

# SURGERY, GYNECOLOGY AND OBSTETRICS

AN INTERNATIONAL MAGAZINE, PUBLISHED MONTHLY

VOLUME XXXV

DECEMBER, 1922

NUMBER 6

## THE PHYSICIAN AND THE SURGEON<sup>1</sup>

By HARVEY CUSHING, M.D., F.A.C.S., BOSTON

“WHY, in God’s name, in our days is there such a great difference between the physician and the surgeon? The physicians have abandoned operative procedures to the laity, either, as some say, because they disdain to operate with their hands, or rather, as I think, because they do not know how to perform operations. Indeed, this abuse is so inveterate that the common people look upon it as impossible for the same person to understand both surgery and medicine. It should, however, be understood that no one can be a good physician who has no idea of surgical operations, and that a surgeon is nothing if ignorant of medicine. In a word, one must be familiar with both departments of Medicine.”<sup>2</sup>

“No one can be a good physician who has no idea of surgical operations, and a surgeon is nothing if ignorant of medicine.” This, gentlemen of the College, is my chosen theme, and lest you think it a novelty of my own I hasten to add that the paragraph quoted is transcribed from writings which exist for us only in manuscript, since Lanfranchi, called the father of French surgery, who expressed this sentiment, lived two centuries before Gutenberg.

When one considers the healthy unification of Hippocratic medicine, why was there such

a difference in Lanfranc’s time, and must we admit that the difference he lamented still exists in ours? Does the shadow of the mediæval schism dividing medicine and surgery, and both from the church, which originated, history tells us, in a thirteenth-century papal decree forbidding the participation of the clergy in any procedure involving the shedding of blood—does the shadow of this schism still lie upon us? What difference, after all, is there between physician and surgeon except in the kind of cases each of them chooses to treat and in the variety of therapeutics applied? And in view of many centuries of separation, do we tend toward reunion or further separation? These are questions which concern in no small degree the very existence of this College.

### THE PHYSICIAN’S PROGRESS

We certainly have stumbled along widely divergent therapeutic ways, we lay physicians and lay surgeons. The great physicians of ancient days were first of all given over to a polypharmacy inherited from the Arabians, then to the Law of Signatures with its astounding botanical therapeutics, then to a period of heroic bleedings and purgings and sweatings. Homeopathy followed, and taught the profession a much-needed lesson, and finally cellular pathology and bacteriology came to revolutionize physic by arousing a

<sup>2</sup> Cf. Henry E. Handerson’s *Gilbertus Anglicus*. Privately printed. The Cleveland Medical Library Association, 1918, 77 pp.

<sup>1</sup> Presidential address before the American College of Surgeons. Boston, October 27, 1922.

profound skepticism in regard to the efficacy, whatever the dose, of most of the drugs abundantly prescribed for symptomatic purposes. This gave to the traditional practices a staggering blow, and the coal-tar products with synthetic chemistry finally closed the physic-garden, drove plants with a few notable exceptions from the pharmacopœa, and botany from the curriculum.

While all this was going on, much time was spent in evolving "systems" of therapeutics based upon bizarre interpretations of pathology which followed one another in succession, the Brunonian doctrine being one of the last, whereby diseases were either sthenic or asthenic; and a century and a half later we still hear "asthenic states" spoken of as ones which need supporting treatment by alcohol, so that even in these dry days the physician is privileged to prescribe the drug that was Brown's personal undoing, though he lived north of the Tweed.

It is an old saying that the wisest physician is he who knows the uselessness of the most medicines. Nevertheless, in an unfortunate alliance with the apothecaries, at about the time the surgeon was entangled with the barber, the eighteenth-century physician was accustomed to write prescriptions for patients he hadn't seen, while enjoying good company in the coffee-house. Some measure of common sense in matters therapeutic was finally knocked into the profession by the growing appreciation of the self-limitation of many diseases, by the success first of Hahnemannism, and, later, of other cults like Mother Eddy's which revived the therapeutic importance of a neglected principle well known in the Æsculapian temples—the influence of the mind upon body ailments, particularly when imaginary in large part, as so many of them are. Mr. Dooley once sagely remarked that "if the Christian Scientists had a little more science and the doctors more Christianity it wouldn't make much difference which you called in—provided you have a good nurse." And there is no doubt but that Florence Nightingale and her successors have also had much to do with modifying our modern therapeutics.

But the profession has not entirely regained

its therapeutic sanity under these benign influences. Those uncritical and poorly-trained physicians who live in glass houses and give welcome to the prescriptions of certain pharmaceutical establishments which elbow their way to our desks on leaflets and postcards, cannot throw stones at the laity who give no less a welcome to nature-healers, herbalists, chiropractors, bone-setters, patent-mediciners, and other charlatans beyond enumeration. Little wonder that the wiser heads, both lay and professional, have about come to the conclusion that we had better limit the number of students in our schools, and let a smaller number, better trained, devote themselves to the prevention of disease and, through public-health measures, keep the bulk of the community well in spite of itself, in much the same way that we protect our live stock.

#### THE SURGEON'S PROGRESS

While all this has been going on through the centuries, in physic, the surgeon was pursuing an entirely different way, independent of tradition and for the most part, be it said, in rather bad company. A handicraftsman, often a rude, uncultivated, and ignorant though practical fellow of itinerant proclivities, he was rarely utilized in the schools, and when so employed, merely as the tool of the more learned and socially more respected physician. He had broken away from established authority: he ventured to write in the vernacular, and sometimes to operate without the physician's permission. Indeed, he did many unorthodox things. However, he was greatly needed especially in time of war, as Charles V used Vesalius; as four successive Bourbons used Paré; Elizabeth, William Clowes; Charles I, Richard Wiseman; and, to give an example from more modern times, as Napoleon used Larrey. Thus he came to be respected at court, even though he was kept out of the faculties where he was looked upon with scorn not untinged with jealousy. An outcast both of church and profession, he finally climbed into professional and some measure of social esteem about the middle of the eighteenth century by way of the barber-pole. But his long and quarrelsome alliance with the Guild of Barbers, humiliating enough,

was peaceful when compared with the quarrels of the physicians and apothecaries.<sup>1</sup>

A short century after the surgeons succeeded in breaking away from this alliance with "barbary" and were readmitted into the schools on the same footing as the physician, there came Lister on the heels of Pasteur, to revolutionize, not only surgical therapeutics, but at the same time, by the introduction of surgical cleanliness, the very hospitals in which both physic and surgery are practiced. And so it has come about that while the physician today has busied himself in perfecting elaborate methods of diagnosis for many chronic disorders, he rather shrugs his shoulders over therapeutics, whereas, on the other hand, treatment by operative methods has developed amazingly, and there is no gainsaying that in the hands of some it tends to run away with itself as a therapeutic measure.

#### REUNION OF PHYSICIAN AND SURGEON

Thus, in very rough outline, the two main clinical branches of Medicine, long separated both socially and professionally, have grown in ways so divergent that the fact of their origin from a common stem has become obscured by an accumulation of therapeutic débris left by a succession, on the one hand, of theorists who, like the modern endocrinologist, may perhaps see the patient as a whole but through a mist, and by the modern surgical specialist who sees only a part, but that part so disproportionately he is tempted to remove some of it.

Should these therapeutic groups be allowed to riot in their growth unmolested, branching in all directions at will, or will they bear better fruit if grafted or fertilized or cut back remorselessly? All agree that the time is at

<sup>1</sup> Sir William Stokes in his Cavendish Lecture entitled "The Altered Relations of Surgery to Medicine" (Tr W. Lond. Med.-Chir. Soc., 1888, iii, 126-7), wrote as follows:

"... in the interests not only of the social, but also the scientific position of the surgical profession, the junction, such as it was, of these two corporations [the Surgeons' and the Barbers' Company] was undoubtedly a calamity, and it helped to give the physicians the vantage-ground which they occupied so long, and in which they were still further strengthened by an enactment made in Elizabeth's reign, prohibiting surgeons from prescribing internal medicines. As a proof that the inferior position, socially and scientifically, was maintained up to a comparatively recent period, I may mention as a fact which I learned from Mr. Colles, who informed me that his father, Abraham Colles, had stated that at the commencement of his professional career in Dublin, when a consultation on any important case was held, the surgeon was not as a rule permitted to be in the room where the physicians held their deliberations, but, after the consultation was over, he was informed whether his services would be required or not."

hand at least for some judicious pruning both in physic and surgery, and for the removal of sufficient rubbish to permit the main stem of Medicine and its roots of Science to be properly exposed and aerated. This process will be good for both root and branch, but more particularly will it benefit the branches if it has the effect of making the surgeon less of a pure technician and more of a physician, and the physician more capable of utilizing some of the minor procedures of surgery and with a better understanding of the major ones.

"In a word, one must be familiar with both departments of Medicine," and this is no less true today than in the thirteenth century or in the days of Hippocrates. By no means did Lanfranc, in the statement which has been quoted, mean to imply that physicians must practice surgery—merely that they will be the better physicians, the better their understanding of surgical therapeutics; and, on the other hand, that no surgeon should be regarded as qualified to undertake operative procedures who is not primarily and thoroughly grounded in medical diagnosis. A graduate in medicine may have a very wide knowledge of surgery or even be a successful teacher of the subject without necessarily being himself an operator, just as one may have a thorough knowledge of music without being a performer. So, also, there may be many activities in which a physician may engage, beneficial to his profession, without necessarily "practicing" or prescribing drugs.

However, when in common parlance we differentiate physician and surgeon we do so only on the basis of therapeutics, and, granting the same underlying knowledge of disease, this is all that separates from medicine proper, homeopathy and osteopathy and all the other therapeutic cults, each of which reaches some degree of sanity so soon as it undertakes to perform surgical operations, as in time it is inevitable each one of them should do. There is nothing homeopathic about the scalpel, and when surgery was permitted to creep into this doctrinaire school it was near its end. The osteopath and chiropractor and eclectic and all the others may beware of this, for so soon as they come to engage in surgery, then a thorough medical grounding will be necessary,

so that the natural end of all such cults is, that, dead or alive, they will become swallowed in time by the general profession, distasteful as the dose may be.

#### METHODS OF TEACHING

Unquestionably, what chiefly influences the direction of its growth is the way in which Medicine as a whole is taught—the way in which its various subdivisions are presented to the student, and the relative stress laid upon them. Whatever their spirit of altruism, most of our students enter the profession as a means of livelihood, and are likely to be influenced by what seems to them, given an ordinary degree of ability, to be the most likely road to an income-producing end, whether it be as a laboratory worker, or public-health official, or physician, or surgeon, or specialist of any sort. A disproportionate amount of teaching, or better and more personal teaching in one subject over another, whereby the student's interest is aroused and he begins to feel a certain amount of confidence in his knowledge, will inevitably lure in that direction the larger number.

The periodical turnover in our curricula is an evidence of the fact that faculties show a perennial dissatisfaction with existing conditions, and strive each of them to find the proper average allocation of subjects; little realizing that it makes no great difference—that the fault lies with us the teachers, not with the curriculum, for Medicine can be successfully taught from many angles if only students are properly stimulated and encouraged to observe and think and do for themselves. But what has become particularly apparent of late, is that the curricular tree has become overloaded by grafting upon the clinical branches an undue profusion of specialties, few of them of fundamental importance even though they doubtless bear fruit of marketable value which dangles before the student's eyes so alluringly that he is prone to forget, or to overlook entirely, the source of origin of the specialty in general Medicine.

There has been a great reaction against this, and our supposedly more progressive schools are engaged in lopping off a number of these clinical branches. Some schools, in-

deed, have come to pay so much attention to the root and stem that if we do not beware, the top will be cut back so far that there will be neither foliage nor fruit—no medical practice whatsoever—and thereby encouragement will be given to the growth of every conceivable form of quackery which will spring up around us as have the schools of the chiropractor, to fill the depleted ranks of the profession; and the indifferent public is probably worse off than it was before.

Reforms are often necessary, but there are no schools for reformers. They, like the physicians of the Middle Ages, are inclined to administer such drastic treatment that the object of the reform, whatever it may be, relieved of the existing ailment, is left subject to other and more serious ills. Much needed as he is, the reformer rarely advocates homeopathic doses or gives a chance for the malady he would correct to be overcome by natural processes. So far as our diminishing supply of family doctors is concerned, there are many who have come to feel that it would be better for us to send out after two years of clinical study alone, with some additional knowledge of public health, a group of men to be licensed as Bachelors of Medicine. They at least could attend to the ordinary ailments and health of the rural districts, where public opinion is largely made and from which legislation, detrimental or otherwise to the interests of the profession in its campaign for sanitary measures, is likely to emanate.

#### TEACHING WITHOUT THE PATIENT

It is a curious commentary on our methods, that while we have come to emphasize the importance of teaching the preclinical sciences by practical laboratory exercises so that the student may at least have some first-hand knowledge of the scientific method and may learn to interpret and observe for himself, we have tended, if not to abandon, at least to postpone, to the end of the course, these very methods so far as the clinic is concerned. To be sure, we have long outgrown the time-honored quiz as the basis of teaching, than which nothing could have been less practical. A student may know his textbook thoroughly, may, for example, give without hesitation,

when asked for them in an examination, all the symptoms of that vanishing disease typhoid fever, but if he has to utilize his own observation, senses, and wits, and dig out, himself, the essential symptoms and signs which make the diagnosis possible, he is so incapable of reversing his acquired mental processes that the idea of typhoid fever never enters his bewildered head. Only by prolonged contact with the patient at the bedside can he come to take a good history, to make a proper examination, to learn to separate the wheat from the chaff of the patient's complaints; all of which must precede the interpretation and the treatment of the existing disorder.

The so-called case system of teaching has become highly developed and popularized in certain schools—a diagnostic exercise whereby through the process of elimination and logic the predigested data acquired by a variety of people is presented for discussion and analysis. Such a method is excellent for training in the law, since in the legal profession one argues on the basis of authority and accumulated testimony, in accordance with which satisfactory judgments can be rendered and punishments meted out without even seeing the culprit. But the medical profession has long since broken away from dogma and authority, and though the case system, handled by a lively instructor, provides an interesting exercise in medical diagnosis far superior to the old-time quiz, when carried far, it has the great danger of making logicians of the students, rather than practical physicians. There is some danger lest the student be led to feel that it is unnecessary, for a diagnosis, to examine the patient oneself—someone may get the history, another make a physical examination, still others supply the X-ray findings, the laboratory tests, and so on, while all that the modern physician needs to do is to sit and expound, as did the mediæval anatomist while the barber did his dissections for him. Excellent as they may be, there is nothing practical about such exercises, and if overemphasized they are bad for both teacher and student—for the teacher because he gets out of the habit of making his own thorough examination of the patient; for the student,

who gets an impression that the diagnosis, which an autopsy may confirm or otherwise, is the only thing of importance, and treatment for the most part futile. Meanwhile the patients in their homes, in the dispensary, even those in the wards, would like to know what these professors who admittedly are having difficulty in telling without looking at the organs, what certain people died from, are going to do to relieve their individual backaches or troublesome coughs—and perhaps it would be just as well to go to a chiropractor next time. Indeed, it takes a good deal of explaining to make clear that a lumbar puncture, bismuth studies under the fluoroscope, a blood urea examination, metabolism observations, Wassermann tests, and electrocardiograms made by as many different people, most of them technicians at that, each in their several laboratories—that all these things are necessary preliminaries to the recognition of his malady. All too often, alas, the knowledge thereby gained fails in any way to make him more comfortable, or to prolong his expectation of life. The patient submits to all this and is very glad to know, in the abstract, that diagnosis has become a laboratory science which employs the modern principle of piece-work, and that the medical profession looks forward to the prevention of many existent diseases from which posterity will be exempt—but “meanwhile, doctor, what can you do to relieve my present discomforts so I may get back to work?” He is inclined like the Irishman to ask, “What has posterity ever done for me?”

#### THE HOME-TRAINING IN MEDICINE

The curriculum in all of our schools still retains one essentially practical clinical course to which attention may be drawn—a course forced upon us by boards of registration, else even this might be curtailed or lost. It exists in the case of obstetrics, for no student is allowed to get his degree unless he has actually, himself, supervised a certain number of confinements. Here is an actual test of the medical novice's resources, the one practical test of what he may be able to do in a possible emergency in a patient's home. Nor would any of us wish to see the students robbed of

this invaluable experience. On the contrary, it would be an admirable thing if the principle could be extended and every student, before his graduation, required, under the control and supervision of his teachers or the district physician of the community, to engage in an actual house-to-house practice, armed perhaps with nothing more than a clinical thermometer, a stethoscope, his fingers, and wits, supplemented perhaps by a microscope and a few aniline dyes. In this way he might learn something at least of the living conditions which modify the health of the people he now only meets in the dispensary, surrounded by all of the paraphernalia and instruments of precision supposed to be necessary for a diagnosis. It is a leaf one might take from the book of certain of the training-schools for nurses whose candidates must prove their capacity to engage in actual home-practice before they can qualify for a degree. One of our highly trained young physicians, long-time resident in a teaching hospital, recently confessed to me that he had just been through one of the most valuable experiences of his ten years of medical study. He had passed his summer on an island where was a large summer community, and in the absence of any local physician he had volunteered to hold office hours and prescribe for the needs of his fellow-sojourners, his principal armament being a thermometer, his microscope, some bandages, and a few simple drugs. Never before had his powers of observation and his common sense been so thoroughly exercised.

#### THE SURGEON IN OTHER COUNTRIES

It is a curious anomaly that the British surgeon taken as a whole is probably in practical ways a better trained physician than is the American surgeon, and yet he rarely possesses a full medical degree and is apt to pride himself on not being called a doctor. Here, on the contrary, the surgeon though graduated a Doctor of Medicine, not infrequently lapses into the state of being little more than a craftsman who, except for the external parts of the body, makes little or no pretense at diagnosis but expects the "internist," often without any expression of an independent judgment, to show him the way.

Different countries—indeed, different parts of the same country—vary greatly in the attitude of physician or surgeon toward their problems. This past summer, during an all-too-short service as *locum tenens* for Mr. George Gask at St. Bartholomew's Hospital, I have had a most illuminating experience which has left me with the impression that the British student gets a more practical clinical course, based upon far better training in anatomy and gross pathology than do most of our students, and that he is far less inclined to lean upon laboratory accessories in making his diagnosis. He, for a longer time and more intimately, is brought in contact with the 90 per cent of human ailments upon which complicated laboratory tests have no special bearing, and through practical experience is apt to arrive at a reasonably sound conclusion in regard to his patient's disorder and have a shrewd idea of the appropriate form of treatment. True, he may miss some of the more rare conditions, for which, after all, little can be done therapeutically—conditions which our students, with their vastly better laboratory facilities, might recognize in all likelihood. But, should we put side by side at work in a small town the average product of these two methods of teaching, I am inclined to think that the former would be the more resourceful, and exercise greater wisdom though possessed perhaps of less learning. And, after all, the strength of a profession, as of a nation, is represented by its average product.

#### CARE OF THE MINOR AILMENTS

One looks in vain in the curriculum for a course on the common sense treatment of minor ailments. It has been said by a wise and philosophical lay observer of the profession that so far as he can see, the only difference between the so-called "practical" doctor and the "scientific" one who has had a thorough laboratory training, is that the latter is more likely to cure his patients. But with all personal sympathy for this point of view, the community, particularly its rural portion, still has an enormous need for the common sense practitioner, who for his four undergraduate years, under careful super-

vision, has seen less of complicated laboratory methods and more of the handling of sick people afflicted with the common everyday minor injuries and maladies. Otherwise we shall utterly abandon this all-important work to quacks and charlatans, who may become very skillful at it, in spite of their chicanery. I am not at all sure but that, for most of our schools, some measure at least of the French system would be best, whereby from the very outset of their course medical students are brought in direct contact with patients, and the laboratory courses are given conjointly and possibly prolonged throughout the four years.

We must somewhere and somehow strike a middle ground between over-training in the laboratory and under-training at the bedside, or the reverse. Certainly at the present time our graduates—many of them at least—no longer feel that the rôle of the country doctor, or even the general practitioner in the town or city, is at all an alluring one, even a possible one, so dependent have they become on complicated laboratory findings in arriving at a diagnosis. Unquestionably, there is an economic element which also enters into this, for a training in Medicine at the present day is unduly long and expensive, entirely disproportionate to any possible returns to be gained from a rural practice.

#### STRESS UPON BIOLOGY RATHER THAN ANATOMY AND PATHOLOGY

The present stress laid in this country upon the preclinical laboratory courses, particularly those in chemistry and physiology, has without doubt greatly influenced the entire point of view of the physician, who must have a calorimeter and an electrocardiograph with a technician to operate them, if only to keep in fashion, little realizing that they are scarcely more than research instruments. There has been much talk about the modern physiological schools of physic and surgery, and I presume this means that it is less fashionable for the clinicians to grub in the pathological and anatomical laboratories than formerly. Anatomy and pathology just now appear to the unimaginative to have been thoroughly explored; the pioneers have taken the surface

washings, and rather than dig deep for gold we prefer to look elsewhere for novelties and chance findings.

The interest of the students in these two particularly essential subjects has unquestionably flagged, for they naturally reflect the attitude of their teachers. There is no better illustration of this than the fact observed in many hospitals, that the physician is less apt than formerly to follow his patients to the operating room, and appears to be less eager than in days gone by to have a view, during life, of the pathological lesion. His place there has been taken by the radiographer who is more often on hand to see his diagnoses confirmed or otherwise. This may be for the reason that the disclosures at the operating table relate to regional pathology, and the surgeon rarely exposes lesions which will enlighten those interested in blood urea, the Wassermann reaction, calorimetric or electrocardiographic estimations.

#### THE PHYSICIAN-SURGEON

Does this not mean that the surgeon has become the internist, or, put another way, that the internist (as the physician was once called) has come to do his own surgery? If this be so, it behooves the surgeon to accept the fact that he must be, primarily, a good physician,—and the physician, loth as he may be to admit it, that he has undergone a metamorphosis. A year ago this College gave an honorary fellowship to the professor of medicine of the University of Stockholm, who had evolved an operative method, entailing great skill, whereby the adherent lung may be completely collapsed in the treatment of pulmonary tuberculosis. A distinguished member of this College, whose name we perpetuate by an annual oration, first conceived the idea of putting the diseased lung to rest, but it remained for Professor Jacobaeus, a physician, to add a further and important step to the procedure by the intrathoracic division of pleural adhesions—a step which had not been undertaken even by so imaginative and radical a surgeon as was John B. Murphy.

This, indeed, was a very significant and unusual occurrence, but, properly interpreted, the giving of this fellowship was merely an

admission of the successful invasion of the surgical field by one who occupies a chair of medicine and the prompt recognition of his contribution by the surgeons. Similar therapeutic invasions of what was once "internal medicine" have been made by those who because they handle a scalpel and are willing to set broken bones are called surgeons, with no corresponding recognition, so far as I am aware, by societies of physicians.

There are, however, certain exceptions in the case, both of individuals and of special societies,—men who without disrespect are called surgeon-generals of army, navy, or marine corps, are apt to hold membership in societies both of physicians and surgeons, even though, like the lamented Gorgas, they may be essentially sanitarians,—societies, too, which recognize the inadvisability of confining their numbers to those averse or otherwise to a participation in surgery. The neurologists, for example, have opened their membership to so-called neuro-surgeons, to the unquestioned benefit of those who do, and those who do not, care personally to employ operative methods of treatment. It has made the surgeons strive to be better neurologists, and given the neurologists a better conception of what therapeutic contributions their surgical colleagues are capable of making. It enables both groups better to keep their feet on solid ground and there is no danger that the society will ever become so overrun by the surgeon as to let operative therapy fly away with itself and jump over the moon.

#### TENDENCIES IN PHYSIC AND SURGERY

May I indicate the direction of our present drift, as physicians and as surgeons, by citing two recent examples from my own clinic—they are extreme examples, I admit, but they will serve my purposes. Patient Number One was referred for diagnosis from a sanitarium which she had entered because of headaches, and where she had had a long and expensive sojourn. She brought with her a sheaf of records detailing special studies, made by different people, on her blood (even to the coagulation time), cerebrospinal fluid, stools, fields of vision, metabolism, alveolar air, and carbohydrate tolerance. It was an impressive

array of findings, all within the normal limits of error. The X-ray, however, had shown a "closed-in sella," and after a period of pituitary gland administration without benefit, she was finally advised to undergo an operation and sent here for that purpose. So far as we could determine, she was an overconscientious and overworked medical librarian greatly in need of a long-postponed vacation, who incidentally had been reading at odd hours a popular book on the ductless glands.

In contrast to this, let us turn to the surgeon-specialist and his outstanding fault, in that he often fails to see the patient whole. At the moment of this writing, Patient Number Two has entered the hospital—a poor fellow who for several years has been having frequent uncinete seizures, associated with a vivid olfactory impression. Meanwhile, he has had nine intranasal operations in separate sessions—a septal resection, ethmoids, sphenoid, and both antra opened and drained, turbinates removed, and finally all his teeth extracted. Of course we smell with our noses; the patient complained bitterly of a disagreeable odor, *ergo* nasal operations. What could be more simple? That he had during all this time an homonymous hemianopsia was not observed. It is a venturesome and expensive thing to consult a surgical specialist who does not see beyond his own—or his patient's nose. And this represents for all of us the great danger of surgical specialization, when carried to an extreme, whether it be in rhinology, gynecology, neurology, or what you will. And when the specialty removes itself from contact with general medicine and retires to an isolated hospital given over to a single class of cases it is a danger still more difficult to avoid. Indeed, a ward in a general hospital, so given over, may become no less a place of isolation with its inevitable narrowing tendencies.

A wise physician and teacher, in discussing internal medicine as a vocation, once said that "the manifestations of almost any one of the important diseases in the course of a few years will box the compass of the specialties." It is no less—perhaps even more—true of surgery, and for this reason I believe it to be fundamentally essential in a general hos-

pital, however inconvenient for the attendants, that conditions represented by the specialties shall be scattered in the wards among the patients still grouped under general surgery, so that staff, house officers, nurses, and students alike shall at least continue to have some due sense of proportion regarding general surgery and surgical specialization, and the relation of both of them to Medicine.<sup>1</sup>

#### THE RÔLE OF THE COLLEGE

This College of Surgeons in its short life has assumed some very responsible functions. It is playing a not unimportant rôle in international affairs by bringing together through the common bonds of professional interest the surgeons of this western hemisphere—of Canada, Mexico, and South America as well as of the United States. We have much to learn from each other. Another most important task it has undertaken is to improve, and in a measure to standardize the work done in our larger hospitals. The modern "Survey" with public ventilation of its findings is one of our most advantageous methods of bringing about reforms. So our hospitals, some seven hundred in number, which have over one hundred beds each, have been classified with the result that improved methods of organization have been adopted which have enormously safeguarded the patient—particularly the patient destined to undergo the hazards and aftermath of an operation. It has been an expensive and laborious task, this survey, but a task well worth while, and it is now to be extended so as to include the smaller community hospitals of over fifty-bed capacity, which are far and away more numerous.<sup>2</sup>

The College, too, has from the outset taken a vigorous stand against that abomination which prevails, it is said, in some parts of the country to such an extent that public confidence in the profession has been seriously shaken. It is a matter which bears some relation to these very trends of physic and sur-

gery which I have endeavored to make clear earlier in this address—the surgeon becoming a pure operative technician, incapable of making a diagnosis—the physician, impoverished in therapeutic resources and with so poor a conception of surgery that he will let out his patient to the lowest bidder willing to operate at his dictation, and divide the purse.<sup>3</sup> This takes us back to the abuses of the Middle Ages. It is an abuse which could not possibly exist in any community if the surgeon was trained to make his own diagnosis and if the physician would refuse to employ a surgeon incapable of arriving at an independent opinion regarding the necessity or advisability of an operation. For such a surgeon is apt to be equally neglectful of what is often the most important part of every surgical procedure—the after-treatment. The physician who lends himself to such a practice is in the position of one who prescribes a dangerous drug to his patient without knowledge of its dosage or action, for there is no drug in the pharmacopœa so dangerous as misapplied surgery.

It seems to me that it would not be a bad idea if in our tests of eligibility for fellowship in this College—tests which not only are those of moral and professional character but of operative experience and skill—we should demand something more than the mere report upon a fixed number of major operations successfully performed, but should require, as well, information as to whether the diagnosis of these cases were the result of the candidate's own personal observation, or whether they were made for him by another.

We have seen that the present trends affecting the physician and surgeon are, on the one hand, toward preventive medicine and good nursing which lessen the importance of drugs in therapeutics; on the other, in surgery, an ever-increasing subdivision and specialization which tend to magnify the importance of mere handicraft. Prevention, it is true, can also be applied in surgery. Many industrial accidents can be prevented: the rule of safety first can be followed; there would be no more gunshot wounds if fire-arms and war were abolished; if we can finally stamp out tuber-

<sup>1</sup> I do not know whether a proposal that my medical colleague and I exchange places for a few weeks each year will ever be acted upon, but we at least hold a conjoint visit of the medical and surgical staffs once a week, and thereby endeavor to see *Medicine* whole, and to encourage our students to do so.

<sup>2</sup> It may be noted that 75 per cent of the one-hundred bed hospitals had adopted by 1921 at least the minimum standards of acceptability, whereas in 1918 only 13 per cent of the 692 hospitals surveyed had been accepted.

<sup>3</sup> It is significant of the success of some of the activities the College has engaged in, that laws against fee-splitting have been adopted by many State legislatures.

culosis and eliminate cancer there will be far less for the surgeon to do. If women did not have children, if people did not drink, if we could only keep the policeman off his feet, the housemaid off her knees, the miner off his elbows, the aviator out of the air, the boys away from football; if all children in goitrous districts were given a little iodine, there would be less need for the surgeon. But we do not yet live in the Isle of Utopia, and however much the need of the physician may be lessened through the agency of preventive medicine, by eliminating disease as typhoid has been largely eliminated, and yellow fever, and as malaria can and will be, and many nutritional disorders and perhaps goiter, the surgeon will continue to be needed and I cannot see but that he must become a better and better physician.

When physicians acquire a more intimate knowledge of surgery, fewer people in need of operative procedures will be turned over to the surgeon too late, after delays caused by an inordinate number of unnecessary laboratory procedures. When surgeons are required to have a thorough grounding in general medicine before practicing their handicraft, fewer unnecessary operations will be done and many of the evils which exist in their professional relationship with physicians will be eliminated.

All of which has been said as well and much more briefly by Lanfranc: "No one can be a good physician who has no idea of surgical operations, and a surgeon is nothing if ignorant of medicine. In a word, one must be familiar with both departments of Medicine."