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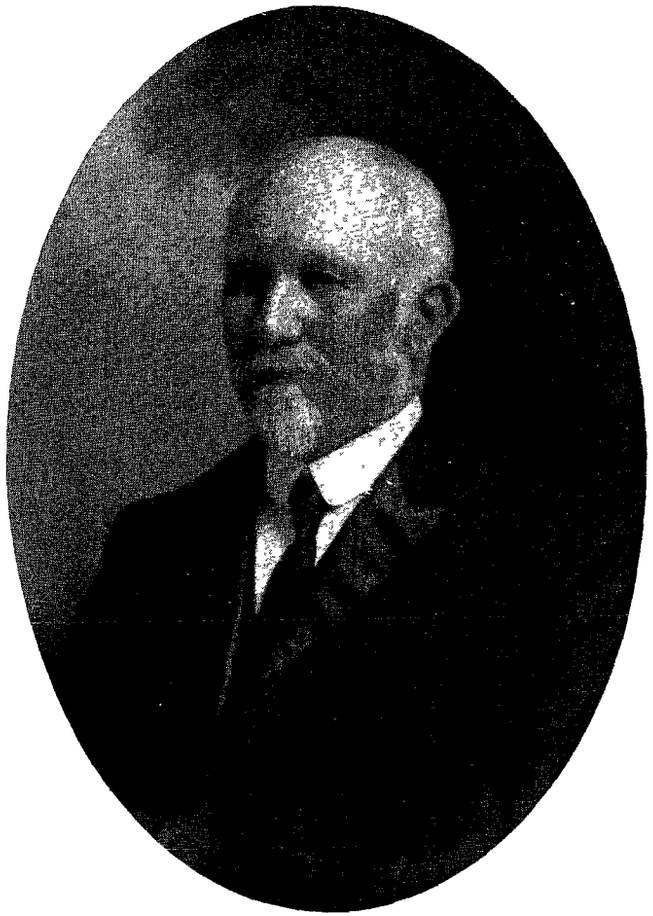

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President of the Federation of State Medical Boards of the United States

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OCTOBER, 1913

PREPARATION FOR THE PROFESSIONS[1]

BY HENRY S. PRITCHETT

The function of education in the modern state is enormous. In one form or another it undertakes to prepare every child for life, every adult for his vocation. Perplexing as are the questions which arise in reference to the right methods of education for children, not less so are those which have to do with the right training of men for the trades and for the professions.

Back of all questions of educational method in the preparation of men for the professions, lie certain other questions which have to do with the fundamental relations of man in the social order. What is a profession, as distinguished from a trade or a business? What conditions may the state fairly impose concerning the entry of men and women into these professions? To whom shall the state designate the authority and responsibility to enforce the conditions which may be laid down?

Like nearly all other problems of a social or political nature, these problems raise at once an inquiry as to the preservation of

[1] Address of the President of the Carnegie Foundation at the dedication of the New York State Education Building, October 16, 1912.

bilities, to deal with large public interests. The qualities which are demanded of him are accurate technical preparation within a narrow range, fidelity and care. To demand of him who wishes to become a pharmacist the same qualifications, and to impose in his preparation the same conditions which are demanded of him who wishes to practise medicine is clearly unjust. The one is a profession; the other is not. And even among vocations which are rightly named professions it still remains true that the exact conditions for admission may well show careful and just discrimination.

Admitting the general attitude toward the whole question on the part of those who represent the state, which has been expressed in these general statements, the conditions which may be insisted on as prerequisites to the practice of a profession seem to me to be embraced under two general heads: First, the requirement of a good, general education. Second, a thorough grounding in the fundamental, underlying sciences and technical branches of knowledge upon which the profession rests. When requirements are broad, they make no distinctions as between sectarian bodies; they are as simple as society can afford to accept.

The requirement of a good, general education is perhaps, on the whole, the greatest safeguard which a commonwealth may set up as a protection for itself, at the doorway of the great professions. The experience of other nations shows that no specific and detailed set-up requirements can insure those qualities of mind and heart which are called for in the exercise of any of these great callings. However necessary it may be that he who practises medicine may know anatomy, that he who practises engineering shall know physics, that he who practises law shall know pleading, it still remains true that these things furnish no test of the texture of the man's soul. As to this there is no test at once specific and final and exact, but the experience of all civilized nations goes to show that the possession of a broad, general education is the surest means to the symmetrical development of those powers of mind and heart which go to make up a true man. Whatever may be the technical skill of him who is to enter a profession, it is first of all to be desired that he shall

be a man. There is no specific in education for making a man. The best we can do is to ask that he shall at least have passed some years in touch with great minds and noble thoughts and high ideals, and this is compassed so far as human conditions can bring about such a result, by the requirement of a good general education.

Of course, the practical question arises, "What is a good, general education?" It is being variously answered in different states of this nation by demanding for candidates to the great professions the completion of a high school course or of two years in college, or in some cases by the completion of a full college course. With regard to the practical determination of this matter it may be said that in some states the enforcement of a good four-year high school course, before taking up the study of law, or of medicine, or engineering, is a higher standard than is the requirement of two years of college work in other states. Common sense will dictate that in the enforcement of such conditions, standards shall not be elevated beyond what is possible; that the reform of the whole educational system can not be made in a day; that it is better to demand and enforce a reasonable standard than to demand and fail to enforce an impossible standard.

In the various states of our Union illustrations of all phases of this situation can be met. There are states today where the enforcement of even a four-year high school course, as a preliminary for the study of law or medicine, would be a very high standard. In most states, however, this would be a very low standard. In the long run, we shall need to consider both the character of the general education which the candidate is to receive, and the length of time which is required to complete it. We can not afford to send into the professions ill-prepared youths, nor yet can we afford to keep them so long in the schools that they lose somewhat of that resiliency which a man ought to carry into a profession. It may well be hoped that as secondary school and college improve, the intellectual stage which a man reaches at the end of two years of college shall be higher than that which he has hitherto attained. It ought certainly to be possible to establish an educational system which shall fit men to begin their

professional studies by the time they are twenty-one years of age. In the confusion which exists today among our various states, it will be necessary for each state to aim at the highest standard for professional entrance consistent with its educational system. It is a matter full of hopefulness to remember that very rapidly our states are approaching a uniform excellence in their secondary school systems, and not many years will elapse before secondary education in one part of the country will be upon the same plane as secondary education in every other part. But until that time comes each state must translate the requirement of a general education in accordance with the facilities and opportunities which the school system of the state affords, and have the courage to raise these standards as rapidly as conditions improve.

The enforcement of adequate grounding in the technical subjects which underlie the great professions seems so evidently necessary as to require no argument, and yet today a very large proportion, perhaps the majority, of those who undertake the two professions most directly touching the life of the nation—the practice of medicine and the practice of law—are not required to make such preparation and do not make it.

The matter can be illustrated best by a brief reference to the existing conditions of admission to the practice of medicine. We have in our country an extraordinary, though now decreasing, number of medical sects. In no other country do they flourish to the same extent for the reason that in no other country is the way made so easy for them to enter the profession of medicine without adequate training. Now, modern medicine is nonsectarian. It is scientific. It turns exactly the same fact to the osteopath, the homeopath, the Christian Science healer, the naturepath and to all other sects. Scientific medicine simply undertakes to deal with the observed phenomena of the human body without prejudice. It will gladly accept a remedy of the homeopath if it has been proved to have value. It will gladly use the services of an osteopath in those cases in which its value has been shown. It will intelligently seek to use the mind itself in the treatment of disease along reasonable scientific lines.

But whatever form of medicine one practises, whether he take up scientific medicine without allying himself to any sect, or whether he chooses to ally himself with one of the medical sects, it still remains true that he must deal with the same human body and its diseases. Whether he call himself a homeopath or an osteopath or a Christian Science healer, or simply a physician, he still has the same need to understand the physiology, the anatomy and the chemistry of the human body.

It is no part of the state's business to say that a man shall not be a homeopath or an osteopath or a Christian Science healer, but the state does have the right and the duty to say that whether a man practise under one name or another, he shall be thoroughly grounded in the knowledge of the anatomy and physiology of the human body, and that he shall know those biological and chemical sciences upon which such knowledge depends. This requirement is absolutely fair. It makes no discrimination between the various medical sects. It is the least protection which society can afford to accept, and it is the minimum requirement which any state ought to make of those who wish to enter into the practice of medicine, whether they desire to practise under one name or another.

Exactly the same may be said of the practice of law. There do not exist in the law, as in medicine, legal sects. It is none the less true that no man is ready to go into the practice of law who will not give a fair study to the underlying subjects upon which the study of the law rests.

It therefore seems clear to me, in the light of all experience of civilized nations, that the requirements for entry into the great professions shall be: first, the acquirement of a general education which shall guarantee at least some contact with the best thought and the best ideals of civilization, and second, so thoroughgoing a preparation in the subjects which underlie the practice of the profession as to give the practitioner a real ability to judge. No conditions can be devised which will be sufficient to keep out all the unfit and all the unworthy, but these two simple conditions which are fair and just, which do not abridge the liberty of the individual and which conserve the public interest,

will at least give us in any state of the Union a body of practitioners who can think and deal intelligently with the phenomena which they are called upon to handle.

There remains yet one other practical question to be settled in the discussion of such a subject, and that is to determine, in any given commonwealth, the hands in which the enforcement of such conditions shall lie. Who shall represent the state in determining the conditions of admission to the professions? Who shall be charged by the state with the enforcement of these conditions?

In most states of our Union this question has been met in the most ineffective way. Each state has, to be sure, a department of education, but these departments have been clothed, as a rule, with limited powers and responsibility. The questions of the conditions of admission to the professions have been entrusted in most cases to other boards not in touch with the schools of the state or its educational conditions. The question of fitness for a profession is preeminently an educational question and the administration of this matter would naturally be entrusted to a department of education in touch with the schools and in sympathy with their ideals both of freedom and of discipline.

This great state, the most populous of all our states, is to be congratulated upon having instituted a Department of Education upon which has been conferred a larger power and a larger responsibility than most states have been willing to consider. It is in honor of this great agency of education that we here meet today. The power which it has received in the past has contributed enormously to the upbuilding not only of the general school system of the state, but to the improvement of the professions as well. We may well believe and hope that as time goes on, this agency, with still greater powers, with still larger responsibilities, will go forward to develop those standards of general and professional education which make alike for the highest freedom of the individual citizen, and for the truest progress of the whole commonwealth.

THE HOMEOPATH'S VIEWPOINT OF MEDICAL EDUCATION

BY ROYAL S. COPELAND

When the history of American medical education shall have been written, it is doubtful if, in the overthrowing of traditions and in the wide departure from beaten paths, any other period will approach this one. As with every other science or institution, the story of medical education is a story of evolution. From earliest times there has been gradual progress toward improvement. But when one decade has been compared with another, the difference has hardly been observable. In marked contrast to this, however, are the revolutionary changes of the present decade. Medical education has been so transformed that hardly a method employed by the medical teacher of a dozen years ago would pass muster to-day.

Naturally, one wonders if the cataclysm has passed and if we may settle down to the peaceful cultivation of our much changed landscape. Let us hope the flood has had the effect of an inundation of the Nile Valley, in that we shall find the soil enriched and future harvests a joy, because of the richer quality of the product.

To be frank about it, this writer does not believe the transformation is yet complete. In our enthusiasm for better premedical education and for better methods of presenting the subjects of the curriculum, have we not failed to consider the curriculum itself and to determine whether or not it is encumbered with a useless collection of time-consuming courses? The present system has developed a host of specialists. Since this writer is himself a "specialist," confining his medical energies to one field, he will be pardoned, doubtless, if he pass criticism upon his fellows. They will know his pot is as black as their kettle.

The specialists, in the enthusiasm of their work and in the knowledge of their victories over disease, have claimed more and more of the time and energies of the medical student. The result is that the junior and senior years of the medical curriculum are crowded with hours devoted to intricate and technical specialties, quite beyond the possibility of practical value to or safe application by the practitioner without graduate study. I have long felt and still believe a proper revision of the present four-year course would eliminate such a mass of interesting and attractive, but unnecessary material, that there would be left ample time, within the present limits of the course, for all the extra work so earnestly contended for by all our official and voluntary critics. Do we not forget it is the aim of the medical college to develop a well-grounded, a well-rounded, a substantial and sensible general practitioner? We are not planning for a composite product, the blurred image of a dozen specialists, rather, we want a clean-cut, cameo-like figure, the "family doctor." Leaving the figurative, we seek a graduate who has his mind filled with exact knowledge of the normal man, who possesses trained and accurate methods of diagnosis, who knows exactly how to proceed in the treatment of his patient and in the protection of society, and, quite as essential, who has developed such a sense of proportion that he knows his limitations and appreciates the occasional necessity of special aid and expert advice.

Society, in looking at doctors, is incapable of estimating values. State examinations, after all, cannot be absolutely discriminating in winnowing the chaff from the wheat. In the last analysis the medical college is responsible for the quality of physicians. The work of laymen, like Mr. Flexner and Dr. Vincent, is most useful in pointing out defects in material equipment, in record-keeping, and in methods of instruction, but when it comes to the curriculum itself, including its subjects and the proportion of time for each, then we must depend upon ourselves. Here is a problem that must be more seriously considered by medical faculties than it has been in the past. An immense amount of selflessness will be needed, because its honest solution will relegate to places of lesser importance many teachers who

now monopolize the best hours and the most time of the students. It will be hard for the popular teacher of this or that specialty to shorten his course and loosen his grip on the student body; yet this very sacrifice must be made if the curriculum is to be properly balanced.

The founder of the school of medicine to which I belong said: "The chief business of the physician is to cure the sick. Any neglect on his part to make himself master of his art is little short of crime." From the beginning, therefore, we have made much of materia medica and therapeutics. Were any radical change to be made in the present-day curriculum, it would naturally occur to us to increase the time given to these subjects. I say it with perfect good feeling and with no desire to offend, but it does seem strange to us that a system that has endured for a hundred years and that continues to serve a very respectable minority of the human race, should fail to receive the serious study and investigation of our brethren of other schools. Might not some of the spare hours for which I have planned be devoted to a study of Homeopathy?

There is growing up between the schools a better feeling, founded probably on a better understanding of each other's motives and ideals. It used to be said by uninformed persons that the study of homeopathic medicine was simply a short cut to a degree and to practice. The success of homeopathic graduates before non-partisan boards of examiners has dissipated this idea. The examination of our schools by unbiased officials has shown the same proportion of good and bad as in the schools of other systems. Our colleges have suffered about the same mortality rate as decimated the old school colleges. Our surviving colleges will be the ones deserving to survive as the surviving old school colleges are the ones deserving to live. I am sure I speak for all my brethren when I say we clasp hands with all who stand for high standards of premedical education, for searching methods of medical instruction, and for exacting requirements for licensure. Let it not be supposed that our adherence to what our critics call "sectarianism" has blinded us to the necessity for broad and liberal education in all the things

usually considered essential. The American Institute of Homeopathy, the oldest national medical society in this country, has officially decreed that "A homeopathic physician is one who adds to his knowledge of medicine a special knowledge of therapeutics. All that pertains to the great field of medicine is his by tradition, by inheritance, by right."

Let it not be imagined that the homeopathic physician looks askance upon the advances of general medicine. The sputum examination, for instance, in the diagnosis of throat and lung diseases, and the blood examination in other troubles, are given the same importance in the homeopathic world that they receive elsewhere. The laboratory methods of science receive the same patronage and the same encouragement. In surgery, in gynecology, in ophthalmology, the same careful technique, the same skill, the same methods are everywhere employed. No one claims that the results of surgery in other schools are superior to those gained by the homeopathic operator. All that pertains to clinical methods, to bacteriological research, to surgical ideas, to the great field of general medicine—all these belong to the homeopathic physician to give to his patient, together with the possibilities of the homeopathic remedy. Our special knowledge in this field we would gladly share with all our medical brethren.

I was asked by the editor to approach my subject from the homeopathic standpoint and to say something instructive about homeopathy. The one thing above all others I wish to say is this: We have no sense of ownership in the theory of "similars" and we gladly make room for all who wish a place beside this fountain of healing. Until the dominant school is willing to investigate and, if it be proven true, to adopt this method of drug selection, we feel it our duty to maintain our separate existence and to continue our colleges. Let it be understood, however, that we do this from necessity. We are one with all the medical world in admiration for and patronage of the science and art of medicine, as usually understood and taught. Barring our teaching of materia medica alone, there is no difference between our good colleges and the good colleges of the dominant school. Our difference is simply the difference of denominationalism.

Of course, for instance, nobody is sent to perdition these days because of his attitude toward transubstantiation. However it would not be just to our view of things to let the figure rest here and perhaps leave the impression that we share the usual estimate of our sectarianism. The truth is, we believe the superiority of our results, where medication is indicated, has been proven in every disease and in every climate. We would not be honest or moral, therefore, if we did not stand for a rule of practice that, in our opinion, shortens disease, lessens suffering, and prolongs human life.

This, in short, is a frank statement of our position, but let no man think we are not conscious of the wonderful progress of general medicine. We are as much a part of the applauding audience as are our colleagues of the older practice. We rejoice in the present trend and are in sympathy with every honest endeavor looking to real improvement. A higher standard for no other reason than to decrease the output of doctors is not, in our opinion, a thing to be loudly discussed. If there is back of the movement a lofty and purposeful design, the protection of society against half-prepared practitioners, then we say "God speed" to every worker in this direction. America must provide a medical education for thoroughness unsurpassed in all the world.

CHIEF NEEDS AND FUNCTIONS OF THE FEDERATION OF STATE MEDICAL BOARDS

BY N. P. COLWELL

In every other country having a standing comparable with that of the United States, the national government, through one or more bureaus, has always kept direct or close control of educational institutions and of the licensing of physicians. As a consequence these matters have always been systematically looked after, medical schools have never been separated from universities, and there never has been the chance for irregular or low-grade institutions calling themselves medical colleges, to gain a foothold; therefore, such institutions have never been known. As a rule, every medical college is the medical department of a government-owned or controlled university, and is always conducted on the same high plane as other educational institutions. Again, the licensing of physicians seems always to have been in the hands of thoroughly competent officials who have charge of such matters for the entire nation, so if a candidate does not present proper credentials, or if he fails to pass the required examinations, he simply cannot procure a license to practice in any part of the country. He must make up his deficiencies or not secure his license.

CONTROL IN THE UNITED STATES

In the United States, on the contrary, the national government assumes no responsibility regarding either education or the licensing of physicians, these matters having been left by the Constitution to the individual states—a responsibility, the importance of which even today has not been fully realized or

fully assumed by many if not by the majority of states. In our forty-nine states there are forty-nine different medical practice acts which, for their enforcement, have been placed in the hands of sixty-two different boards, sometimes two or three to a state. To make the matter still more serious, in 17 states there are also separate boards having entire authority over osteopaths—an arrangement which doubtless protects them in practicing as they see fit, including surgery and the administration of drugs.

EVILS DUE TO THIS CONFUSION

Is there any wonder, with this confusion, that bogus and low-grade medical schools and schools for every fad in the category grew up like toadstools? Is it a wonder that these heterodox institutions have flooded the country with half-baked, illiterate and incompetent "doctors," who, even though they may have been rejected by one state fortunate enough to have a good law administered by a good board, easily secure licenses in some other state—or, if persistent, or if possessing a sufficiently strong political pull, finally succeed in securing a right to prey on the people of the very state where they were rejected, in spite of the efforts of the state's valiant defenders?

Through this confusion also we see notorious quacks, abortionists, spurious patent medicine venders and other undesirables, finally, if not easily, securing the right to carry on their nefarious practices in some state or other, even though they may have been rejected or have had their licenses revoked in one or more other states. Or, even after they have had their licenses revoked by some strong board we sometimes see them brazenly continuing to practice, made immune to prosecution through political affiliations, thus snapping their fingers at the only safeguard the state has placed between the public and these vandals. The protection of the public against such evils *from a national standpoint* is practically a farce and the conditions would be laughable were they not so exceedingly serious. We have very often heard it stated—which is a fact—that the control of these matters "has been left to the police-powers of the various states." True,

but how are these "police-powers" working out? States could be named which have established no "police-power" worthy the name, or which permit conditions to exist which are practically intolerable. Many still have ineffective laws, and some have fair laws but incompetent political favorites to enforce them, and as a consequence the public has no safeguards; other states have fair laws except that two or three separate boards have been established to carry out their provisions, consequently either all boards are "easy" with their respective followings, or serious discriminations result. Even some of the states having the best practice acts for regulating the licensing of physicians have inconsistently provided separate boards for osteopaths (often self-styled "osteopathic physicians").

ONE EDUCATIONAL STANDARD NEEDED

Meanwhile, when are we going to learn—when are our legislators going to learn—that before any method of "healing" can be safely applied to a sick or suffering human being, the "practitioner" must be sufficiently well educated to make a diagnosis, to *know* what disease he is attempting to treat and to *know* whether his particular "specialty" is the one to be used or whether it is the very one most dangerous to the patients? When is the fact going to be recognized that one standard—an educational standard—should be applied *to every* practitioner of the healing act regardless of the particular "system" of treatment he may represent? In fact, the whole mass of fads, diploma-mills, low-grade colleges, quacks, impostors and the like never could have been, or could easily have been nipped in the bud, had it not been for the politics-ridden and ineffective "police-powers" in many of the states. Take the very best conditions existing in any state and even then the safeguards are less effective than in most European countries. On the other hand, they should be even more effective because of the general confusion in control of these matters throughout the country. I have said "less effective than in most European countries" advisedly. Germany, for example, requires the candidate to have been

trained in one of the governmental university medical schools and then requires the passing of an examination unusually severe. Again, I believe it will be acknowledged that in no state is the examination of candidates for license as searching and thorough as that given by the Conjoint Board of England, so ably outlined two years ago by Mr. Frederick G. Hallett, the secretary of the board. The examinations as usually given in this country still lack the searching laboratory and clinical tests which really permit a graduate of a medical school with adequate laboratory and clinical facilities to show his superiority over the candidate trained by the memorizing methods of the low-grade colleges which lack essential equipment. True, some boards have made a beginning, nevertheless almost every candidate, including graduates from some seriously low-grade colleges, succeed in passing the examination. Of the candidates examined by the Conjoint Board of England there are almost always as many as 28 to 35 per cent who fail.

STATE BOARD MEMBERS THE GREATEST HOPE

These statements must not for an instant be taken as a reflection on the officers of our State Medical Licensing Boards, many of whom have striven valiantly against almost insurmountable obstacles to do their full duty. On the contrary it is these men above all who have recognized and are familiar with the conditions to which allusion has been made. It is to the men on our state licensing boards chiefly that the nation must look for better safeguards against these evils. Improvements have been going on for twenty years or more; conditions have been much worse. There is no better place to pay a most deserved tribute to one state board secretary, who during the twelve years from about 1878 to 1890 did more to raise the standards of medical education and medical licensure than any other man of his time. He likewise exposed, and caused the closure of some fifty or sixty diploma-mills which prior to that time were having free rein. His reports, furthermore, constitute the most reliable account of medical colleges existing during and prior

to his time. I refer to Dr. John H. Rauch, one time secretary of the Illinois State Board of Health. Other state board officials could be mentioned who, without adequate pay, and facing opposition from the very persons from whom support was expected, carried on vigorous and effective campaigns in the interest of the public. Even though this is a dark picture, it is no more dark than could be drawn regarding the ineffective control of other matters, commercial and otherwise, which are due to our complex and politically influenced city and state "police-powers." The important thing is for medical men, and especially those on state boards, to recognize the defects in connection with these medical matters, take stock of the hindrances, and altogether, through the Federation of State Medical Boards and other agencies working toward the same end, press the campaign for betterment.

SUMMARY OF REASONS FOR THE PRESENT CONDITIONS

Briefly stated, speaking from the national standpoint, the causes for the present complexity of conditions are as follows:

(1) Instead of one controlling factor there are sixty-two boards, each of which has no legal connection with, or responsibility for, the work of the other sixty-one boards.

(2) These boards are variously hampered by (*a*) poor laws, (*b*) bad politics, (*c*) unskilled board members, (*d*) conflicting boards, (*e*) lack of provision for skilled examiners, (*f*) lack of full-time officials, (*g*) lack of ample funds with which to do things, and (*h*) lack of ample authority to do what is needed.

(3) Lack of direct control of the chartering of new colleges.

(4) Difficulty (formerly) of securing accurate knowledge of conditions underlying medical education and licensure in different sections of the country, and again the lack of officers, time and money which would permit of wholesale campaigns of investigation such as have been voluntarily carried on by the American Medical Association through its Council on Medical Education.

Note.—Even if each board had possessed all that was needed

for such tours of inspections, it is a question whether such work conducted by all boards individually would be desirable. It would be poor economy, be an awful nuisance to the medical colleges thus inspected and—worse yet—could result only in a multiplicity of conflicting standards.

(5) Lack of information regarding what other state boards are doing. All states are not warned against quacks, charlatans, or other undesirables, to whom licenses are refused by one state, nor do they as a rule learn the fact, if one state revokes a license for unprofessional conduct. All boards should be informed of such matters. Here is a suggestion for the new STATE BOARD QUARTERLY.

(6) Lack of money, means or skill to conduct examinations which will bring out the applicant's real training instead of his being able merely to memorize book information.[1]

We have, therefore, viewing the situation from the national standpoint, a very complex system with 62 different boards, having no legal cohesiveness, and each having the final word in its own district. There is no central authority over these boards, and at present there is no strong influence by which they can be brought to work in harmony for the best welfare of this great country, for uniformly high standards, and for equally effective methods of examination and licensure. It is working along these lines that the Federation of State Medical Boards can do the greatest good.

WHAT THE FEDERATION OF STATE BOARDS SHOULD BE

(*a*) A moral force standing above the individual boards, supporting the good work being done and extending knowledge of proved methods to other boards.

(*b*) A moral force tending to unify the efforts of all boards, thereby securing a better enforcement of laws now existing and urging better laws in states where such are needed.

[1] Many state laws prohibit teachers in medical colleges from being members of the licensing boards, nevertheless they are, naturally, skilled examiners. Could they not be called into service in a similar manner as is done by the Conjoint Board of England? (See *A. M. A. Bulletin*, Mar 15, 1912, p. 160)

(*c*) An influence toward a rapid extension of reciprocity in medical licensure.

(*d*) An organization through which impostors, incompetents or other undesirable practitioners can be prevented from securing the right to prey on the public in any state.

(*e*) An organization which will influence the general adoption of a single and fair educational standard for measuring all candidates for the license to practice the healing art by whatever form of treatment.

(*f*) An organization which will be in position to solve the problem of providing a single examination which will be so thorough as to command recognition by all state boards, along the lines of the Conjoint Board of England, or the new Dominion Examination just provided for in Canada.

(*g*) An organization to study the needs of various boards and through publicity to help secure those needs; not to usurp the authority of the individual state boards but to secure the coöperation of all boards by which such authority may be made more effective.

The greatest work of the Federation will be to secure complete protection of the people of the entire country against those who are not properly trained in the medical sciences, where now, although some parts of the country may be protected, other vital parts are seriously exposed.

The present confusion and ineffectiveness in the control of medical licensure and medical education, even as does the confusion existing in divorce laws, in commercial matters and in other departments of public life, sometimes lead one to despair of the future of the form of government in the United States, the land of the free, where there is too little control over the lawless elements who always abuse the liberties given to them.

The situation needs the influence of an organization like the Federation working in a spirit of unity. The Federation has a great opportunity to do good service.

AN ADDRESS TO STATE BOARDS[1]

BY W. A. SPURGEON

This confederation should have one chief aim, namely, the elevation and unification of the medical profession of the whole country. No physician should be satisfied, no state should rest, until a high and honorable professional standard has been attained by all the states. To this end a helping hand should be extended to every honest, capable man and institution.

A state medical board, in the discharge of its duties, while it can get along alone, can do better work, accomplish more for its state, by co-operation with other state boards. State boards, clothed with authority by the law, can dictate certain conditions and terms in many cases and under many conditions, but they will accomplish much more by council and co-operation, especially with the educators of the country, and with each other.

Of the duties and functions of the state medical boards, imposed by the laws of the several states, none are of greater magnitude, or of such far-reaching consequences, as the maintenance of educational standards and their gradual elevation. Educational standards constitute the basis of interstate reciprocity in medical licensure, hence this confederation is vitally interested at this point, and in this question.

While the primary purpose of this confederation was to work out the problem of reciprocity, the extension and maintenance of this work has made it necessary for the confederation to give much attention to the question of uniform medical legislation and uniform standards of educational requirements. As a retrograde movement in educational requirements in any state should not be tolerated, and, as a rule, will not be, the unification

[1] The President's address at the meeting of the American Confederation, March, 1911.

of standards means the gradual elevation of standards everywhere. Unreasonably high requirements in one state, with unfortunately low requirements in another, is not to the credit nor the advantage of medicine in America. The reputation of American medicine is not materially above that of the lowest legalized standard obtained in any state, hence the importance of our work in the supervision of medical colleges, and the encouragement of honorable standards.

The solution of questions of magnitude, into which the elements of justice and equity always enter, carries with it the solution of subsidiary questions, the lesser questions, however, important in themselves, being involved in the greater.

It has been suggested at intervals that the American and National Confederation should disband and reorganize as an organic unit. This organization will not have accomplished its mission until the principles for which it has contended are fully understood, accepted and reduced to a working basis in all the country, and the subsidiary questions thereto related are solved.

The chief value of practical reciprocity between the states is not so much in the privileges and advantages to the individual, as in the necessary and required educational attainments on which it is based. This advantage inheres in, and is applicable to, the individual in a way, for when the qualifications established by this confederation are properly understood, it will be seen that the individual of high-grade professional accomplishments, though applying from a state of low minimum standards, may be admitted to practice in a state of high-grade minimum requirements. Some state boards do not know this, and hence deny good men their inherent rights. The advantages of reciprocity, with its accompanying and required conditions, find expression through the state medical boards, which are the chief authoritative source, under the law, of educational requirements.

Permit me to repeat a former statement, that while the American confederation has measurably solved the problem of interstate reciprocity in medical licensure, it must continue to give careful attention to other questions intimately related to the main question, such as uniformity in examinations, methods of

examination subjects, questions, grades, standards of education, minimum requirements for medical colleges, entrance requirements, uniform legislation, etc.

In a former address I referred to the work accomplished by the confederation. The work speaks for itself. I desire now to offer a few suggestions respecting the work before us.

Of the various committees to which the work has been assigned, there are, in my opinion, two of especial consequence, namely, the Committee on College Classification and Inspection, and the Committee on Uniform Medical Legislation. The former will have a partial report to submit at this session. The medical colleges of the country are the active machinery in the educational field. While some colleges now in existence are of very inferior quality, the fact is that a large proportion of the indifferent colleges with which the whole country was filled a few years ago, have been eliminated through the active work of the state boards. The state boards alone can accomplish the important work of eliminating such medical institutions as are of no value, and should be vigilant in this line of work, and just as active in the encouragement of such institutions as are worthy and well equipped. No college fairly well equipped and engaged in good work, or that can be induced to become properly equipped and to do good work, should be killed or crippled by any action of a state board, or a confederation of boards.

In dealing with medical colleges, the conditions obtaining in the states where they are located, their environments, and all surrounding conditions and circumstances, should be taken into account. We do not need more colleges, but better ones. The way to have better colleges is to make them better by intelligent and well-directed assistance.

In some of the southern states their best medical colleges are handicapped by the educational conditions surrounding them. These institutions should have assistance, rather than harsh treatment and adverse criticism.

A medical college having an ample and sufficient faculty, enthusiastic and earnest, giving adequate time to the work of instruction, with reasonably good facilities and equipment, can

do, and often does, the most efficient work. Though the work may be a labor of love and enthusiasm, rather than for pay in dollars and cents, the results justify the work and the workers deserve all honor. At this time some of the medical colleges in some sections of the country find it impossible to enforce the high standards of preliminary or entrance qualification desirable, owing to the condition of the secondary schools and general facilities by which they are surrounded. These institutions should be given timely assistance and encouragement, that they may be elevated to the higher plane they so much desire. While the graduates of medical colleges of lower requirements may be admitted to practice in a state having more advanced standards, yet they have a field of usefulness, and many of them are most excellent physicians.

The Committee on Uniform Medical Legislation has a difficult and exceedingly important work to perform. In many of the states the medical laws are inefficient. The state boards in these states are handicapped, or held in bondage, either by the provision of the law or the lack of authority under the law to perform the full measure of service that a state board should perform. In some states the Medical Practice Act attempts to provide specifically just what the educational standard in the state shall be, and to define and limit the duties of the state board respecting many features of its work. Such provisions in a law, while supposed to be conducive to strength and educational elevation, has the very opposite effect, and results in limitations that cannot be passed except by amendatory legislation. In lieu of such provisions the law should confer upon the state board such discretionary authority as will enable it to engage in every good work for the elevation of educational standards, for the encouragement and assistance of worthy medical institutions, the protection of the interests of the medical profession and the people. In lieu of a specific definition of the educational requirements of the state, the law might define one duty of a state board to be the establishment and maintenance of such schedule of minimum requirements and rules for the recognition of medical colleges as to keep these requirements up to the average standard of medical education in other states.

Clothed with authority and vested with reasonable discretionary powers, the state board can, and will, do more to advance the cause of medical education along safe and sane lines than can be effected in any other way.

While unofficial, unauthorized committees and associations may work diligently and with the best possible motive in attempting to regulate medical educational standards, their efforts will do little other than to engender strife, promote jealousies, cause confusion and create suspicion. This is true, for the reason that such committees have no authority, and are generally regarded as being out of their field and assuming to perform the functions and duties of properly constituted bodies to whom the work has been assigned by law. It is impossible for any man, or committee of men, having a direct interest in a medical college, or colleges, to sit in judgment upon the educational value of competing institutions and escape suspicion and criticism in the event of any adverse finding, and this is unavoidably so, irrespective of motives and purposes. To the state boards alone should be entrusted the duties imposed upon them by law, and the law should invest the boards either with direct authority or discretionary right to act.

In this view of the case, should the Council on Education of the American Medical Association, or the Carnegie Foundation for the Advancement of Teaching, inspect and report upon medical colleges of the country? No, not if the state medical boards can and will perform this duty; yes, if the state boards fail to perform this most important duty, for no question is of more consequence to medical education in this country than effectual and efficient work on the part of the medical colleges, and nothing tends to stimulate the colleges to activity and improvement so much as the inspection of their work. To accomplish the most good, all medical college inspections should be as thorough as possible and done in the spirit of helpfulness. Reports of findings should never be made to the general public until the properly constituted authorities are fully advised and all insti-

tutions under adverse criticism have had ample opportunity to avail themselves of the advantages of recommendations and criticisms.

The state board acquainted with conditions within its own state, vitally interested in the educational interests of its state, familiar with surroundings and environments, being on the ground and responsible for results, can be safely trusted to perform the duties and exercise the rights conferred upon it by the law under which it works and by which it is governed. Any other plan or method of procedure will inevitably lead to confusion and dissatisfaction. No board can surrender to anyone, however competent, the performance of its law-defined duties, without discredit to itself and its work.

UNIFORMITY

This confederation, made up of state boards, cannot occupy extreme ground, or make extreme recommendations, but rather must occupy medium ground as to standards and requirements. There are now, to my knowledge, a number of states, namely, North Dakota, South Dakota, Minnesota, Colorado, Connecticut, Kansas and Indiana, exacting preliminary requirements in advance of a four-year high school education, while there are twenty-one states which have adopted preliminary requirements equivalent to a four-year high school education, and about the same number that have not yet reached the high school standard. It is, therefore, obvious that as a leader in the movement toward the plane of higher education, the confederation will accomplish more if it is not so far in advance as to be out of reach, otherwise the ranks will become confused and scattered. When a reasonable majority of the states have reached the standard fixed by the confederation, a conservative increase of requirements should be made. We should work as a national organization, keeping in view that, when a minimum standard has been fixed, every reasonable effort should be made by all the states to attain to that standard.

UNIFORM STATE LAWS—A NECESSITY[1]

BY CHARLES THADDEUS TERRY

In no field is the requirement for uniform state laws more pressing than the field which is covered by the Federation of State Medical Boards of the United States. It is hardly conceivable that anyone could advance any argument in support of a diversity of law governing medical examination and the licensing of physicians. The matter is one of life and death. It is a question which affects closely the health of every citizen. To put it mildly, it is an anomalous situation that there should be a different standard in different states, for the admission to the ranks of practicing physicians.

Whatever may be in reason and experience indispensable for the equipment of a practicing physician and necessary for the proper safeguarding of the public in any one of the states or territories of the United States must be, in the nature of things, equally reasonable and necessary in every other section of the country. Difference of climate, or of geographical position, or of social atmosphere could not be a determining factor in prescribing the qualifications of a good physician.

For any state of the Union to insist that it shall work out its own laws on a subject like this, in disregard of the laws of its sister-states, is narrow, selfish and provincial. If that were all, we should not be particularly concerned in the matter—we should regard such narrowness and provincialism as exceedingly lamentable. The question is one which affects individuals outside the boundaries of the particular state—indeed, it is one which affects the residents of all the States.

[1] EDITOR'S NOTE. Charles Thaddeus Terry, Esq., President of the Conference of Commissioners on Uniform State Laws, was requested by us to write a brief article presenting his views on the necessity of uniform state laws relative to the regulation of the practice of medicine.

A physician frequently changes his place of residence and accordingly his place of practice, and, having been admitted to practice in one of the states, under a system of statutory regulations which may be lax and inadequate, is admitted in some other state upon a very cursory or perfunctory investigation of his eligibility; and this, in pursuance of what is called "States' comity!" It is well that there should be "States' comity," but it is of the utmost importance that it should not be misapplied. In respect of the matter under consideration "States' comity" should consist in harmony of the laws of the various states affecting a common subject of interstate interest. The "comity" should precede and not follow the admission of a physician to practice, and it should be comity which finds its expression in a uniformity of prerequisites imposed in every state for the admission to practice in any of them.

The tendency of our times to make a fetish of statutory enactment is one which should be viewed with considerable alarm, and one which deserves the most earnest attention. The multiplication of laws upon the statute books of the various states and of the Nation is so tremendous as almost to stagger the imagination. There is a disposition to consider, more or less unconsciously, that every phase of life and character can be corrected, improved, modified or reversed by statute. That is, of course, an idle sentiment; but until it shall be checked it will be the prolific source of many ill-considered, useless enactments. This tendency to excessive legislation with regard to new subjects is a sufficient evil in itself, without the additional embarrassment of the divergence of the various and ever-varying state laws on old subjects.

The goal to be aimed at is less law, rather than more law. It will materially reduce the body of law under which we live if the laws of the various states on a common subject of interstate interest and application are stripped of their divergencies and made uniform throughout the Nation.

This accomplishment is peculiarly desirable in respect to regulations of medical examination and licensing boards. Not only are physicians themselves migratory, but to-day is the day

of travel, and those who travel are constantly in need of the services of a physician or surgeon, and they should be able to secure such service as they may need in whatever portion of the country they may be, in full confidence that the law has safeguarded them in their temporary place of sojourn as thoroughly as it did in the place of their permanent residence. If the laws of the various states governing medical examinations and the work of licensing boards were uniform throughout the country, the medical board of any state could admit the physician duly licensed by the medical board of any other state, without the slightest misgiving. The situation should be just that. This would seem to be so obvious, so reasonable and so simple of attainment as to require no argument; but too frequently it is the simple, the obvious and the common-sense things which are overlooked or ignored.

The Conference of Commissioners on Uniform State Laws, composed of the official representatives of the governments of the states and appointed by their chief executives, has been for twenty-three years making it its business, as rapidly as may be consistent with conservatism, deliberate exercise of judgment, thorough study and careful consideration, to deal with these divergencies of states laws, prepare uniform laws on the more important and the more pressing subjects and present them to the legislatures of the various states for enactment. The field is large, the necessity for deliberate and calm action is great, but the progress has been constant and steady. All those who are interested in special topics coming within the purview of the requirement of the uniformity of law may aid, and it is their duty to aid, in the movement which the Conference of Commissioners is officially constituted to carry forward.

RULES AND REGULATIONS GOVERNING EXAMINATIONS[1]

BY JOHN M. BALDY

In order that I may keep my paper within a reasonable time limit, I shall confine my remarks to a single phase of the subject assigned to me, namely, the character of the examination. It has been said that a practical bedside examination is the desirable type of test that should be employed for applicants for a license to practice medicine, but let us not deceive ourselves in our enthusiasm for the practical examination into forgetting the fact that some parts of a medical man's knowledge are quite as well, if not better, tested by the written word. The combined examination as conducted by the Royal College of Physicians of London and the Royal College of Surgeons of England, a full description of which was presented to you at last year's meeting by Mr. Hallett, is to my mind preferable to either the written or the practical alone.

The English examination as outlined to us may be practical for such a country as England but I submit that it is not feasible in all its details in the United States at this present time, for very obvious reasons. There can be no doubt whatever that we should drift toward the combined method and, as we are all aware, a beginning has been made in a small number of states. God speed their efforts! Pennsylvania hopes soon to join their ranks and try her hand in the effort to develop an American standard. As time passes, we will have a word to say on this subject, but until the time comes when a feasible and possible working plan can be evolved, adapted to the environment of our "states' rights" and our lack of sufficiently paid administrators, there is no reason that the active aggressive forces of

[1] Read at the Federation's conference, February 25, 1913.

this country should lie supinely and see a continuation of the farce of qualifying examinations that are at present in vogue among us.

If we are not ready and able to step forward to the "ideal," let us at least make the best of what we have in hand and let us make it as near the ideal as possible. Let us make a real test of an applicant's ability to begin the practice of medicine and not a test which is no test at all.

In order to discuss the subject intelligently, let us consider for a moment what the function of the state is in relation to this subject. To put it briefly, the function of the state is to protect its citizens by not allowing an individual to practice medicine without a sufficient knowledge of the subject which will render him safe in the practice. This and this alone I take it is that about which the state should and does concern itself. Now I submit that a carpenter is not a competent man to build a house simply because he knows the names of his tools and what they are used for. He may know all this perfectly well and yet not be able to make a joint nor square a plane. A medical man may know perfectly the name of a drug or any number of them and equally well know their action, he may know all the muscles of the leg as well as the other anatomical parts of that organ, he may know all the formulas in inorganic chemistry, all the facts of physiology, and pathology, but unless in addition he is taught their application he is a dangerous man to turn loose on the community and be licensed to practice medicine. This, I take it, is so self-evident that no one will gainsay it. How senseless it must appear that an applicant for licensure is given a test which in the main asks him to name his tools and the use to which they are put and in which no effort is made to test him in the application of this knowledge.

Information as to the tools and their use is exactly what the schools, for the most part, teach and examine upon, each professor in his own branch with but a minimum of correlation with any other branch. And our colleges are more and more doing this type of teaching, because of the fact that we of the state boards are conducting our tests in precisely this manner. In

order to prepare their students so that they may pass the state boards, each instructor votes the bulk of his time to trying to have the students know everything in his particular branch, instead of teaching them a reasonable number of the most important and fully established truth and then thoroughly familiarizing them with their application at the bedside. If I were in pain and distress, I would prefer a doctor who knew one good reliable pain killer and knew how to use it safely in the particular disease with which I happened to be suffering than any number of men who could dash off every pain killer in the pharmacopeia and give me their full physiological action, but who had not been taught which was adapted to my disease and could be used with safety and certainty. If I am suffering with a fracture of the femur, of what interest is it to me whether a man can name minutely the anatomical parts of my thigh when he does not know what keeps the fragments displaced and is unable to reduce the displacement or properly to apply splints?

I agree that this is exactly what we could correct by a practical bedside examination and that this is the very reason for establishing this system. What I do not agree with is the implied opposite, namely, that we cannot so approximate this result by a written examination to such an extent as to make a very fair substitute that is far and away above the common type of test now so universally given.

To come at once to the gist of my thought then, I conceive that there are two different factors at work in making tests of would-be medical men—the schools and the state; and that their functions are in a measure widely divergent.

The schools teach the medical student the tools and their uses and before graduation test him as to whether or not his knowledge of these qualify him to be graduated. In addition of course they give him as much applied work as possible. The schools do not go behind the preliminary requirements for medical study—they do not conduct examinations in mathematics, history, physics or languages. The schools in which this preliminary work was done were approved by the medical school.

And likewise the state should approve the medical school.

The state through its proper representatives should lay down a minimum course of medical instruction and should see to it that the approved courses are maintained. Among these requirements should be a test by the school of the competent knowledge of the advancing student until such time when it deems his acquirements sufficient to graduate him. And then what? The state should say we have reserved to ourselves the right of the final test of your finished product and we will test him as a finished product and not as you have already done, test his knowledge of tools. We will test him as to his knowledge of the use of his tools and incidentally we will be able to observe whether or not he has a knowledge of the tools themselves. We will not go back and perform the functions of the medical school any more than the medical school goes back and performs the functions of the preliminary school. This is as it should be, but as the situation now obtains it appears to me that the state boards of the country are merely duplicating the exact work of the schools, unnecessarily, and to the neglect of their own proper functions.

How then do I mean that state boards shall conduct their tests? Broadly I may state that it is not the function of a state board to examine in any of the fundamental branches of medicine, excepting indirectly. No man can explain how to treat a disease and give reasons for that treatment without a good and safe working knowledge of such tools as physiology, pathology, therapeutics, materia medica, and chemistry. If we can so put a question as to insure the display of these fundamental branches in the answer, why, as is done almost universally, ask direct questions on these branches with little or no correlation to anything else?

Allow me to give a few concrete examples of the type of questions to which I refer and make a critical analysis of them and their results, and you may contrast them with the common type of question to which I so much object. The following question was asked in the December examination in Pennsylvania: *"If a woman in labor should suddenly develop the symptoms of collapse or shock, name three causes which may be responsible for the condi-*

tion. How would you recognize the one present and how would you manage the case in event of each of the three causes (omit description of operations)?"

Here is an actual bedside problem which might be the first experience of anyone after being licensed to practice medicine, and the solution of which, and a quick solution at that, would mean life or death to the patient. Had the applicant been asked for the symptoms of placenta previa, or of a premature detachment of a normally placed placenta, or of a ruptured uterus he could in all probability have written them down as a parrot would have repeated them, correct in every detail. He could probably have told equally well how to treat each separate condition if asked. He might have been able to have told what ergot was and all about its physiological action, he could no doubt tell how to do version, he might know all about the dangers of hemorrhage and could have written a long and correct essay on peritoneal infection; but had he been taught how to think, how to gather all this detailed knowledge into a concrete working form, how to correlate the one kind of knowledge in his possession with the other, how to differentiate these conditions one from the other, there would be less doubt as to the outcome of his patient.

A point of importance in the method of putting the question is the blending of a wide range of subjects so that the man answering it would display either his knowledge or lack of knowledge of symptomatology, diagnosis, therapeutics, physiological action of drugs, prognosis, and treatment.

I believe it to be the function of a state examination to test the applicant's ability to use his tools properly. He cannot show such knowledge as to use, without incidentally showing that he knows his tools, and consequently a direct examination as to this is superfluous. All examinations of the tools alone without their correlated use is a mere farce.

The blending of various branches in a single question is an important part of this method of test as adopted in Pennsylvania. *"In severe ulceration of the cornea what changes may occur in the structures involved and what disturbed function may be permanent? Name three micro-organisms most frequently found*

and outline a method of detecting and differentiating them" is a type of question asked under the heading of physiology, pathology and bacteriology. Here all three branches are represented in the answer, while but two (pathology and physiology) are involved in *"Describe any one lesion of the liver showing how this lesion interferes with the normal functions of the liver and the effects of such interference upon digestion." "Enumerate the various forms of abdominal hernia; outline the technique for the correction of any one form, giving the surgical anatomy of part selected"* and again *"What are the early symptoms of hip joint disease? And what is their anatomical explanation"* is illustrative of how beautifully anatomy and surgery may be blended and a practical working knowledge of these subjects drawn out. What more can be wanted in the way of therapeutics, materia medica and physiological action of drugs than a question of this type: *"How would you treat a case of typhoid fever, and the more important complications? Give dose and frequency of administration of each remedy you would use in this disease and the reasons for its employment?"*

I defy anyone to give me a rational reason why the state should conduct an examination in inorganic chemistry, which is a mere preliminary foundation for physiological and pathological chemistry and prescription writing. If the state boards are to continue such examinations as descriptive anatomy, physiology, inorganic chemistry and like fundamental branches, in the name of retrogression let us introduce reading, writing, arithmetic and finally the alphabet. There is as much common sense in one as in the other as far as the state is concerned. The point I insist upon is not that all of these are not of prime importance but that there are other agencies organized to conduct these preliminary tests and get them out of the way and that the state should take over only the finished product and test it as an entity and not in detail.

Perhaps some one may object that such a limitation put upon the state boards will result in an insufficient test and that the result will be disastrous. If there be any such, let him undeceive himself. Pennsylvania has now for a full year given this method

of blending kindred subjects together into one practical bedside question, trusting the demonstration of a knowledge of the fundamental branches to this method and the result is most convincing—so convincing that she intends to develop the method to the limits of possible improvement. Under the system of examinations as usually conducted by state boards in past years the mortality of applicants in Pennsylvania never rose above a possible ten per cent. It was a fairly stupid and badly coached boy or girl who did not amply fortify himself or herself from quiz-compends or state board books and pass readily. In our June examination under a system which forced the applicant to think and apply to an actual case a working knowledge of his tools we lost over thirty per cent and in the December examination over forty per cent.

The cry has gone up in Pennsylvania that these questions are too comprehensive and that ten such questions cannot be fully answered in a three-hour session. It is the very comprehensiveness of the question which is one of its greatest merits. In detailing the symptoms of a disease it is a very simple matter for a candidate to omit possibly an essential one. As has been demonstrated time and again in a question involving the symptomatology and treatment of eclampsia, high blood pressure was omitted as a symptom, a fatal omission, and yet the candidate demonstrated in the treatment when speaking of veratrum viride, vapor baths and blood-letting that he was well versed in its importance. On a straight question on symptomatology, he would probably have lost half the possible mark by such an omission. No one expects or wishes an applicant to write all that is possible to write on a given subject, but when he writes about it extensively and from various viewpoints it becomes quickly apparent whether he is repeating quiz-compends or whether he really has a working knowledge of the subject in hand.

Schools do the best they can to instil knowledge into the students, but the time is too short and they are forced by the character of the examination given by the state boards to accentuate this instruction without time to do what they would like to on the practical side. The schools are urged to give more bedside training, but if they do so their students are likely to fail at the state theoretical examination. Can anything be more absurd or more illogical?

That different results would obtain were the schools allowed to teach medicine unhampered and as it should be taught is amply testified to by the results of Pennsylvania's December examination. Forty-three applicants came up to this examination who had failed in June and who in the interim (six months) obtained hospital experience (in using the tools they had been taught); of this number but eight or eighteen and one-half per cent failed. Eleven applicants who had failed in June did not utilize their time in acquiring practical bedside experience; of this number seven or sixty-three and one-half per cent failed.

Finally, we are well convinced that the departure in examinations we have instituted is a very great step in the right direction and we intend to continue to develop this idea.

We are equally well convinced that a period of time in which the student shall cease to learn about new tools but shall devote himself to learning how to use the tools with which he is acquainted is advisable. The results of our December examination have made that belief stronger.

In order to meet the deficiencies of the present curricula of the schools and to supplement them, the State Bureau of Medical Education and Licensure has decided that after January 1, 1914, it will admit no applicants from within the state nor from without the state to the state examinations, until he or she has completed a year of service in an approved hospital, nor will any one be admitted to begin practice in the state through reciprocity who, after that date, has not fulfilled that requirement.

DISCIPLINE OF THE CHARACTER IN MEDICAL EDUCATION

BY EUGENE A. PHILBIN[1]

The views of a layman who has had some occasion to look into the subject of medical education may not be entirely barren of some suggestion that will be of value. It would seem to be obvious that the acquisition of knowledge of the principles of a science is the least important part of the training for a professional career. An education for that purpose truly involves a strong and consistent discipline not only of the mind, but more particularly of the character of the person who is to assume the exalted and serious responsibility. It is because of the failure to realize this aspect of professional education that we not infrequently have occasion to observe members of the medical, legal and other professions, who, although educated under the highest auspices, are wholly lacking in ability to utilize their training for the greatest service. While acquiring a sufficient knowledge to easily pass the examinations they have wholly failed to receive the spirit that must always inspire a useful member of a profession. The aim of the school must be not merely to instil a knowledge of the science but also to inspire a great and absorbing love for it. The ideal professional man is one whose whole thought and life is absorbed by his profession and who withal has the ability to utilize in a practical manner for those dependent upon him for advice the good offices of the science. He must neither be so absorbed in the science that he lacks practicability nor be actuated by the feeling that success means the accumulation of wealth. No man who ever takes up a profession as a means of acquiring wealth can succeed. While

[1] EDITOR'S NOTE The Honorable, Justice Eugene A Philbin, for a number of years served as Chairman of the Committee of the University and Education Department of the State of New York in charge of the registration of medical schools

it is true that men eminent in professions receive very large fees, yet the very same men give their services gratuitously where the equivalent value is many thousands of dollars. The properly constituted man feels that a great privilege has been entrusted to him and that his actions under it cannot be influenced or restricted solely by money consideration.

If views thus expressed as to the importance of a true professional training are correct, it follows that in no profession is it more important that such a training should be received than in the medical. The physician is not only relied upon by his fellow men for the protection of life and health, but the confidential relation to the patient which he occupies frequently gives him the opportunity to exercise an influence directly affecting the welfare and happiness of the subject of his care. It is, therefore, the plain duty of the state to be most exacting as to the requirements of the medical schools. It should never for a moment be considered a sufficient test as to the efficiency of a medical school that its students had successfully passed a state or other examination. The state should go further and insist not only upon a definite period of study of not less than four years, but also upon the maintenance of a proper curriculum conducted by instructors whose training and experience give ample assurance of their ability. The nature of the duties to be performed absolutely precludes the state from tolerating anything but the most perfect equipment in such schools. No allowance should possibly be made for the lack of financial means or inadequate conditions which time apparently may cure. It would be obviously absurd to permit an institution that was not qualified to secure the best results, to continue, even though there was positive assurance of plans for improvement. A strict observance of such a policy might cause serious loss to those who had invested in the school, but when it is considered that any other course means the imperilling of human life or the cause of human suffering, there is no room for discussion as to what should be done.

UNIVERSAL RECIPROCITY[1]

BY BEVERLEY D. HARISON

I wish to express my appreciation of the compliment paid me by your executive committee, in selecting me to read a paper at this time, on this most important subject; I must, however, in connection with my paper, call your attention to the fact that medical reciprocity has been a matter of discussion at society and association meetings during the past fifteen or twenty years, and, to such an extent, that the subject in all its phases is so well known to you that I feel I can make very few suggestions on reciprocity from a universal standpoint. When writing my paper I had in mind that Dr. Henry W. Briggs of the Delaware Examining Board, who is listed in the program as alternate, under the subject of Universal Reciprocity, would be present, and would state to you the history and achievements of the National Confederation of State Medical Examining and Licensing Boards. As he is unavoidably absent, I wish to express my appreciation of the accomplishments of this organization. The working activities of the two national organizations, the "National" and the "American," have been along the same lines, and both have had in view the same object. The difference, however, has been that the "National" activities have been almost wholly confined to the educational proposition, while the "American" has specialized along the executive line.

Some thirteen years ago, at the annual meetings of the American Medical Association and the National Confederation of State Medical Boards, held at Atlantic City, both associations adopted resolutions, which, in effect, stated that medical reciprocity between states was an impossibility, and the reason given was, that there was no provision in the United States Constitu-

[1] Read at the Federation conference February 25, 1913

tion for the federal control of medical licensure and education; that the authority to regulate the practice of medicine, including the setting of standards of preliminary and medical education, the recognition of medical colleges, and the creation of state boards to administer on qualifications for practice, was already a function vested in the several states, under the term known as the "police power" of the state. No one, as far as I can recollect, at that time, or since then, has suggested that if the control of medical education, including licensure, were subject to federal control, the term "Medical Reciprocity," as applying to the several states, would be a misnomer because the qualifications demanded by a federal board would apply to every applicant for medical licensure, irrespective of the state in which he had his residence and practice. A medical licentiate of a federal board would naturally have the qualifications for registration in every state of the Union.

In connection with the above, therefore, I am reminded of the story of the man who had ninety-nine reasons for not paying his debts. The first reason given was, that he had no money. Consequently his creditors did not press him for the remaining ninety-eight reasons. Likewise, universal reciprocity is impossible, from the federal standpoint, because the administering of reciprocity between the several states through a federal board is not possible at this time. In order to have a federal license an amendment to the Constitution of the United States would be necessary. To accomplish this would require years of effort in educating the public. In the meantime, however, on the principle that "half a loaf is better than none at all," *modified reciprocity*, so-called, which is possible to a large extent if administered by a federation of state medical boards, seems to me to be the best practical solution of the question.

Some eleven years ago, the subject of medical reciprocity was taken up by three state medical boards, which met in Chicago and founded a reciprocal association, that adopted a basis upon which a partial, or modified, reciprocal registration could be accomplished This new confederation provided in its constitution, that membership should be confined to state medical

boards, the voting power being confined to a single vote from each state board represented in the confederation, as opposed to a membership composed of members and ex-members of state medical boards and other persons interested in medical education. Membership in this confederation, as thus provided for, gave an equitable representation and recognition to the several schools of medicine represented on the boards. The constitution adopted provided the fundamental basis of medical reciprocity between states—in brief, that an applicant going from one state to another, should comply in every respect, with the preliminary and medical requirements, including board regulations, of the state in which he sought reciprocal registration or endorsement. This recognition of the principle of partial, or modified, reciprocity, and the basic legal requirement in the constitution, that all applicants for reciprocal registration should fulfil the requirements of the state engaged in such reciprocity, has been successful, to a very large extent, as demonstrated by the fact that some thirty-five states, at the present time, have adopted, to a greater or less degree, this method of reciprocity, and that last year some fifteen hundred licentiates removed from one state to another through reciprocal endorsement. This association was semi-official only, and its activities were necessarily confined to suggestive methods, which included suggestive preliminary and medical educational requirements, suggestive methods of state board examinations, and suggestive equipment for medical colleges. In fact, while only semi-official, its membership represented the policy and requirements of the *boards* in its membership, as opposed to representation by a member or an ex-member of the board, who could represent officially only his personal opinion. It is unnecessary for me to state that the accomplishments and activities of the confederation have not been ideal. It entered an entirely new field, but its accomplishments, thus far, have demonstrated the fact, that from a small beginning, through a proper recognition of the legal conditions involved in the endorsement of state medical licenses, greater results can be expected in the future, from a strong, single federation with a similar constitution and like objects.

Since every state is "a law unto itself," in its relation to qualifications for the practice of medicine, each state not only having its individual legal requirements, including preliminary and medical education, but also diversified methods of administration, it cannot be expected that universal reciprocity can be accomplished in the near future even through the efforts and administration of a strong federation of state medical boards. Nevertheless a great deal can be accomplished through the uniformity of state requirements. The ideal is always of slow growth, requiring years of perseverance and activity.

It must not be forgotten that medical education in the United States has increased in the last decade, by "leaps and bounds." No other country can compare with her in this respect. One of the great difficulties we have to contend with is that our people are demanding the ideal, but are impatient of the processes necessary for the accomplishment of an ideal—a gradual, but a sure and lasting growth.

Personally, I object to the term "reciprocity," and would substitute "Interstate endorsement of medical licenses". I can briefly mention two objections to the word reciprocity. First, "reciprocity" conveys the idea, not only to the educated man and board member, but also to the layman, that the endorsement of every applicant licensed in the reciprocating state is involved irrespective of such applicant's preliminary and medical qualifications, or the status of his state board examination. Reciprocity legally applies to individuals only. Second, I believe that the intent of all state medical regulation is the licensing of competent medical men, regardless of the fact that one state has not, either through want of legal enactments, or for other causes, entered into a formal, legal reciprocity agreement. I am, therefore, in favor of eliminating the provision in a reciprocity clause—"Provided such state reciprocates the action of this board." The medical board should be vested with greater discretionary power, covering qualifications for the legal practice of medicine.

EDITORIALS

THE QUARTERLY

In presenting the QUARTERLY to the public the aim of the Editor is guided by one of the objects of the Federation, namely, to seek and to publish accurate information concerning medical education. The Federation is composed of all factions and sects in the medical profession; hence the views of all shall have a place in the QUARTERLY. We will publish articles not only on fundamental principles in pedagogical methods but on practical details of instruction in the various branches and specialties. The QUARTERLY will help in the work of the state boards to determine upon a standard for medical education; after this is accomplished, it will advocate uniform state laws for the practice of medicine and for interstate indorsement of medical licenses; and when these laws are established it shall help the public maintain and keep them intact by guarding against any misunderstanding of the term medicine, which includes all the healing arts and is not to be confounded with the term medicinal treatment. This does not mean that the QUARTERLY is opposed to the granting of licenses for the practice of limited therapeutic measures. Our policy is to seek the best in medical education, regardless of the source, with open mind and without prejudice. We shall ever remember that the teaching of medicine has two halves—the necessary material equipment and the inspiring spirituality of the teacher; it takes the two halves to make the whole.

THE ORIGIN OF THE FEDERATION

The Federation of State Medical Boards of the United States is the result of a conference held March 2, 1911:

"On the call of Dr. Wm. P. Harlow, Dean of the School of Medicine of the University of Colorado and President of the Association of American Medical Colleges, the Presidents and

Secretaries of the two State Board Confederations, the Council on Medical Education of the A. M. A., the Carnegie Foundation for the Advancement of Teaching, and the Association of American Medical Colleges met for an informal conference, March 2, 1911, in the Congress Hotel, Chicago.

"There were present: Drs. Wm. P. Harlow, A. D. Bevan, W. A. Spurgeon, C. P. Tuttle, A. Flexner, G. H. Matson, B. D. Harison, N. P. Colwell and Fred C. Zapffe.

"On motion, Dr. Harlow acted as chairman and Dr. Zapffe as secretary.

"On motion of Dr. Bevan, seconded by Dr. Matson, it was declared to be the sense of this conference that it is desirable that there be, in this country, one strong organization of state examining and licensing boards.

"On motion of Dr. Matson, seconded by Dr. Colwell, it was decided that the name of such an organization shall be the 'National Federation of State Medical Boards.'

"Moved by Dr. Harison, seconded by Dr. Matson, that the organization shall consist of members, fellows and associates, state boards only to be entitled to membership, ex-state board members to be fellows, and all such individuals as are interested in medical education shall be entitled to be associates on being duly elected by a two-thirds vote of the members present at any regular meeting, and on payment of one dollar. All shall have equal rights and privileges, excepting voting power, which shall be restricted to members."

The two State Board Confederations represented at this conference were THE AMERICAN CONFEDERATION OF RECIPROCATING, EXAMINING AND LICENSING MEDICAL BOARDS and THE NATIONAL CONFEDERATION OF STATE MEDICAL EXAMINING AND LICENSING BOARDS.

FRANCESCO REDI

It is said that the child in its development passes through stages which correspond to steps in the evolution of mankind, and that in the growth of its mind we may recognize manifesta-

tions which characterize the important periods in the history of civilization. If this be true the state of mental development, when a child believes that a horse-hair shut up in a bottle of water will turn into a snake or worm, would correspond to the intellectual development of the seventeenth century, for at this time a spontaneous generation of animal life was believed to account for the appearance of worms, insects, and parasites. These parasites were believed to arise spontaneously within the body, and the teaching of Hippocrates that worms existed in the fetus had not yet been refuted. Disease was accounted for by some theory applicable to all diseases. Specific causes were not known. It was into this age of ignorance and fanciful notions that the scientist, Francesco Redi, came and by observation and experiment threw the first light on the causation of disease.

We have not been taught our debt to Redi. True it is that parasites had been recognized in ancient times by the Egyptians as a cause of disease, but no progress was made in the study of them throughout the entire period of six hundred years that the teachings of Hippocrates and Galen held sway. It remained for Redi to give us our first accurate knowledge of the parasites of man and animals. In 1687 he described the itch-mite and showed it seated in the lesions of the itch and that it could be extracted and placed under the microscope. He also found the laying of eggs and described the male and female. All of these observations enabled him to reject the old theories of the humoral nature of the affection. Its extreme contagiousness was explained by the migration of the mite from one host to another, the reason why internal remedies had been so ineffective became apparent and the new use of external remedies proved efficient. At this time, however, medical education did not profit by these scientific discoveries of Redi because the Galenists with their humoral theories predominated and students and doctors were prejudiced against scientific observation.

Redi not only made this signal discovery and upset the theory of Galen's explanation for the existence of the itch but he made a close study of other parasites and by describing the male and female round worms and the life cycle of insects he at once was

able to refute the accepted spontaneous generation theory. His work in 1668 when he proved that a dead body protected by gauze did not develop maggots because flies could not reach it and deposit their eggs was a forerunner to the same kind of experimental observation which brought such large rewards at the hands of Pasteur with pathogenic bacteria, of Patrick Manson in proving that filariasis is transmitted by mosquitoes, of Theobald Smith in discovering the rôle of the tick in the transmission of Texas cattle fever, and of Loos in finding that the larvae of the hookworm could pass through the skin.

It was Redi's work that blazed the way for these and other great discoverers. And in all branches of medicine real scientific progress has come only by the one method, the method of observation and experiment, the method of the great pioneer, Redi.

For this especially, we, in the spirit of our foreword, wish to honor his work, and in the hope of doing so we print on the front cover of the QUARTERLY a picture of the statue at Florence erected in memory of him.

EXCERPTS

For a Higher Standard in Medicine:

"There should be a hearty welcome from the entire public to the newly formed Federation of State Medical Boards. It not merely aims at an end indisputably desirable, but it seems a feasible and practical plan to accomplish that end. It has every justification that is offered for such associations as the so-called House of Governors and the larger society to secure uniformity of laws, and it has the advantage of a purpose more single and definite.

"Not, however, that everybody *will* welcome it, or that it will not encounter opposition and difficulties. It aims not merely to fix and make uniform, but also to raise the standard of admission to the medical profession, and unfortunately there are only too many men and institutions with plenty of reasons to resist any such project. Part of its work must be educating public opinion, and public opinion on this matter will take a lot of educating. Because that is so, the political work of the Federation, also, may be not too easy. Anybody who doubts that both quackery and the simplicity it plays on count very substantially in politics can probably learn better by looking into the history of the movement for a National Health Department, not to speak of the patent-medicine part of the history of the Food and Drugs Act.

"Still, it is rather surprising that the state health boards have waited so long to join together against these forces of knavery and ignorance: they seem so natural an agency of reform, and the need of reform has been so long urgent and plain. With admirably generous endowments to medical education and research, with really great doctors and medical schools, we lag amazingly behind Europe in the protection of the public against both incompetent practitioners and schools of scant equipment and low, commercial character. We have far more doctors than we need, and that alone proves that we let men become doctors too easily and too swiftly. Let us not shrink if any retort that that means 'too cheaply;' nor yet if any talk confusedly of 'states rights' in this connection. It is well to make sound education accessible to all, rich or poor; but faulty training is not good for anybody, and it is poor philanthropy to help make anybody a quack."—Editorial comment, *Harper's Weekly*, July 26, 1913.

The Medical Council of Canada

"Canada is to be congratulated on not being hampered by legal barriers in effecting a national registration law to regulate the practice of medicine, or rather on having in its medical profession the unity of spirit which enabled it to bring about such a desirable law. Henceforth any one desiring to obtain a medical license which will grant him the right to practice medicine in any or all of the provinces of Canada without further examination may obtain the same from the Medical Council of Canada. This council is composed of members representing each provincial medical council and each university medical school. The qualification granted by the Medical Council of Canada will be known as the "License to the Medical Council of Canada" (L. M. C. C.) according to the first Announcement of the Council just issued. The council appoints examiners who submit the candidates to written, clinical and oral examinations. One of the great objections to the introduction of thorough practical examinations here in the states is the great expense. This will be met by the Medical Council in Canada by charging a fee of $100 for examination. Whether or not it will ever be possible here in the states to establish a like examining body whose license will be recognized and give the privilege of registration in each state is difficult to predict.

"At present there is organized the Federation of State Medical Boards of the United States which is working to this end. In this country we cannot have a national registration law without amending our federal constitution because Congress has no power to regulate the practice of medicine within any given state. All that Congress could possibly do now would be to pass a law that would be applicable to a doctor taking an examination in more than one state. Under our present consti-

tution, reform on a national scale must come by all the states enacting uniform laws.

"Many practitioners have suffered the annoyance of having to take examinations that are far from practical when, for some reason, they have chosen to move to another state. By these physicians if not by the rank and file of the profession a national licensing body would be most welcome. It would seem that such a body could be established more quickly than to bring about a uniform standard for medical education and uniform laws in all the states. Many of the state boards might have moved rightly in the direction of recognizing high standard examinations conducted by colleges or other states if it had not been for the unfortunate introduction of the so-called reciprocity clause in many of the state laws. This reciprocity clause might better be termed the retaliation clause. A state which has an obviously lower standard than another state that refuses to indorse its license retaliates by refusing in turn to indorse the license of the higher standard state. This wrongful retaliation is deplorable. It is to be hoped that we may before many years be able to have a national licensing board similar to the Medical Council of Canada."—Editorial in the *Medical Record*, July 19, 1913.

Medical Teaching

"The truth is that if our graduates in medicine are insufficiently trained, we—the group of men here present—are responsible. We either haven't the brains or the backbone to change things. In either case our slumbers should be fitful and our working days fuller of activity. Really, gentlemen, this is serious business. * * * When I hear of an avoidable death I have some of the qualms of a murderer. The question, 'What are you going to do about it?' shrieks for an answer. This question opens the discussion of methods.

"*Methods of Teaching: Laboratory Method.* Concerning the laboratory side of general medicine there is unanimity of opinion that a certain acquaintance with the methods can be gained through laboratory courses of the same nature as those

conducted by the ancillary sciences; namely, systematic work with a considerable number of students in laboratories not immediately related to the hospitals. This is the way in which clinical pathology is ordinarily taught to juniors. While such a course is justified, there is equal unanimity among experts that such work constitutes only a beginning, and that the continued application of the laboratory methods in the first-hand study of actual patients is an absolute necessity. This necessity must be borne in mind when we come to the consideration of teachers and equipment.

"For the present let us turn to the other forms of teaching applicable to general medicine.

"*Didactic Lectures:* Since a thorough acquaintance with facts is one of our aims, it becomes apparent that the didactic method may be employed, provided the students have the opportunity of acquiring the objective basis by which the matter of lectures or text-books is made intelligible. By this objective substratum I mean that first-hand knowledge of facts, terms and methods by which alone wider discussion and excursion can be comprehended—by which alone words can be vivified and descriptions visualized.

"*Importance of Objective Knowledge:* To me as a teacher of physiology this subject is almost a fetish. I spend probably a fourth of the time of my students in the systematic development of objective knowledge of the methods and principles of this science, but I do not attempt to teach it all from an objective standpoint. I find that when my students have a moderate working acquaintance with the graphic method, they are in a position to understand and interpret heart tracings that they have not made themselves; that if they have studied the process of secretion of the salivary glands, they can visualize the process in the stomach; that if they have seen the effects of secretin on the pancreas, the discussion of the ductless glands without demonstrations becomes intelligible.

"Now is it apparent that the fundamental sciences supply in part the objective substrata for medicine. For this, in part,

the students have pursued anatomy, physiology, chemistry and pathology. But it is equally apparent that a part of the experimental basis must be supplied by the department of medicine. The student must early see some sick people. Else 'fever,' 'dyspnea,' 'râles,' 'contusion,' 'abscess,' 'rigidity,' 'edema' and many more words remain words only, parrot words, learned by rote, glibly repeated it may be, but lonely and unassociated in the mind. Hence we have the argument for some clinical instruction, as intimate as may be and as early as possible, surely by the beginning of the third year.

"Concurrent with or following (but not before) this observational basis can come systematic didactic instruction. Whether by lectures or by recitations from a text or by a combination of the two seems from a study of our authorities to be a matter of local conditions. To me it appears that the working out of this problem should take into consideration our fourth and fifth aims in regard to the development of powers of expression and habits of study. Furthermore, the problem should be worked out in relation to other departments and divisions. For example one department may well work from the text-book with frequent oral and written exercises and consequent development of ability to read and to express. Another department may properly use lectures and develop power to recognize essential points in discourse and make good notes. Whatever be the detailed system, every one agrees that the didactic method is to be employed with discrimination as to subject-matter and sparingly in relation to the total instruction.

"*Self-criticism as a Factor in Education:* I believe, however, that one recognized psychologic fact should not be lost sight of; namely, that self-criticism of motor responses is easier than self-criticism of purely mental functions. A child can more easily tell whether he has made a right angle correctly than whether he has defined it correctly. A man may make a good machinist of himself. He can with difficulty make an electrical engineer of himself. Still less easily can he make a scientist of himself. The broad foundation of theory and of generalization must be laid by systematic instruction in

the school. Your average graduate should constantly improve his technical skill in his life-work; he will be less likely to add to his scientific knowledge and to his ability as a thinker. This is not saying that we should teach the latter to the exclusion of the former. But it is saying that in our zeal to produce a competent technician we must not narrow the mental horizon—that we must not submerge the science in the art. This is a real danger, to be borne in mind in every readjustment of curriculum by which didactic instruction is supplanted by technical instruction and in all teaching, especially of the latter kind.

"*Clinical Lecture Method:* Taking up the second method of instruction, the clinical lecture, there is a surprising majority expression among our correspondents as to its limited applicability. It is criticized, on the one hand, as not furnishing systematic instruction; on the other hand, as not affording intimate, first-hand information to the students.

"The first criticism is met in part by saying that the lecturer must be in command of a very large clinical material from which to develop a systematic course (which is easier said than accomplished). The first criticism is also answered in part by saying that the student in his after-life will have to meet his cases as they come and must be prepared to open his mine of knowledge at any spot and at a moment's notice. The second criticism is partially met by having certain students participate, either by being abruptly called to the arena or, better, by being afforded opportunity to examine the case in advance. You will all remember, however, Mr. Flexner's description of the ineffective working of the *Practikant* system in the highly organized clinics of Germany. It can hardly be so good, on the average, in our less organized and controlled hospitals.

"Nevertheless the clinical lecture has ardent defenders; and much of its success must depend on the care with which the system is worked out, and on the way in which the student-participant is compelled to work up and present his part of the exercise. That the method may be used in moderate degree should be admitted.

"*Section Teaching and Individual Work:* Two other methods

of clinical instruction remain to be discussed; namely, so-called section teaching and individual work in hospital wards. It seems to me that many practical considerations demand that the two methods be combined. Abstractly, we may say that the student should work out everything by himself in ward and laboratory. Practically, it is acknowledged by all that the student must have supervision and help. Abstractly, we may say that all instruction should be individual. Practically, we cannot furnish instructors enough; and there are other difficulties. Abstractly, we may say that the teacher's criticism and discussion of a student's work pertain only to that student's work. Practically, we know that a valuable by-product of that discussion and criticism may fall to others who are near enough to know the facts under consideration. Teaching in small groups, therefore, appears to combine the maximum of efficiency with the minimum of supervision and expense.

"The maximum of value in this type of sectional instruction will be found neither when the teacher demonstrates everything, nor when he simply turns the student loose in the ward and laboratory and says, 'Do so and so.' The maximum of value is somewhere between these extremes. It will vary in position with the advancement of the students and with other conditions. We need not try to locate it exactly. It is of more importance just now to decide how many students a teacher may properly supervise and the length of time to be spent in this work. Our correspondents are united in affirming that the sections must be small. Twelve is the largest number named, and a big majority favor sections not larger than six. They assert further that two or three (or four) hours a day for six (or seven!) days in the week and over a period of eight to twelve weeks should be spent by each senior student in ward and laboratory work on actual cases of disease.

"Even admitting that under good conditions the students can work part of this time by themselves (and the régime to make this possible needs to be very good indeed, if proper regard be had for the patients concerned), it is apparent that here is a very

large problem of organization, equipment and teaching. This problem has been stated so often that some of you are doubtless whispering, 'Katydid,' but a far better slogan is 'What are you going to do about it?' What are *we* going to do about it?

"*Medicine should be a University Department:* We must, complacent gentlemen, *we must* organize this inexpressibly important teaching on a university basis. At the present time, as Dr. Blumer has frequently said, it is like chemistry forty years ago. At the persent time, in many of our schools, sick people are like the instruments in the physics cabinet thirty years ago bearing the notice, 'Students must not touch the apparatus.' First of all, we must open the cabinets; that is, the hospitals. Secondly, we must organize the teaching so that students may properly use the apparatus; that is, the patients. Incidentally we shall find, as did physics, that many more teachers and much more apparatus are needed the instant that the university type of instruction is adopted.

"*The Teaching Hospital:* I can take time but to indicate in brief symbols, as it were, this aspect of our problem. The university hospital is what we are all praying for; but so far but few of our rich men or rich states have been influenced to double, yea, quadruple, the results of their philanthropy by endowing institutions which both minister to immediate unfortunates and also, through educational facilities, radiate blessings to unnumbered others in sick beds far removed in time and space. Meanwhile let us not only pray but work.

"Organization, tact and persistence will do much. Scattered and inadequate hospital privileges will bear fruit if cultivated and fertilized. By fertilization we mean all that the medical school can do for the hospital. Have not the schools heretofore asked much and given little? The relation should be *quid pro quo*. And in addition to moral support and other help, the schools may well afford to pay money for their clinical privileges. Often a very moderate annual sum will secure affiliations of great value. The school may properly conduct the laboratory of the hospital or furnish a paid pathologist or support a number of free beds. Gradually the schools can gain control of the

staffs; but even pending that all-to-be-desired day, tact and weight of opinion may secure working co-operation. The staff-surgeon has the reputation, it is true, of lying full length in the trough while he eats. But the medical man has often no more than two legs in his victuals; and the man trained a generation ago, who ought not to try to teach under the new conditions, will sometimes move over a bit to allow the young instructor a chance—on the charity cases!

"Seriously, while admitting the real difficulties above indicated, I must express my appreciation of the unselfish zeal of many of the older type of medical teachers and of their willingness to give up their authority, when the good of the school demands the sacrifice. It is ours to demonstrate that a new prophet is come and the sacrifice is due.

"*Present Defects in Teaching Medicine:* A word only on the teaching side of our topic. At present, in most of the schools of this association, the teaching of medicine is as far from the university standard as Dr. Cook from Captain Scott. A glance at some schedules which I studied would demonstrate this all too easily. In one school, for example, there are two 'professors' of medicine: one is scheduled for one lecture a week; the other conducts a clinic two hours a week. The first gives one-fiftieth, the second one-twenty-fifth of his working time to teaching. Contrast this with the professor of anatomy who teaches, according to the schedule, ten hours a week; and the rest of whose time goes to the constructive work of his department and, as shown by his publications, to investigative work in his science. Take another school, three professors of medicine teaching two, two and three hours a week, respectively. Take another, one 'professor,' one lecture; the rest of the work by subordinates, all practitioners.

"Or take up budgets! One school spends yearly for medicine (total budget), $930, for anatomy, $3,750; for pathology, including bacteriology, $4,600; for physiology, including pharmacology, $3,800. Another school: medicine, nothing; anatomy, $5,600; pathology, $7,500; physiology, $4,500. A third school: medicine, $200; anatomy, $7,000; pathology, $8,000; physiology,

$3,500. A fourth school: medicine, $1,100; anatomy, $6,000; pathology, $4,500; physiology, $6,600. Of course other budgets read quite differently; for example, those of Stanford, Western Reserve, Minnesota and Michigan. In one school, to its great advantage, a strong young man has been put at the head of medicine on practically a full-time basis, and the salary for this man was voluntarily surrendered from the already inadequate budgets of the fundamental departments. This is mentioned as showing how great is the need to strengthen the department of medicine, and what sacrifices may sometimes be deemed necessary to do it.

"*Need of Money for Paid Teaching:* Gentlemen, complacent gentlemen and complacent public, you have got to spend money on the teaching of medicine. You cannot expect a busy practicing profession to teach; and even if you had a right to expect it, this profession could not fill the bill; for the profession of medicine is not the profession of teaching—and 'no man can serve two masters.' Practitioners may give valuable help but they cannot bear the larger burdens.

"But if you had the money—which admittedly you have not—how would you spend it? As everybody knows, we have not bred the self-perpetuating race of clinicians and teachers which has made the German medical schools the models of the world. We have produced a few promising men, already well placed. But the wise school, attempting to build up medicine on a university basis at the present time, will look for a young and vigorous 'sport' (I am still using the language of the breeders), and will hope from him to develop the new species of clinical teacher. Select a strong young man who has done some research work in the fundamental sciences and has had a good clinical experience, and tell him to swim or sink. If he sinks or if he drifts into the maelstrom of practice, let him go and get another idealist still in his early thirties. Pay him well for his services. Pay him more than the laboratory head, if you must. I say this with misgiving, for I cannot think one kind of service intrinsically more valuable than the other. But on the other hand, the law of supply and demand cannot be

denied. Surround this young man with other young men, some full-paid; others, part-time. Yes, and with old men too, men of experience, vision and zeal, who are willing to co-operate for better things. Presently we shall think the millenium is indeed here!

"*Teaching Ethical Ideas:* Finally, let us recall the seventh of our aims formulated for a department of medicine: to inculcate the ethical and professional ideals of honor, self-respect, altruism and social consciousness without which medicine degenerates into a business or a trade. Is there not need that something be done in this direction? Does not the wide-spread distrust of the medical profession indicate that something should be done? Does not the unrest in the profession demand that something be done? Can we deny that many of the profession are money-mad? Does not cut-throat competition beat the oil business in its worst days? As deans you doubtless often receive from doctors offers to sell their practices or notices of desirable locations for young physicians. Did you ever get one that told of the good a physician could do in that community? No; they say rather 'Practice worth $6,000 a year. Collections good.' Or they say, 'Little competition here. The other doctors are old fogies. I came here six years ago without a cent and have saved $15,000.'

"Gentlemen, the need of higher ideals is very great. But can we suggest methods which will at all help to meet the demand?

"If you will pick up almost any book on principles of teaching you will find a chapter on 'Responses of Conduct' or 'Moral Training.' You will find that the psychologists trace the elements of character very far in the complex web of existence—farther indeed than the life of the individual, for there is evidently an important hereditary factor. 'To expect school education to determine moral development,' they acknowledge, 'is like expecting a city water-supply to abolish all sickness.' But at the same time they point out that the teacher can 'do a little of what so much needs to be done.' And we think the department of medicine also can do a little of what so much needs to be done in its sphere of education.

"*Teaching by Example most Important:* The department of medicine enjoys the advantage of being able to teach by

example even better than by precept. It can place before students worthy examples of men devoted to science, the advancement of knowledge and the amelioration of suffering. It can develop the instinct of workmanship. It can teach a man to do honest work Any man who learns to do something useful is a better man than he would have been otherwise. Moreover, an overpowering interest in his occupation keeps him from distracting and lowering influences. This interest the instructors in medicine should arouse. Says Thorndyke, 'A man's conscience is not the producer but the product of his career.' If this be even partially true, habits of thoroughness, persistence, punctuality and patience have real moral value. These habits the instructors in medicine should help to form in their students. The field of preventive medicine should be traversed as the great altruistic fighting ground of our science. Finally by a host of shining lights, such as Pasteur, Livingstone, Walter Reed and Ricketts, it may be shown that the enduring stars in the esteem of mankind are the morally great and not the flaming rockets of worldly success.

"We as deans and officials have our part. We help to select the teachers and thereby accept a great responsibility. I remember an instructor who never wrote a prescription on the blackboard without saying, 'This will be worth two dollars to you fellows'; another who frequently spoke of his large practice and admonished the students not to be afraid of any kind of surgery when they went out of school. Both these men, I am glad to report, have discontinued their activity as medical teachers. I know a surgeon who recently, for reasons of his own, sold his big limousine and now drives to the college in a little runabout. I venture the suggestion that that surgeon is now a better teacher.

"*Conclusion:* The weakest part of medical teaching is general medicine. It should be the strongest. It should be a university department, like the other divisions of biologic science. It must be given its laboratory; that is, a hospital. It must be given its equipment. It must be given its material. It must be given its personnel; that is, paid scientists and teachers who devote their

time to this work. It must have money. The problem of teaching general medicine is the great problem in medical education. You have built a good foundation, gentlemen; but you have put on a temporary roof at the height of the first floor, and you are holding divine services in the basement. It is time to build the church."—From the report of the Committee on Pedagogy of the Association of American Medical Colleges, Feb. 26, 1913, Dr. E. T. Lyon, Chairman.

Now for a House of Doctors

"Admirable results in the way of elevating and standardizing medical education in this country are promised, and with some confidence can be expected, from the new Federation of State Medical Boards, the organization and purposes of which were announced by Secretary Huffman, of the New York board, in *The Times* on Saturday.

"This body will be in many respects analogous to the House of Governors, though dealing with one subject, or rather one group of subjects, instead of with any that may be of general interest. The chief functions of these state boards are to decide upon the qualifications to be required in aspirants for the right to practice medicine, to see that none do practice it without the fixed minimum of knowledge and experience, and to encourage or suppress medical schools according to whether or not they provide reasonably adequate facilities for their students. As these are all matters of state regulation, the members of the boards will acquire no new power by meeting as a federation, but they will thus be able to exert much greater influence toward the highly desirable end of securing uniform legislation relative to the public health and safety.

"The delegates from the states with the best medical laws will also be privileged to point out changes and improvements needed in the more backward states, and this should hasten the extermination of the so-called medical schools that are merely, or little more than the vendors of diplomas to anybody with the inclination to buy—and the money to pay. Even now, such degree factories are not as numerous as they used to be, but there

are still too many of them for the credit of the medical profession, and there are states where still flourishes the quack-cultivated delusion that the "practice of medicine" consists of the administration of drugs. That fallacy is suffering from a slowly accumulating mass of court decisions soundly based on facts and experience, and if the Federation of State Medical Boards can put an end to it the service will be enormous.

"The Federation, moreover, can campaign effectively for the establishment of a Federal Bureau or Department of Health by convincing ignorant doubters and confuting interested deniers of the Government's duty in that direction. Recognition of the fact that the treatment of disease is a public, rather than a private concern is becoming steadily clearer, day by day, and the Federation's privilege will be to emphasize and extend this truth."—*New York Times* (daily), July 14, 1913.

Report of the Committee Appointed by the American Laryngological, Rhinological and Otological Society to Consider the best Methods to be followed in the Teaching of Oto-Laryngology in Undergraduate and Post-Graduate Schools.

"The subject assigned to our deliberation naturally divides itself into two distinct parts, and yet in the final analysis, the post-graduate teaching is closely dependent upon the thoroughness of the undergraduate work.

"First—'The Teaching of Oto-Laryngology to Undergraduates.'

"In order to ascertain what methods are followed and what views are held in the various leading universities of this continent upon this question, your committee submitted a series of questions to the professors of oto-laryngology in forty of the leading institutions, the list of these being compiled from the Carnegie Foundation Bulletin No. 4 entitled 'Medical Education in the United States and Canada.'

"These questions were as follows:

"1. Should the 'Course of Instruction' be extended over one or two years?

"2. How many hours should be devoted to this 'Course of Instruction?'

"3. What proportion should be clinical and what didactic?

"4. In what order should these be given?

"5. What should be the limits of such a 'Course of Instruction' having in view the necessities of the general practitioner, and the proper balance of the subjects of a medical curriculum?

"6. Should 'Operations' form part of such a 'Course of Instruction.'

"7. Should a separate examination in oto-laryngology form an integral part of the Final Examination?

N B.—In answering the above questions, which are intended to ascertain the personal views of those responsible for oto-laryngology in the leading medical colleges of the United States and Canada, it is desirable to indicate briefly also to what extent these personal views are carried out in the institutions with which the writer is connected.

"Replies were obtained from some thirty-one institutions, including over twenty states and provinces, so that the opinion elicited may be considered fairly representative. In perusing these reports, your committee was agreeably surprised to find so little divergence in either practice or opinion as the replies revealed, and have therefore the greater confidence in submitting the resolutions which form their conclusions.

"We regret that we were unable to elicit satisfactory information as to the amount of 'individual instruction' given to each student. Where the number in the classes are considerable (and if possible that number should never exceed six students), as Mygind points out, 'the student is apt to acquire superficiality in the examination of the patient, this fault is undoubtedly in many cases due to the teacher not having sufficient time to take each pupil individually and teach him all the details he should observe.' (B. M. J., Aug. 24, 1912.)

"We note also that the idea still lingers in the minds of some of our leading instructors, that didactic lectures form an adequate means of instruction. About one-fourth of those reporting asked for equality between didactic and clinical instruction. Surely this can not be right. The regions involved in oto-laryngology are such as lend themselves least readily to demonstration by lectures, or even by lecture-clinics. It is only in so far as the

student receives 'individual instruction' on the living subject, that he can acquire an adequate knowledge of his subject in the limited time, which can be spared in the overcrowded medical curriculum.

"This 'individual instruction' requires time, patience and competent assistants, but these are well worth the expense involved, as by properly instructing the student of medicine in oto-laryngology, we will do much to avoid the conditions which now lead to the foisting of vast numbers of what we may style pseudospecialists upon the public. To quote Mygind again, 'a few cases examined and followed thoroughly teach the student to observe and give him better experience than a great number of cases examined superficially.'

" 'Individual instruction,' as pointed out above, demands competent assistant instructors, but the governing boards of our universities must be compelled to realize the absolute necessity which exists for the proper balancing of the medical curriculum, so as to turn out all-round general practitioners and must provide the equipment therefor.

"Another point which your committee deem worthy of criticism in dealing with these reports is the scope of the instruction with regard to text-books. Such a course should get as far away from the text-book as possible. We cannot in the least agree with the gentlemen who reported in answer to question five, 'that the contents of the required text-book on these subjects should be covered, *chiefly by recitations*.' (Note the italics) The student should be led to read up the cases he sees in one of the many excellent text-books which are at his command, but to cover a text-book by recitation is simply wasted time, and must lead to superficiality.

"Every student of medicine has a right to graduate primarily as a general practitioner The first task of every general practitioner is diagnosis. No amount of text-book recitation will develop the ability to diagnose correctly in oto-laryngology unless there go beforehand the visual knowledge of the normal as contrasted with abnormal, the education of the eyes, ears and fingers. This education means actual work upon the patient

and the 'course of instruction' should therefore be almost wholly clinical.

"As regards the order in which instruction should be given, some of the teachers feel strongly that any didactic instruction should be given as the finale, to enable the student to co-ordinate his observations and place them in related groups.

"By question five we hoped to elicit a sufficient answer to a difficult problem. With the daily advance of medical science, new subjects are with loud voices demanding admission to an already-overburdened course, and even in those universities where the course is one of five years, it is being found needful to relegate some of the science subjects to the preparatory course so as to give the student time to digest what he sees daily in the wards. The best of judgment is therefore called for in determining what shall form a part of the minimum curriculum in medicine.

"On the other hand, as Gradenigo (*Trans. Amer. Laryngological, Rhinological and Otological Soc.*, 1911) has pointed out, 'what doctors need is their daily practice should be made compulsory without expecting them to be familiar with complicated examinations and operations.' This states in a nutshell what should be included in the 'course of instruction' in oto-laryngology. The student should therefore be made thoroughly familiar with the anatomy, be taught the use of the instruments of examination, be able to recognize the normal parts, be familiar with their appearance in the acute inflammations, and in the commoner chronic affections, and finally be able to recognize and understand the principles of treatment of the acute affections.

"With this information in his possession he will have a solid foundation upon which to build his superstructure, will be able to read his text-book in connection with a given case intelligently, obtain a comprehensive knowledge of the condition of the various organs of his patient, and finally be in a position to secure early and useful assistance from the specialist. Inability to examine a larynx has often led to a failure to recognize malignant disease in its incipient stages, and many examples will occur to all of us, where the lack of training of the student has been to the great

suffering of his patient, and the disgrace of the practitioner. Such a course will, however, not be complete without instruction from his professor as to what symptoms demand the skill of the specialist, and the unwisdom and criminality of failure to refer the case for examination by the thoroughly trained specialist when such symptoms arise.

"The question regarding operations was intended to raise the point that except where emergency aid is required as in myringotomy, intubation, and tracheotomy, the general practitioner should not undertake even the removal of tonsils, because every operative procedure in oto-laryngology is attended by risks which call for special training and special skill. The student has a right, however, to understand the way in which the condition of the patient may be improved by skilled operative procedure.

"The last question elicited practically unanimous replies that a separate examination conducted by the professor of oto-laryngology should form an integral part of the final examination. The association of a question or two on the ear, or throat, upon the paper in surgery must be relegated to the past.

"Your Committee therefore beg to recommend for your adoption the following as the minimum requirements of the undergraduate course in oto-laryngology:

"1st. That each student of medicine is entitled to receive sufficient instruction in oto-laryngology to enable him to deal with the parts concerned as intelligently as with the rest of the human body.

"2nd. That for this purpose he should be familiar with the anatomy of the parts, possess a practical working knowledge of the simpler instruments of examination, be able to recognize familiarly the normal appearance of the structures, be practically acquainted with the pictures presented by the acute inflammations, and the commoner diseases of the organs involved, and how to treat the same. He should further be instructed to recognize the symptoms of serious complications, the wisdom of early associating the greater knowledge of the specialist in the care of his patient, and the dangers associated with all operations

upon the parts involved, except in the hands of the competently trained specialist.

"3rd. That for this 'course of instruction' a share of each of two final years of the medical curriculum is essential.

"4th. That the said 'course of instruction' should embrace both clinical and didactic teaching, preferably intermingled, the clinical to be greatly in excess of the didactic, at least in the proportion of three to one.

"5th. The clinical instruction should be given to small groups of students, preferably in classes of six, each receiving individual instruction, and this together with the didactic work should extend over a period of at least forty hours in the time of each student in each of the two years.

"6th. That operations should not form any part of the above courses, except that in so far as may be possible, each student should be permitted to assist at the performance of the simpler varieties, that he may become practically acquainted with the methods of procedure and the objects sought.

"7th. That a special separate examination in oto-laryngology, preferably clinical, conducted by the professor of oto-laryngology should form part of the final examination in medicine of every university and every licensing body.

"8th. That a copy of these resolutions be forwarded to the medical faculty of every university and college of medicine, as well as to every state or provincial examining board in the United States and Canada."

The Examination in England

"I may perhaps just sum up the particular features of the examination.

"We can examine at one time as many as 250 candidates. In the case of chemistry they would all write their paper on one day: they would be examined in the laboratory in three batches of 80 men each, leaving a few for a fourth batch. These four batches would take two mornings and two afternoons.

"In physics the candidates would be examined at the rate of 16 men an hour in the practical part, or a total of 16 hours spread over 3 days.

"In biology we only take 36 candidates a day for the oral part, and therefore the examination would occupy 7 days.

"For the second examination in anatomy and physiology, we examine 48 candidates a day in the oral part, and we should therefore take five days and a part to get through this number.

"As a matter of fact, however, we do not have such large numbers for the first and second examinations, because many of our candidates obtain exemption from these examinations by passing in the subjects at their universities.

"For the final examination, the papers in medicine are written on a Tuesday and Wednesday and the clinical and oral part commences on the following Saturday, when 24 candidates are taken. We should examine four days in the next week when 96 more candidates are taken, and four days in the week after, when again 96 candidates would be examined, leaving 34 to be taken in $1^1/_2$ days in the following week, so that in three weeks from the date of the paper we should finish the whole of the candidates.

"In midwifery we examine 32 candidates a day, therefore in 8 days—four days a week—we should complete the examination and, as the paper is written on a Thursday and the first oral night is on the following Saturday, it takes exactly a fortnight.

"For surgery, the paper is written on a Friday and the oral commences on the following Monday. We take 90 candidates in four days in the following week and 90 candidates in the week after that, and the remaining 70 candidates take another four days, two of which would be short, so that in three weeks from the date of the paper the examination is finished.

"Take an individual candidate: he will have two papers of 3 hours each in medicine, one of 3 hours in midwifery, and one of 3 hours in surgery. He may be summoned to attend for his oral examination on any of the days appointed for the practical and oral parts. On the day that he is summoned to attend for medicine and midwifery he is examined in clinical medicine for half an hour; in practical and oral medicine for half an hour; in midwifery for 20 minutes; in surgery he would be summoned for another day for half an hour's clinical examination and a

quarter of an hour's examination in surgical anatomy and apparatus, and for 20 minutes' examination in pathology and surgery on the following day, making a total of 65 minutes for his surgical examination.

"An examiner in medicine would therefore be occupied for $4^1/_2$ hours on each of $10^1/_2$ days and would receive in fees £110 ($550); an examiner in midwifery would be engaged on seven days for 2 hours and 40 minutes each, and would receive £60 ($300); and an examiner in surgery would be engaged on 10 days for $5^1/_2$ hours and 4 hours alternately and for two shorter days, and would receive in fees £106 ($530).

"You will agree with me that, at any rate, our examinations are practical and thorough, and because of this I consider our license has a peculiar value, namely, that the mere fact of a man having to undergo a series of examinations before such a number of strange examiners, and away from the surroundings and associations of the institution in which he has been educated is, in itself, a test of his ability to act in emergency, to adapt himself to circumstances, and to prove himself capable of rapid resource.

"It is now 34 years since I first entered the office of the Royal College of Surgeons, and for 24 years I have been Secretary of the Conjoint Examining Board of the two Royal Colleges. During these years the examinations and the organization have greatly developed. I have seen the practical examinations of other bodies—indeed, in addition to our own examinations the management of a considerable part of the examination for the Degree of the University of London, as well as the examination for surgeons for H. M. Navy and for the Indian Medical Service is in my hands. Naturally, I have acquired certain convictions as the result of my experience and have contemplated how an ideal system of state examination should be framed, where no vested interests stand in the way. May I conclude my address by shortly stating the outlines of such a scheme?

"I. Assuming that medical education is on a sound and efficient basis, the state board should be representative of the professorial staffs of the medical schools and hospitals.

"II. Should the board be a large one, an executive committee consisting of 6, or at the most 8, members of the board should be appointed who should be entrusted with the administration of the examination on conditions laid down by the state board.

"III. The examiners should be elected only from physicians and surgeons who are engaged in active clinical instruction.

"IV. The following conditions should be observed:

1. There should be not less than 10 examiners in medicine, in surgery, and in midwifery.
2. They should be well distributed among the staffs of hospitals where clinical instruction is given.
3. The appointments in each subject should be so arranged by rota that not more than two examiners in each subject should go off in any year.
4. The appointments should be for a period of five years but subject to annual re-election.
5. A new examiner should be paired with one who has examined for not less than 3 years.
6. The pairs should be changed every two examinations.
7. The examinations should be held four times a year to keep the numbers in moderation and to prevent too great a penalty for failure.
8. An official should be responsible for all details of organization with a sufficient staff. He should have a free hand to organize the examination under the supervision of the executive committee.
9. Punctuality, regularity, and compliance with the conditions laid down by the executive committee must be absolutely insisted upon.
10. A high standard should be set from the commencement, for unless the examination standard is a high one the teaching will not be thorough and the confidence of the profession and the public will not be gained.
11. In the conduct of the examinations the system de-

scribed for our surgery should be adopted, namely—5 *pairs of examiners—each pair in turn taking some* part of each candidate's examination.

"V. Should there be numerous states in the country, it would conduce to economy, efficiency and equality of standard, for such states to be divided into zones, 2, 3, 4 or even 5, states combining in one conjoint state board according to their geographical situation.

"VI. There would thus be groups of state boards between which there should be complete reciprocity.

"VII. In order to justify reciprocity by the maintenance of equality of standard, there might be a board of inspectors consisting of a representative of each group, whose duty it should be to visit the examination of every board in turn. They should report from time to time to all the constituent boards, who would then decide whether reciprocity should be continued with any particular board.

"VIII. A scheme such as this can be started by a small number of states, and if found to work satisfactorily, can be *extended as others become prepared to fulfill the neces*sary conditions.

"Now I have finished—I have encroached already too much on your indulgence.

"I realize only too well that in attempting to explain the organization of the conjoint board, I may have failed to convey all I could wish, for it is difficult to express in terms all the hundred and one little points which go to build up a complete system. I can only say that it will be a great pleasure to me to supplement or explain any details of our examinations by conference or correspondence. If in any small degree I have fulfilled the mission which you expeeted of me as the representative of those two great and ancient corporations which form that board, I shall feel no little pride in having taken a small part in assisting you to develop the system of medical education and examination, which you, with your characteristic thoroughness, are endeavoring to advance to a position worthy of so great and enterprising a country."—From an address delivered by Frederic G. Hallett, Secretary of the Board in England, before the Conference on Medical Education of the American Medical Association at Chicago, February, 1912.

Moral Force

"If I have discussed, with a certain degree of impartiality, alternative methods of moral teaching, I would not have you suppose that this impartiality is a mark of indifference or of doubt. Speaking here, in this venerable home of learning, my thoughts revert to the men who laid the foundations of Washington and Lee University. They were not men of wealth. Compared with ours, their surroundings were primitive. They did not have great libraries nor well furnished laboratories. They knew that they were pilgrims and strangers here. But they sought a country—a country of bright hope, of a nobler life, of a more perfect civilization. They did this, sustained not by capricious and charlatan notions of society, of religion, of virtue, of the right of property. They were directed by an irresistible moral force. They had an almost immediate consciousness of an invisible world of high ideals. Their eyes were fixed upon God, to whom they looked as the source of moral truth, as the principle of order in the midst of threatening disorder and chaos, as Light of Light. Theirs might have been the device of the University of Oxford: DOMINUS ILLUMINATIO MEA."—From the Commencement Address delivered at Washington and Lee University, June 11, 1913, by Charles B. Alexander.

President Eliot's Inaugural

"The best result of the discussion which has raged so long about the relative educational value of the main branches of learning is the conviction that there is room for all in a sound scheme, provided that right methods of teaching be employed. It is not because of the limitation of their faculties that boys of 18 come to college having mastered nothing but a few score pages of Latin and Greek and bare elements of mathematics. Not nature, but an unintelligent system of instruction from

the primary schools through the college is responsible for the fact that many college graduates have so inadequate a conception of what is meant by scientific observation, reasoning, and proof. It is possible for the young to get actual experience of all the principal methods of thought. There is a method of thought in language, and a method in mathematics, and another of natural and physical science, and another of faith. The actual problem to be solved is not what but *how* to teach."—From President Eliot's inauguration address at Harvard in 1869.

State Licensing Boards

"Hardly second to the universities, colleges, and the influence of the medical associations to exact standards is the importance of having a single medical licensing board, whose members are selected because of their special fitness for the work involved and apart from politics. In many States 'diploma laws,' by which the presentation of the diploma of a medical college admitted to practice, or by which the faculty of a state university performed the functions of an examining board, prepared the way for a new subject. South Carolina had a state examining board, but it was in Minnesota that the legislature of 1877 passed a new medical practice act, to be thereafter known as the examination law, and creative of an independent state board of medical examiners. This became a substitute for the diploma law, which made the faculty of the department of medicine of the state university an examining board. The example of Minnesota has been followed universally. Now all states except New Mexico require an examination of all applicants for license and 36 make provision for preliminary education, 6 requiring 1 or 2 years of college work as the minimum preliminary requirement.[1]

"We now have in our 49 states and territories 82 different boards of medical examiners, including the sectarian boards. It is also of great importance that in each state there should be only one portal of entry to the practice of medicine. The following point, made in the Council's report, deserves emphasis:

[1] Proc. of House of Delegates, Amer. Med. Assoc, 1909, p 16

"We have in some states one portal for those with ample qualifications but special gateways by which ignorant and incompetent practitioners, professing to adhere to special methods of treatment, can also get in. In the majority of states, after the representatives of these cults are licensed, even with the lower standards, they are granted or allowed to have privileges of unrestricted practice. This one portal of entry, already adopted in some states, should be a fixed educational standard to which all schools professing to train medical practitioners should have to comply. Graduation from a medical college holding to that standard should be required as well as the state license examination."—From Bulletin No. 4, U. S. Bureau of Education.

The State Boards

"The state boards are the instruments through which the reconstruction of medical education will be largely effected. To them the graduate in medicine applies for the license to practise. Their power can be both indirectly and directly exerted. They may, after examination, reject an applicant, an indirect method of discrediting the school which has vouched for him by conferring its M.D. degree. * * * The law that protects the public against the unfit doctor should in fairness protect the student against the unfit school.

"With the manifold duties and responsibilities of the state boards we cannot here fully deal. Our attention is necessarily confined to their educational function. They examine candidates for license, but admission to examination should be granted only after a fair presumption of intellectual fitness in favor of the applicant which has been established by the record of his preliminary education, and a fair presumption of sufficient professional training by his guardian from a recognized or reputable medical school. * * * * * *

"There is only one sort of licensing test that is significant, namely, a test that ascertains the practical ability of the student confronting a concrete case to collect all relevant data and to suggest the positive procedure applicable to the conditions disclosed. * * * * An effective, but purely mechanical and

entirely useless drill may be employed to make examination-proof a student who in the presence of a sick person would be quite helpless. As a matter of fact, prominent publishers put forth 'state board questions' and 'quiz-compends' with 'answers.' These manuals, well conned, guarantee the candidate's safety. Do not the several states appear to do almost everything in their power to resist the production of a well trained body of physicians? In the first place, they permit a half-dozen men to start a medical school as lightly as they permit them to open a printing shop; and they then offer them every inducement to furnish poor training by permitting the graduates to undergo an examination for which they can satisfactorily prepare by an inexpensive drill that has no bearing on the practical ends for which doctors are needed. A proper examination would go far to correct all the defects that this report has sought to point out. For low entrance standards, deficient equipment, bad teaching, lack of clinical material, failure to correlate laboratory and clinic, would be detected and punished by a searching practical examination. * * * * *

"In 1906, the worst of the Chicago schools—a school with no entrance requirement, no laboratory teaching, no hospital connections— made before state boards the best record attained by any Chicago school in that year."—From Report on Medical Education in the United States and Canada by Abraham Flexner for the Carnegie Foundation for the Advancement of Teaching, 1910.

Oliver Wendell Holmes on Bedside Teaching and Practical Examinations

"At the bedside the student must learn to treat disease, and just as certainly as we spin out and multiply our academic prelections we shall work in more and more stuffing, more and more rubbish, more and more irrelevant, useless detail which the student will get rid of just as soon as he leaves us. Then the next thing will be a new organization, with an examining board of first-rate practical men, who will ask the candidate questions that mean business, who will make him operate if he is to be a surgeon, and try him at the bedside if he is to be a physician,

and not puzzle him with scientific conundrums which not more than one of the questioners could answer himself or ever heard of since he graduated."—From an introductory lecture by Oliver Wendell Holmes delivered before the Medical Class of Harvard University, November 6, 1867.

NOTES

THE AMERICAN MEDICAL ASSOCIATION

Next Annual Session, Atlantic City, 1914.

President, John A. Witherspoon, Nashville; *President-Elect*, Victor C. Vaughan, Ann Arbor, Mich.; *First Vice-President*, Walter P. Conaway, Atlantic City, N. J.; *Second Vice-President*, Frank C. Todd, Minneapolis, Minn.; *Third Vice-President*, Lillian H. South, Bowling Green, Ky.; *Fourth Vice-President*, Sol. G. Kahn, Salt Lake City, Utah; *Secretary*, Alexander R. Craig, 535 Dearborn Avenue, Chicago; *Treasurer*, William Allen Pusey, Chicago; *Editor and General Manager*, George H. Simmons, 535 Dearborn Avenue, Chicago; *Board of Trustees*, Philip Marvel, Atlantic City, 1914; Philip Mills Jones, San Francisco, 1914; W. T. Sarles, Sparta, Wis., 1914; M. L. Harris, *Secretary*, Chicago, 1915; W. T. Councilman, *Chairman*, Boston, 1915; Thomas McDavitt, St. Paul, Minn., 1915; W. W. Grant, Denver, 1916; Frank J. Lutz, St. Louis, 1916; Oscar Dowling, Shreveport, La., 1916; *Judicial Council*, Alexander Lambert, *Chairman*, New York City, 1914; James E. Moore, Minneapolis, Minn., 1915; Hubert Work, Pueblo, Colo., 1916; George W. Guthrie, Wilkes-Barre, Pa., 1917; A. B. Cooke, Nashville, Tenn., 1918; Alexander R. Craig, *Secretary*, 535 Dearborn Avenue, Chicago; *Council on Health and Public Instruction*, H. M. Bracken, Minneapolis, 1914; W. C. Woodward, Washington, D. C., 1915; H. B. Favill, *Chairman*, Chicago, 1916; Walter B. Cannon, Boston, 1917; W. S. Rankin, Raleigh, N. C., 1918; Frederick R. Green, *Secretary*, 535 Dearborn Avenue, Chicago; *Council on Medical Education*, Arthur D. Bevan, *Chairman*, Chicago, 1914; George Dock, St. Louis, 1915; W. D. Haggard, Nashville, Tenn., 1916; James W. Holland, Philadelphia, 1917; H. D. Arnold, Boston, 1918; N. P. Colwell, *Secretary*, 535 Dearborn Avenue, Chicago; *Council on Pharmacy and Chemistry*, L. F. Kebler, Washington, D. C., 1914; John Howland, Baltimore, 1914; Henry Kraemer, Philadelphia, 1914; F. G. Novy, Ann Arbor, Mich., 1915; George

H. Simmons, *Chairman*, Chicago, 1915; H. W. Wiley, Washington, D. C., 1915; O. T. Osborne, New Haven, Conn., 1916; Torald Sollmann, Cleveland, Ohio, 1916; M. I. Wilbert, Washington, D. C., 1916; Reid Hunt, Washington, D. C., 1917; L. H. Long, Chicago, 1917; Julius Stieglitz, Chicago, 1917; J. A. Capps, Chicago, 1918; David L. Edsall, Boston, 1918; R. A. Hatcher, New York City, 1918; W. A. Puckner, *Secretary*, 535 Dearborn Avenue, Chicago.

AMERICAN INSTITUTE OF HOMEOPATHY

At the sixty-ninth annual convention of the American Institute of Homeopathy, held in Denver, the following officers were elected: *President*, Dr. Dewitt C. Wilcox of Boston; *Vice-President*, Dr. Grant S. Peck of Denver; *Second Vice-President*, Dr. Anna B. Varner of Pittsburgh; *Treasurer*, Dr. Thomas Franklin Smith of New York; *Secretary*, Dr. J. Richey Horner of Cleveland.

THE NATIONAL ECLECTIC MEDICAL ASSOCIATION

President, W. S. Glenn, M.D., State College, Pa.; *First Vice-President*, Rosa B. Gates, M.D., Waco, Texas; *Second Vice-President*, W. E. Daniels, M.D., Madison, S. Dak.; *Third Vice-President*, O. S. Coffin, M.D., Indianapolis, Ind.; *Recording Secretary*, W. P. Best, M.D., Indianapolis, Ind.; *Corresponding Secretary and Editor of the Quarterly*, W. N. Mundy, M.D., Forest, Ohio; *Treasurer*, E. G. Sharp, M.D., Guthrie, Okla. The next annual meeting will be held at Indianapolis, June 16–19, 1914.

AMERICAN OSTEOPATHIC ASSOCIATION

The names and addresses of the officers elected at the last annual meeting are as follows:

President, C. B. Atzen, Omaha Nat'l Bank Bldg., Omaha, Nebr.; *First Vice-President*, Della B. Caldwell, Flynn Bldg., Des

Moines, Ia.; *Second Vice-President,* Bessie A. Duffield, Wilcox Bldg., Nashville, Tenn.; *Secretary,* Harry L. Chiles, Orange, N. J.; *Ass't Secretary,* Leslie S. Keyes, Andrus Bldg., Minneapolis, Minn.; *Treasurer,* M. F. Hulett, 8 E. Broad St., Columbus, Ohio.

MEDICAL COUNCIL OF CANADA

Dr. R. W. Powell, of Ottawa, Ontario, Canada, has been appointed Registrar of the Medical Council of Canada, the newly constituted medical licensing body whose license shall be recognized in all the Provinces of the Dominion. His office is at 180 Cooper St., Ottawa. The examination consists of three parts: the written, the oral, and the clinical.

EXAMINING BOARD IN ENGLAND

Mr. Frederic G. Hallett is secretary of the Conjoint Examining Board of the Royal College of Physicians of London and the Royal College of Surgeons of England. His office is in the Examination Hall at 8 Queen Square, Bloomsbury, London, W. C. The examination is written, oral and practical.

CALIFORNIA

Dr. Charles B. Pinkham has been appointed Secretary of the Board of Medical Examiners of the State of California. His office is the Butler Building at Geary and Stockton Sts., San Francisco. August 11, 1913 a new Medical Practice Act became effective. It provides for the registration of physicians licensed by other states and exempts from examination medical officers honorably retired or resigned from the Army or Navy. This does not apply to contract surgeons or the medical reserve corps. The law also provides for practical, clinical, and oral examinations.

QUESTIONS AND ANSWERS

The W. B. Saunders Company has published a second edition of a large seven-hundred page volume of State Board Questions and Answers by R. Max Goepp, M.D.

PENNSYLVANIA'S NEW LAW

A new law has gone into effect which requires a year of hospital work in addition to the four-year medical school curriculum as a qualification to take the state's examination. It affects all students now matriculated as well as those to follow.

CONFERENCE ON UNIFORM LAWS

The twenty-third annual conference of the Commissioners on Uniform State Laws met at Montreal in August. The officers were: *President,* Charles T. Terry, New York City; *Vice-Presidents,* John Hinckley, Baltimore, and Talcott H. Russell, New Haven; *Secretary,* Clarence N. Wooley, Pawtucket, R. I.

FEWER AND BETTER DOCTORS

The World's Work, August, 1913, publishes an article by Frank P. Stockbridge, entitled "Fewer and Better Doctors." The author outlines what has been accomplished by the American Medical Association and the Carnegie Foundation for the Advancement of Teaching in bringing about a betterment of medical education in this country. He also shows the lack of uniformity in the state laws for regulating the practice of medicine.

MIDWIFERY LAW IN OHIO

The recently amended laws in Ohio provide that midwives shall be qualified as to preliminary education the same as physicians and that they shall have attended recognized schools of midwifery before being admitted to the licensing examination.

LIST OF RECOGNIZED HIGH SCHOOLS

The U. S. Bureau of Education has recently published a list of Accredited Secondary Schools in the United States compiled

by Dr. Kendric Charles Babcock. In the preface to the List, Dr. Babcock defines an "accredited secondary school" as a school which requires for graduation at least 15 units of secondary work above a standard eight-grade grammar-school course, and has been approved by some state agency, university, or institution like the New England College Entrance Certificate Board. He also gives the definition of the word "unit" as authorized by the *National Conference Committee on Standards of Colleges* and Secondary Schools composed of representatives from all the associations, organizations and institutions vitally interested in school and college standards.

A REQUIRED FIFTH YEAR

After the 1913–14 session, Rush Medical College and the University of Chicago will require a fifth year for graduation in medicine. The fifth year may be spent as an interne in an approved hospital or as a Fellow or Research student in one of the departments of the college. The requirements for admission to the medical course comprise the completion of a four-year high-school course, and, in addition, two years of work in a recognized college or university.

FORTHCOMING MEETING

The next annual Conference of the FEDERATION will be held at the Congress Hotel in Chicago on Wednesday, February 25, 1914, the day following the Conference on Medical Education held under the auspices of the Council of the American Medical Association, and the same day as the annual meeting of the Association of American Medical Colleges.

Some of the topics to be discussed at the Conference are:

The clinical and oral examination.

Reciprocity in indorsing medical licenses.

The state examination.

The preliminary medical course in colleges.

The unlicensed practitioner.

Uniform laws throughout the states for regulating the practice of medicine.

Are medical colleges with an income of less than $16,000 able to attain the proper standard?

The Conference will be attended by a number of persons well known for their interest in medical education and examinations. Dr. Abraham Jacobi, Surgeon-Generals Stokes, Blue and Torney, Mr. Abraham Flexner, Drs. Witherspoon and Colwell and Mr. Babcock have promised to take part in the Conference.

CALENDAR FOR CONFERENCES ON PUBLIC HEALTH, MEDICAL EDUCATION AND LICENSURE TO BE HELD AT THE CONGRESS HOTEL ANNEX IN CHICAGO BEGINNING MONDAY, FEBRUARY 23, 1914

Health and Public Instruction..	Monday
Medical Education..	Tuesday
College Association	Wednesday
Federation of State Boards .	Wednesday

LIST OF CHARTER MEMBERS AND FELLOWS

CHARTER MEMBERS

Boards	Enrolled	Secretary
Arkansas Eclectic Medical Board	Jan 23, 1913	Dr Claude E Laws 712 Garrison Ave Fort Smith
Arkansas Regular Medical Board	Feb 13, 1913	Dr. F. T Murphy, Brinkley
Illinois State Board of Health	July 10, 1913	Springfield
Iowa State Board of Health	Mar 5, 1913	Dr G H. Sumner State House, Des Moines
Louisiana Board of Medical Examiners	Feb. 7, 1913	Dr A B Brown 108 Baronne Street New Orleans
Maryland Regular Board of Medical Examiners	Jan. 29, 1913	Dr. J. McP. Scott Hagerstown
Massachusetts Board of Registration in Medicine	Feb. 20, 1913	Dr. Walter P Bowers State House, Boston
Michigan State Board of Registration in Medicine	July 24, 1913	Dr Beverley D. Harison 504 Washington Arcade Detroit
Minnesota State Board of Medical Examiners	July 17, 1913	Dr T. S McDavitt Lowry Bldg, St. Paul
Montana State Board of Medical Examiners	July 30, 1913	Dr William C. Riddell Helena
New Jersey State Board of Medical Examiners	May 1, 1913	Dr Horace G Norton Trenton
New York State Board of Medical Examiners	Feb. 17, 1913	Dr O V Huffman Education Bldg., Albany
North Dakota State Board of Medical Examiners	Feb 19, 1913	Dr. G. M Williamson Grand Forks
Ohio State Board of Medical Examiners	Feb 7, 1913	Dr George H. Matson State House, Columbus

Oregon State Board of Medical Examiners	Mar 13, 1913	Dr E B. McDaniel 704 Electric Bldg, Portland
Pennsylvania Bureau of Medical Education and Licensure	Mar 25, 1913	Nathan C. Schaeffer Harrisburg
Rhode Island State Board of Health	Feb. 17, 1913	Dr. Gardner T. Swarts Providence
South Carolina State Board of Medical Examiners	July 30, 1913	Dr. A Earle Boozer Columbia
Utah State Board of Medical Examiners	Feb 5, 1913	Dr G F. Harding Salt Lake City
Vermont State Board of Medical Registration	Feb 7, 1913	Dr. W Scott Nay, Underhill
Virginia State Board of Medical Examiners	July 30, 1913	Dr. Herbert Old, Norfolk
Wisconsin State Board of Medical Examiners	July 26, 1913	Dr John M. Beffel, M D. 3200 Clybourn St Milwaukee

FELLOWS

Name	Address	Enrolled
Amberg, Dr. Emil	Detroit, Mich.	Feb. 7, 1913
Bennett, Dr John P.	Chicago, Ill.	Feb. 25, 1913
Brown, Dr A. B	New Orleans, La.	Feb. 25, 1913
Brown, Dr Geo S	Conway, Ark.	May 6, 1913
Colwell, Dr. N P	Chicago, Ill	Feb 10, 1913
Cook, Dr. Chas H.	Natick, Mass	Feb. 25, 1913
Copeland, Dr R. D	New York, N. Y.	Feb. 10, 1913
Dupuy, Dr Homer	New Orleans, La	Feb 25, 1913
Hallow, Dr W. P	Boulder, Colo.	Feb 25, 1913
Isbell, Dr. F T.	Horatio, Ark.	May 6, 1913
Lawrence, Dr F F.	Columbus, O.	Feb. 25, 1913
Martin, Dr. J. G.	Lake Charles, La.	Feb. 25, 1913
Motter, Dr. Murray F.	Washington, D. C.	Feb 11, 1913
Murphy, Dr F. T.	Brinkley, Ark.	Feb. 25, 1913
Tallerday, Dr. Geo C.	Belvidere, Ill	Feb. 25, 1913
Waite, Dr F. C.	Cleveland, O.	Feb. 25, 1913
White, Dr. S. L	Ruston, La.	Feb 25, 1913
Williams, Dr Espey	Patterson, La	Feb 25, 1913
Zapffe, Dr Fred C.	Chicago, Ill.	Feb. 10, 1913

CONSTITUTION AND BY-LAWS OF THE FEDERATION OF STATE MEDICAL BOARDS OF THE UNITED STATES

CONSTITUTION

ARTICLE I. NAME

The name of this organization shall be the Federation of State Medical Boards of the United States.

ARTICLE II. OBJECT

The object shall be to develop and maintain reasonably high and uniform standards of medical licensure in the United States. Contributing toward this end the Federation shall endeavor (*a*) to obtain accurate knowledge of the standards of preliminary and of medical education; the rules adopted and methods employed by the medical boards of the various states of this country, and of other countries; (*b*) to publish a Bulletin by which this information may be disseminated among the members; and (*c*) to further interstate endorsement of medical licensure.

ARTICLE III. MEMBERS

SECTION 1. *Active Members.*—(*a*) The medical board of any state may become an active member of this Federation by making due application, if its standards, rules and methods are at least equal to the minimum requirements as set forth in the By-Laws, on the recommendation of the executive committee and a majority vote of the members of the Federation present at any regular meeting. (*b*) On the recommendation of the executive committee, any membership may be terminated at any annual meeting of the Federation by a majority vote of the membership present.

SEC. 2 *Associate Members.*—The medical board of any state where, for good reasons, the standards, rules or methods are not as high as those required by this Federation, may be elected as an associate member on the recommendation of the executive committee and by a majority vote of the active membership present at any regular meeting

SEC. 3. *Fellows.*—Any individual not a member of a state medical board who is interested in medical education and state licensure may, on the recommendation of the executive committee and by a majority vote of the membership present at any regular meeting of the Federation, be elected as a fellow of the Federation

SEC. 4. *Honorary Fellows.*—Ex-members of state medical boards may, on recommendation of the executive committee and by a majority vote of the membership present at any regular meeting, be elected as honorary fellows, such honorary fellows being exempt from the payment of dues. Delegates from the U. S. Army, U. S. Navy, and U S Public Health and Marine-Hospital Service will be admitted to all sessions of the Federation, on the same basis as honorary fellows.

ARTICLE IV EXECUTIVE COMMITTEE

There shall be an executive committee consisting of five individuals who are members or executive officers of state medical boards which are active members of the organization. The president and secretary of the Federation shall be ex-officio members of this executive committee The remaining three members of the executive committee shall be elected by the Federation, one for three years, one for two years and one for one year, thereafter each year a member shall be elected for a term of three years No two members of the executive committee shall be members of the same state board

ARTICLE V. ANNUAL SESSIONS

The Federation shall hold an annual meeting at such time and place as may be fixed at any previous session. The time and place may be changed, however, by the unanimous vote of the executive committee prior to two months of the time selected for the session.

ARTICLE VI. OFFICERS

SECTION 1.—The officers of the Federation shall be a president, a vice-president and a secretary-treasurer.

SEC 2.—These officers shall be elected annually by the Federation to serve for one year or until their successors are elected and installed.

SEC. 3.—Only individuals who are members or executive officers of state medical boards in active membership shall be eligible to office; except that provision may be made by the executive committee with the sanction of the Federation for a permanent secretary.

ARTICLE VII. FUNDS

Funds shall be raised by equal dues of not less than twenty-five dollars annually from each active member; ten dollars annually from each associate member, one dollar annually from each fellow and in any other manner approved by the Federation. Funds may be voted by the executive committee or by the Federation to defray the necessary expenses of the Federation Funds for any special purpose may be paid by the executive committee when voted by the Federation.

ARTICLE VIII. AMENDMENTS

This constitution may be amended at any annual meeting of the Federation, provided that the amendment has been submitted to the secretary in writing and sent to the members at least two months prior to the annual session; a three-fourths vote of the membership present at any regular annual meeting shall be required to secure the adoption of any amendment to this constitution.

BY-LAWS

ARTICLE I. ELIGIBILITY OF STATE BOARDS FOR MEMBERSHIP

SECTION 1 *Authority.*—A state medical board to be eligible for membership in this Federation must be operating under a medical practice act, which in the opinion of the executive committee gives it authority to uphold the minimum standards of the Federation

SEC 2 *Standards* —The minimum standards to be required for membership in this Federation are

(*a*) *Preliminary Education.*—Completion of at least 12 units, or its equivalent 60 counts, of work in and graduation from a recognized four-year high school or an equivalent credential.

(*b*) *Medical Education* —At least four years of training in and graduation from a medical school having teachers, laboratory equipment, clinical facilities and property equipment equal to the minimum requirements of the Federation.

(*c*) *Examinations* —These must be by such methods, must cover such subjects and be of sufficient duration to thoroughly test the candidates' fitness to practice medicine

SEC 3. *Qualifications for Indorsement of State Licenses.* (*a*) *Prerequisite Credentials* —As a prerequisite to reciprocal registration the applicant therefore shall file, in the office of the board of the state of which he is a licentiate and of the state where reciprocal registration is sought, such evidence of good moral and professional character as may be demanded by said boards, and such evidence, at the discretion of either board, may include proof of membership in a recognized medical society, and such membership may be considered in connection with the other evidences of character presented.

(*b*) *Qualification 1* —A certificate of registration showing that an examination has been made by the proper board of any state in which an average grade of not less than 75 per cent was awarded, the holder thereof having been at the time of said examination the legal possessor of a diploma from a medical college in good standing in the state where reciprocal registration is sought, may be accepted, in lieu of examination, as evidence of qualification. Provided, that in case the scope of the said examination was less than that prescribed by the state in which registration is sought, the applicant may be required to submit to a supplemental examination by the board thereof in such subjects as have not been covered

(*c*) *Qualification 2* —A certificate of registration, or license issued by the proper board of any state, may be accepted as evidence of qualification for reciprocal registration in any other state. Provided, the holder of such certificate had been engaged in the reputable practice of medicine in such state at least one year, and also provided that the holder thereof was, at the time of such registration, the legal possessor of a diploma issued by a medical college in good standing in the state in which reciprocal registration is sought, and that the date of such diploma was prior to the legal requirement of the examination test in such state

SEC 4 *Effectiveness* —It is understood that the chief purpose of these standards, and requirements is to secure in each state a proper safeguard between the public and incompetent physicians In deciding the eligibility of a state board for membership in the Federation, therefore, the executive committee shall convince itself that the board before being granted membership is actually enforcing the minimum requirements of the Federation.

ARTICLE II. DELEGATES

SECTION 1 —All members and executive officers of state medical boards are eligible as delegates, but only one vote may be cast by each state medical board in active membership and in good standing

SEC 2 *Credentials* —Each delegate before having the right to vote shall deposit,

with the secretary of the Federation, a certificate signed by the secretary of his state medical board, showing that he has been duly authorized to represent that board.

ARTICLE III. PROCEDURE AT BUSINESS SESSIONS

SECTION 1. *Order of Business.*—At the business sessions of the Federation the following order of business will be observed:

1. Call to order by the president.
2. Roll-call.
3. Reading and adopting of minutes.
4. Reports of officers.
5. Reports of committees:
   (*a*) Special committee
   (*b*) Executive committee.
6. Unfinished business.
7. New business.

SEC 2. *Rules of Order.*—The Federation shall be governed by Roberts' Rules of Order when not in conflict with these By-Laws or the fixed rules of the Federation.

SEC. 3 *Quorum* —Seven(?) voting members shall constitute a quorum for the transaction of business.

SEC. 4. *Elections.*—All elections shall be by ballot.

SEC. 5. *Special Meetings* —Special meetings of the Federation may be called at such time and place as may be determined by the executive committee.

ARTICLE IV. DUTIES OF THE EXECUTIVE COMMITTEE

SECTION 1. It shall be the duty of the executive committee to investigate and determine all matters in regard to qualifications for membership, subject to the approval of the Federation. Any charges or complaints regarding any member of the Federation coming to the knowledge or notice of the executive committee shall be investigated by the executive committee and reported with its recommendations to the Federation.

SEC. 2. *Application of Membership.*—A state board desiring membership in the Federation shall make due application to the secretary on a blank provided for that purpose. The board by this application expresses its willingness to have its standards, methods of examination and its system of records investigated by the executive committee or its representative At the next meeting of the Federation following such investigation the executive committee will report its decision if favorable for the final vote by the Federation

ARTICLE V. AMENDMENTS

These By-Laws may be amended on a majority vote of the active members present at any regularly called meeting of the Federation, provided that such amendment has been referred to the members in writing at least two months prior to the meeting when final action is taken

PAST MEETING

FIRST ANNUAL SESSION

The first annual session of the Federation of State Medical Boards of the United States was held at the Congress Hotel in Chicago, February 25, 1913.

The following members had delegates in attendance: Arkansas Eclectic Board, Arkansas Regular Board, Louisiana Regular Board, Maryland Board, Massachusetts Board, New York Board, North Dakota Board, Ohio Board and Vermont Board

More than one hundred guests representing state boards, medical colleges and other institutions attended the Conference.

The following officers were elected: *President*, Charles H. Cook, M D., Massachusetts Board, Natick, Mass.; *Vice-President*, Albert de Bey, M.D., Pres. Iowa Board, Orange City; *Secretary-Treasurer*, Otto V. Huffman, M D, Secretary New York Board, Albany.

Dr. W. J. Means, Dean of the Starling-Ohio Medical Colleges, read a paper on the subject "Should Medical Boards Require One or More Years of Medical Work?"

Dr. Isadore Dyer, Dean of the Medical Department, Tulane University, read a paper entitled "Should an Interneship Be Required?" These papers were discussed by Drs. Pepper, Peterson, Grant, LeFevre and Baldy.

Dr. John M. Baldy, President of the Pennsylvania Bureau of Medical Education and Licensure, read a paper on "Rules and Regulations Governing Examinations" This paper was discussed by Drs. Hinsdale, Bowers, Siemon, Lawrence and McCann.

Dr. Beverley D. Harison, Secretary of the Michigan State Board of Registration, read a paper on "Universal Reciprocity" This paper was discussed by Drs Harlan, Scudder, Bowers and Matson

Dr. Herbert Harlan, President of the Maryland Board, read a paper on "The Methods of State Board Record-keeping," which was discussed by many.

A motion for the appointment of a committee to confer with the Directory Department of the American Medical Association with a view to recommending a uniform card-index system for state boards was carried The president appointed Drs. Matson and Huffman.

Dr P. H. Tatman of the Arkansas State Eclectic Board read a paper on "The Qualifications of Examiners"

Dr. Charles H. Cook discussed the question "What Fee Shall Be Charged for Examination?"

The question of time and place for holding the next annual meeting was referred to the Executive Committee

Drs. Huffman and Boozer, appointed to audit the books of the secretary-treasurer, reported that they examined the books and records and found them to be correct.

EXECUTIVE COMMITTEE

The executive committee met on the same day and voted to extend the time limit for enrollment in charter membership until July 1, 1913.

The committee unanimously voted to recommend Dr. John K. Scudder for election to *Honorary Fellowship* at the next regular meeting of the Federation.

The executive committee met again at the Hotel Manhattan, New York City, on September 2, 1913. The committee then voted to receive applications for charter membership until January 1, 1914. The committee took this action because a number of state boards had not held their annual meetings as yet

The committee unanimously voted to recommend an amendment to the constitution providing the executive committee with the power to fill any vacancy occurring on the executive committee or in any office in the interval between the regular annual sessions, the appointments by the executive committee to hold good until the next annual session.

The committee unanimously voted to call the next annual session for Wednesday, February 25, 1914, in the Francis I Room of the Congress Hotel, Chicago, at 9 A M

The following were unanimously recommended for election to *Honorary Fellowship*: Dr. James A. Duncan, Dr. Albert de Bey, Dr. Glentworth R. Butler and Dr. Charles F Tisdale.

The secretaries of state medical boards are requested to report to the editor any changes in the Medical Practice Laws in their respective states or any change in the regulations of their boards relative to examinations or the issuing of licenses.