the last decade we had been accustomed to characterize everything which was particularly novel or startlingly iconoclastic as *fin de siècle*, and with even a possible suggestion of decadence. Nor was this strange when we realize that our standpoint of comparison was nearly a hundred years behind us. We had grown old with the century, and the things we were doing were the fruits of what our forefathers sowed. The same things today when the new century is but just born and a hundred years stretches before us, with all its possibilities of marvelous development, are now the feeble expressions of a youthful energy, as yet untried. We are prepared to start anew and to work out on new lines, and in new ways it may be, the problems which are confronting us, and which will certainly come up for solution.

It seems to me appropriate, therefore, that on this, the first of a new series of annual gatherings, the keynote of what I have to say should be prophetic rather than retrospective; what we are doing and will do, rather than what we have done; and I therefore ask your attention briefly to some of the tendencies of medical practice and what our attitude towards them should be. In doing this it will, I am sure, be pardoned if I consider these tendencies from the standpoint of the specialist, and limit myself, as I must necessarily do in a short address, to a few of the many aspects of the subject, which have impressed me as a gynecologist.

¹ Read before the Norfolk District Medical Society.

In the first place, what is a specialist, and what should be his relation to general medicine? It has been said that this is preëminently the age of specialism. In a general way this is true; and yet specialism is as universal as society and as ancient as is the human race. It began as far back as the fall of man, when Cain showed an aptitude for farming, while Abel thought he could do better at sheep-herding. Since then its development has kept pace with the increase of knowledge and the density of the population. It has invaded all callings, and is as inevitable as growth; but its spread has been gradual and irregular. It has had its fluctuations, its periods of rapid or slow growth; and these have been influenced and directly measured by the two factors which I have mentioned above,—increase of knowledge and density of population. It has been most marked in those periods of the world's history which have been characterized by material prosperity, revival of learning and rapid growth of population.

Applying this idea to medicine, we see why the past half century has been called the age of specialism. The marvelous advances which have been made in the last fifty years in every branch of our science have so heaped up the facts to be learned that no man can keep abreast of it all. He has to choose some part which especially interests or appeals to him, and as far as possible make himself master of that. A single organ or group of organs and the diseases to which they are liable are sufficient to absorb the energies and tax the resources of a man, no matter how thorough his research or untiring his activity. He must, perforce, leave large fields of knowledge wholly untilled as far as he is concerned.

It is, therefore, perhaps not saying too much to affirm that all doctors, except possibly those practising almost alone in isolated rural communities, are specialists. If they call themselves general practitioners, they are so only in a limited sense; for they have in their own consciousness, and in the opinion of their fellow doctors and of the community, a special taste for, and skill in, the treatment of the diseases of some particular branch of their profession.

Even the exceptions quickly disappear. As the community grows and population increases, specialism becomes more and more marked. In our own old Colonial days, to quote a familiar illustration, with a sparse and impecunious population, one man had often to unite the two professions of preaching and physics, the care of souls with the cure of bodies. The minister was the doctor. Later, when the growing village could support both parson and physician, the latter had to be in the fullest sense of the term a *general* practitioner. Medicine, surgery, midwifery,—all were his departments; and he could truly say that his only specialty was diseases of men, women and children. As soon as the village and its neighborhood expanded sufficiently to give a decent living to two doctors, there was a beginning of specialism within the healing profession itself.

Dr. A was considered better in fevers, and Dr. B in childbirth. So the evolution would go on, the community growing and the guild of doctors increasing, until we have the stage of development at which we have arrived today, where in the larger towns and cities all the departments of medical practice into which our calling is divided have their representatives.

Face to face, then, with the fact of specialism, it becomes pertinent to inquire what is its future, and what should be our attitude towards it. In the first place, it has come to stay. It is a necessary phenomenon of progress, and cannot be ignored. Nay, I would go farther, and would say that it should be fostered and encouraged, for in this direction only is healthy growth to be attained. If this is so, it is perhaps not at first sight obvious why there should ever have arisen any question as to the benefits of specialism, or in what respect it may be dangerous.

It is a fact, however, that there is a feeling more or less prevalent that the limiting one's self to a special branch of study and practice does in some way have a deleterious effect upon that broad development which should be the ideal of every physician. Justification for any such feeling seems to me to lie in the fact that the practice of medicine is not an exact science, nor indeed ever can be. We deal with human beings,—complex organisms made up of body, mind and spirit; and the interdependence of these various elements on each other presents a variety of problems which can never be solved by scientific formulæ. The body and the mind react upon each other, and there are hidden forces which cannot be demonstrated, many of which are only recently being vaguely recognized, which nullify any attempt at exhaustive or even definite conclusions. In the close study, therefore, of any one set of organs, and the diseases to which they are liable, we are apt to ignore that a human being is a complex whole, of which no one member can suffer without involving the possibility of remote or general changes, both physical and psychical, in other parts of the economy.

The trouble, therefore, would seem to be not with specialism in the abstract, but with specialists. The principle is correct and beneficent; but in its application there is opportunity for narrow views and slack methods to creep in, and there is no doubt that the criticism referred to is in some degree well founded.

In the light of this it is evident that a broad basis of knowledge in general medicine is the very best preparation for the specialist. This should not be confined to the medical school, but should extend through the first years of practice. I am of the opinion that no encouragement should be given the students in our medical schools to choose special lines of study. They should be graduated with at least a working knowledge of all the branches of practical medicine. It may be said that there is not time for this, even in a four-years' course, and as the time is divided now that may be true; but I think it is a question which is not

yet definitely settled, whether too large a proportion of a student's time is not devoted to laboratory courses in branches which have a less practical than scientific value. Nine-tenths or more of all the students of medicine are to devote themselves to the task of treating disease, and the greater the knowledge gained by clinics, direct observation of patients, bedside instruction, and opportunities for diagnosis and treatment by the student himself, the better doctors of medicine we shall have.

Let the physician, then, in the first years of his professional activity be catholic in his practice. There are usually many opportunities, varied in character, for seeing and studying disease. Making use of these opportunities will broaden his outlook, increase his skill and ripen his judgment. More than that, his experience will show to him in what particular line his faculties are best trained and his efforts most successful. In that direction let him specialize, and become a specialist because he must. A man so trained will be the best specialist; and particularly fortunate is he who in a certain sense is made one by his patients from their recognition that in a certain class of cases he has exceptional success.

Such a training will minimize the great danger of specialism referred to: that a too exclusive study of one branch of a subject narrows the horizon and warps the judgment. The specialist is apt to look at a case only from a single standpoint. In an obscure case—for instance, of headache—into which a number of factors may enter, the neurologist will see some lesion of the nervous system as the underlying factor, the ophthalmologist eye-strain, the gynecologist some trouble with the generative organs. They may possibly all be right as regards the existence of the various factors, but the mistake will lie in exaggeration of their relative importance. Each specialist has a right to insist upon the value of what he has found abnormal towards the definite solution of the problem in question, and to that extent it is inevitable that his point of view must be limited. As some one has recently very aptly said:² "The specialist must, to a certain extent, become a narrow man in a general sense, in order to become at the same time an expert in a limited sense. Such is the paradox that confronts the medical man of the day."

The practical side of what I have been saying lies in the consideration of what may be done to counteract this tendency to narrowness which is conceded to be the greatest danger of specialism. The first remedy I have already pointed out. Let the student as far as possible in his four years get the most practical training obtainable in the whole field of medicine. Let the medical school send out doctors of medicine in the broad sense of the term: men fitted to treat intelligently the ordinary run of cases of whatever character.

Second, let the first few years of active practice be general: medical, surgical, obstetrical, and as far as may be, include even the more limited specialties—certainly as far as diagnosis is con-

² Philadelphia Medical Journal, Feb. 16, 1901.

cerned. Supplement this practice with reading, so as to keep in touch and sympathy with what is being discovered in the broad field of medical science. In the early years of a man's career, when the demands of private or hospital work are not as great as they will be later, there is time and opportunity for this, and the cultivation of this habit will do much towards counteracting the narrowness of vision which insidiously but inevitably tends to creep in.

Third, as a help toward the attainment of a broader outlook, I would urge the value of more frequent consultations. Theoretically this is not denied. It is recognized that two heads are better than one; but practically the advantage which might be gained by a consultation is neglected.

There are, perhaps, two considerations which are especially potent in this neglect; one is the underlying feeling that the wish for a consultation is a confession of ignorance; the other that one's hold on the patient is weakened when a consultant is called in. With regard to the first, there is nothing which is more evident to an honest man than the fact of his own ignorance, and the prompt and frank confession of it will injure him in the esteem neither of his fellow practitioners nor of his patients. There is no man, so unsafe to follow as he who thinks he knows it all, or if conscious he does not know it all, is too conceited to confess it.

The feeling that by bringing in a consultant there is danger of losing the patient has a certain hold upon the profession at large, and it is going too far to say that it may not sometimes be justified. The code of ethics provides against this; but beyond that law is the principle which should always be uppermost in all our professional work; namely, the good of the patient. Both parties should have that in view. If the specialist suggests some treatment which the family doctor can carry out perfectly well, it should be left to him; but if better and quicker results can be attained at the hands of the specialist, the management of the case should be cheerfully entrusted to him. No other course can commend itself to the conscientious man, and such an ideal of professional honor should be cultivated.

The conceptions of the claims of professional etiquette vary very much in different parts of the country. I think *we* are fortunate in living in a community where the standards of medical practice are high. There is a spirit of mutual regard, an absence of petty jealousy, an *esprit de corps* which to the same extent hardly exists in any other large city. I have often heard this testimony from distinguished physicians in other cities. Since that is so, may we not feel that the level of professional etiquette is too high to allow the fear of losing a patient to weigh against what our better judgment tells us may be for his or her good.

The conception of a consultation has imperceptibly changed in the last fifty years. In those days a physician "asked counsel" of some older,

wiser man. I like the old-fashioned term, which to my ears already sounds quaint. But a consultation today is more often a meeting of experts, who from different standpoints look at the case and supplement each other's lack of special knowledge.

So far we have been considering specialism in its general aspects. There are, however, certain features of the subject which have to do with gynecology which seem to me of interest, and for the consideration of which my own relation to that branch of medical practice must be the excuse. The story of the development of this specialty is an interesting one, but it has been often told, and I do not propose to more than touch upon a few salient points. Up to a time within the memory of some of us, the vagina was the only route by which pelvic diseases could be recognized and treated. Hence, the subject was practically limited to diseases of the vagina and cervix, and was in no sense broad enough to rank as a specialty. Inflammations and so-called ulcerations bounded the horizon of practice, and it was the day of the topical application of caustics and astringents. Then followed the era of the rise and development of plastic surgery, as applied to the repair of lacerations of the cervix uteri and the vaginal outlet, and the cure of vesico-vaginal fistula.

With the fresh impetus given to pathological research in the seventies, the true nature of the inflammatory processes in the pelvis and their results became known, and the coincident discovery and application of antiseptic principles made the successful treatment of these affections by the abdominal route a possibility. Then began the era of surgical gynecology, rapid in its development, alluring and seductive in its performance and brilliant in its results.

The first general application of this method was to the removal of ovarian tumors, easily diagnosed and inevitably fatal if left to themselves; and the story of thousands of women saved from certain death forms a chapter of medical history of which we may well be proud. The perfection of the technique, and the avoidance of peritonitis by strict antiseptic precautions made it possible to extend the bounds of pelvic surgery by the abdominal route, until today it is possible to attempt—I was about to say—anything. The removal of all varieties of tumors, the partial or total removal of organs, the rectification of displacements, the conservative treatment of these organs so vital to a woman's complete life, are the lasting results of this wonderful development. So far has this gone that the advance today is almost wholly in new methods and not in new operations. The live questions which now occupy the thoughts of progressive men are of this character: route of operation, whether abdominal or vaginal; methods of hemostasis; total removal or conservative procedures in the treatment of minor affections of tubes and ovaries; myomectomy or hysterectomy in cases of fibroids and the like.

How has this development of gynecology on new lines affected the opinions and practice of the profession? There is no doubt that it has stimulated the surgical aspect to the partial neglect and discredit of the nonsurgical. But that was to be expected; and it is a shortsighted and partial view which would look upon any exaggeration of one phase as permanent. What is more natural than that the glamor of a brilliant surgical operation, skilfully done, with the opportunity under ether of clearing up doubtful points, when offset against the slower, more uncertain nonsurgical methods, more or less blindly groping, should have gained the day? Hence there has been such an impetus given to surgical work that there has followed the inevitable reaction, and from all sides we hear a protest raised against unnecessary operating. That there is a basis for this protest, that there has been *some* unnecessary operating, perhaps much, in certain quarters, is undoubtedly true; but it must be remembered that it is only by the over-zealous insistence upon one side of a question that the germ of truth which lies at its heart is recognized at last.

While admitting, then, that there have been and still are performed unnecessary operations, I think it should be borne in mind that that is not synonymous with saying that they are harmful. In fact, I am of the opinion that this difference has not been clearly perceived, and that undue emphasis has been accorded to that prejudice in the lay mind called the "horror of the knife." I think the sober judgment founded on observation of patients before and after operation, when sufficient time has elapsed to allow the legitimate results to be apparent, would be that in the vast majority of cases no harm has resulted, and the patient is not worse for the operation. It may be true that a case of dysmenorrhea will in time be relieved by drugs, or a change in the mode of life; but if a dilatation is performed, though it may have proven unnecessary from the fact that it has failed to relieve the pain, it practically never makes the patient worse. A plastic operation on the cervix and perineum may not cure the backache and nervous symptoms which may have been wrongfully attributed to it, but it does not add to their severity. In the case of the removal of organs, as ovaries or tubes, the innocuousness of such operations cannot be so definitely taken for granted; yet even here I am strongly of the opinion that it is rare for the patient's condition to be made worse. The production of the artificial menopause is, to be sure, a shock to the system; but my own experience leads me to the belief that the rule is (to which there are undoubted exceptions) that the change of life thus prematurely and suddenly imposed is less disturbing to the general health, and the system more quickly recovers its equilibrium, than is the case with the natural menopause.

If this is so, it may, perhaps, be also taken for granted that the descriptions of the dire effects to women of removing these organs essential to menstruation and reproduction, the so-called "unsex-

ing a woman," have been exaggerated. It is only natural that so complete a revolution in the external manifestations of the generative system should at least have excited apprehension lest it should be accompanied by remote and far-reaching changes in her nature, but such fears are, I think, in the vast majority of cases unfounded.

Ever since these organs began to be removed for disease, exhaustive attempts have been made to prove the existence of serious ill effects from such operations, but the experience of any surgeon who has occasion to operate frequently, fails to substantiate this view; and even our neurologists and alienists, while they may see the exceptional cases, cannot attribute to this class of operations any very decided increase in nervous diseases. As I said before, it is the production of an artificial menopause, and it does not differ essentially from the natural change of life. I do not wish to be misunderstood in this matter, nor to convey the impression that I would advocate indiscriminate operating, because in most cases the patient is not made worse. On the contrary I would urge conservatism. No one would condemn more strongly than I do the performance of serious operations for trifling symptoms or slight pathological changes, and particularly the removal of healthy organs in young women for pain; but I do think that there is often an unreasonable prejudice — sometimes, I am sorry to say, encouraged by the medical adviser — against operative interference, when that would be the quickest and surest road to health.

The development of the surgical side of gynecology has therefore been a boon to suffering woman. It has rescued thousands of women from certain death, and relieved other countless thousands from years of invalidism. It has substituted for prolonged local treatment, which is too often merely inefficient palliative tinkering, with its strain upon the delicate nervous organization, a brief, thorough and practically safe method of effecting a cure.

Is there, however, no other side to this question? Is the welfare of our patients so perfectly secured by this preponderance of surgical methods that we may feel satisfied with the present status of the question? I am by no means convinced that it is. The danger, as I see it, is not so much that of unnecessary operations as that, blinded by the brilliant results of surgery, the simpler methods of gynecological treatment will fall entirely into discredit. There are signs that this is to some extent true. We read of the decline and fall of the pessary, and the inadequacy of local measures for the relief of even temporary functional disturbances. We forget to inquire into our patient's mode of life, environment and habits, and having detected some error of position, change of form, or variation in size, see that and only that, and fly to surgery for their relief. More than one well-known observer has hazarded the opinion that in the near future there will be no gynecologist as such, but the field will be divided up between the surgeon and the family physician.

That may be so, but not before the surgeon becomes a more expert diagnostician in minor pelvic disorders, and the family physician has both the time and patience to wisely apply the broadest principles of general medical and judicious local treatment to his cases. Be that as it may, the present danger is that even in suitable cases, if no surgical procedure can be thought of which can be justified by the conditions present, or the suggestion of an operation be not entertained, nothing will be done. The simpler methods will be despised and rejected, and with the dictum "either this or nothing," our patients will be driven to the alternative of suffering resignedly and patiently, or becoming ardent devotees of Christian Science or whatever latest fad is prevalent.

While, therefore, appreciating what has been done by surgery, and believing that the surgeon's knife, more often than is sometimes rather lightly maintained, is the cruel but necessary means to the restoration of health, I would yet make a plea for the humbler side of this specialty known as minor gynecology, and would urge a just weighing of its claims, a deeper study of its principles, and a keener appreciation of the importance to the woman of absolute health, not only in respect to the graver ailments which threaten to make her an invalid, but also the minor discomforts which at least render her incapable of living her complete life.

The general practitioner, the family doctor, can do much towards this end. There are countless minor ailments, inflammations, displacements and functional derangements which can and should be successfully treated, where the question of operation should not enter, and the consulting specialist should stand ready to help with suggestion as to methods, under control, it may be, from time to time. Such common interest in a patient may be ideal, but it is not for that reason unpractical or impracticable. It would result on the one hand in a strengthening of the doctor's hold upon the patient through an intelligent attempt to relieve minor discomfort, to prevent what at first may be trivial alterations in structure and function from developing into serious disease, and to recognize in time the necessity of expert advice, and on the other hand in a more healthy and cordial relationship between the attending physician and the consultant.

The one quality which in my mind stands out preëminently as essential to the well-trained specialist is judgment. This is of course true of a physician, no matter in what branch his practice lies. But inasmuch as the more obscure and the more desperate cases are the ones in which advice is sought, a judicial frame of mind is the one to be cultivated. The doubtful point is more often not the diagnosis, but the etiology and the treatment; and here the calm, sober opinion of a mind accustomed to take a broad view of all the facts and circumstances in the case, to weigh evidence and to clearly see the relation of cause and effect, is what is sought and prized.

That this attitude of mind can be encouraged and the training towards it started in the years of preparation in the medical school is true, but it is usually the result of experience, which can only be gained in the solution of problems and the decision of questions, for which the physician himself is wholly responsible. This emphasizes again what I said before as to the value of some years of broad, general practice before limiting one's work to a special branch.

A certain class of cases seems to me to require in a preëminent degree this matured judgment for their explanation. They are the cases where we find coexistent a train of nervous symptoms and evidences either functional or otherwise of disturbances of the genital sphere. They are familiar to us all. With loss of energy, change of disposition, a weakening of mental grasp, neuralgias in various parts of the body, disturbances of function, especially digestion and circulation, we find associated unmistakable proof of some trouble with the reproductive organs. The question that then presents itself for solution is the unraveling of the tangle, so that the true relation of cause and effect which underlies the complex whole may be found out. Is the threatened or actual neurasthenia the result of the local disturbance, or is the latter but one phase of the more general nervous affection? To such a problem one must bring all the powers of a trained logical mind. The dangers of a limited sphere of the specialist are here apparent. The neurologist will see in the backache and the dysmenorrhea and the menstrual headache only the expression of the overstrained nervous system, while the gynecologist will see in these symptoms the *fons et origo* of the nervous breakdown. Each sees but his own side of the shield. Nor does it contribute materially to the clearing up of the question to say that these are the extreme views, and the true solution lies in the mean between the two. Either may be right, but both cannot be; and each individual case must be analyzed in the light of the special features which are present. A careful study of the symptomatology in a large series of cases will be rewarded by a clearer insight into the true relation as regards cause and effect of these complicated problems.

The most constant factor that we find is a constitutional weakness of the nervous system. These patients are of the neurotic type; under favoring conditions, a healthy mode of life, appropriate environment, and absence of special strain they do very well, but the balance is very easily disturbed. Any mental strain, be it overstudy, care of an invalid, a sorrow or a disappointment, is sufficient to upset the delicately poised nervous system. The same is true of any physical disturbance. A displacement of the uterus, or an increase of the pain suffered at the menstrual period, may be the little extra weight which is just too much. The order of the appearance of the symptoms will therefore often give a clue to the true cause. If the local symptoms antedate the more distinctly nervous manifestations, they may fairly be looked

upon as a cause. Where, as is often the case, the order of events cannot be told, the marked increase of suffering at the menstrual epoch will be significant. In such cases the obvious course to pursue is to eliminate the local pathological conditions as far as possible.

On the other hand, where the symptoms which might suggest pelvic lesions are distinctly secondary in their appearance, are not markedly aggravated at the time of menstruation, and are not progressively more severe as time goes on, their causal dependence upon the general nervous state may be taken for granted. With this statement of the case, however, the question is not always settled. In many cases where there can be no reasonable doubt that the primary factor is the general nervous system, which has either caused disturbances of the pelvic organs or brought into activity local troubles which were latent and causing no symptoms before, the pelvic trouble becomes a secondary cause of such importance that no permanent improvement can be looked for until this is relieved. The nervous system is not able to throw off the incubus of the additional local disorder, and it is a weight which must be removed before lasting cure can be effected. A stormy menstrual period may undo all the good effect of three weeks' steady gain under appropriate general treatment, and the wise practitioner will first devote his energies to removing all such obstacles and smoothing the road to recovery.

I have rather elaborately detailed this class of cases, because they seem to me to illustrate well the character of the highest type of work which the specialist is called upon to do, and to emphasize the kind of training which is necessary to success.

At the beginning of my paper I suggested that it was appropriate that in the year 1901 what I had to say should be prophetic in character. I find, however, as I read over what I have written, that there is very little of prophecy in it in the restricted sense of the word, which is perhaps wise. He is a bold man who would attempt to foretell in any more than the most general way what the future holds for us. I find that I have rather tried to analyze certain tendencies of medical practice, to point out their advantages and their dangers, and to suggest in what ways the advantages may be secured and added to and the dangers avoided.

And yet in a certain sense that is prophecy; for do we not know that we must advance, and that progress must be along certain inevitable lines, and that if we resist the temptations to worship strange gods, if we keep clearly in our minds certain high ideals and consecrate our energies to their attainment, the results can be foretold? We cannot know all the steps which will mark that advance, nor the pitfalls which will hamper our progress, nor the bypaths into which we may be tempted to stray; but the results are certain. These results, which will come as surely as day follows night, are increase in knowledge in all

branches of our noble profession, greater opportunities for rendering unselfish service to suffering humanity, and cordial coöperation with each other in the great work which is our heritage.

Original Articles.

THE AFTER-TREATMENT OF OPERATION ON THE NASAL ACCESSORY SINUSES.

BY WALTER A. WELLS, M.D., WASHINGTON, D. C.

THE after-treatment of any operation, unfortunately for the patient, never possesses for the surgeon and his assistants that degree of attraction which attaches to the operation itself, or even to the preoperative stage of the case. With the operation professional interest ascends to a climax, from which the descent is all too sudden, and the interest, thereafter, may be said to be in inverse ratio to the length of time the patient persists in remaining uncured. Nevertheless, the reflective surgeon knows that much depends upon the manner in which the after-treatment is carried out, and if he be careful and conscientious as well as intelligent, and have the welfare of his patient at heart, he will personally supervise every detail of the after-treatment of his case.

An operation is generally judged from the circumstances only which are present during its execution, and is considered successful merely with regard to the finding of suppuration or other suspected diseased focus, or, perhaps, according to the skill with which the incision, the flaps or the sutures are made, and the other manipulation procedures are carried out. Many an operation, therefore, which is to the surgeon and the spectators brilliant, is for the patient an ignominious failure. To no class of cases do these remarks more aptly apply than those of operation upon the various accessory sinuses of the nose. There are cases which will get well promptly, no doubt; but, as every specialist knows, there are others which drag on, not for months only, but for years, to the great chagrin of the physician and discomfort to the patient.

Killian,¹ who succeeded in curing 22 of 36 cases of antrum empyema (61%), found that the average length of time required to bring about a cure was 82.6 days; 5 cases, however, required more than 2 months, of which 2 were nearly 4 months, and 1 was under treatment over 2 years. In 5 other cases no recovery, but only an improvement, could be obtained, while in 9 others the antrum disease remained unchanged. Some of these cases had been under treatment many months, and 1 for more than 4 years.

The cause or causes of the delayed healing,—or as it may be, even of its ultimate failure,—if not owing either to some inherent, diathetic state of the patient's constitution, or to local causes, must be attributed to the insufficiency of the treatment. The latter may be either of the operation itself, or it may be of the treatment subsequent. It is

¹ Munch. Med. Woch., 1892, xxxix, 51, 70, 88.