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ASSOCIATION OF
AMERICAN MEDICAL COLLEGES

MINUTES OF THE FIFTEENTH ANNUAL
MEETING, HELD AT CHICAGO
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ASSOCIATION OF AMERICAN MEDICAL COLLEGES.

*Minutes of the Fifteenth Annual Meeting, held at Chicago,
April 10, 1905.*

MORNING SESSION.

Pursuant to call, the association convened in the Great Northern Hotel, and was called to order at 10:30 a. m. by the president, Dr. Samuel C. James, Kansas City, Mo.

After explanatory remarks by Dr. James as to the reasons for calling the meeting earlier than has been customary, the first vice president, Dr. R. Dorsey Coale, took the chair, while the president delivered his address.

President's Address.

To the Delegates of the Association of American Medical Colleges:

It is my desire to express my sincere thanks and appreciation for the honor conferred on me, on the school that I represent, on the coming great metropolis in which I live, and on the glorious Middle West that I am so proud to call my home, in selecting me to preside over so important a body as the Association of American Medical Colleges.

In justice to myself, I must take this opportunity to apologize for the errors and incompleteness of this paper. I had hoped to have the time between the first of April and the meeting of this association to study over the facts and present them in a more acceptable manner, and also to canvass the members of this association for opinions and suggestions, but we are aware of the change of date, so that with the examinations and commencement exercises of The University Medical College on my hands, together with my own private practice, and the reports to be made on the schools of the association visited, I have not had the necessary time to devote to this paper. However, I am not coming before you with nothing but apologies.

RETROSPECTION.

Reviewing the past fourteen years of this association, back to the date of its birth, we can but rejoice in the progress it has made, and hope that the onward and upward advance-

ment will continue until our association will be second to none in the universe, and why should it not be so? The American people lead in agriculture, in commerce, in war, in inventions, are the equal of Europeans in literary pursuits, and why can we not lead in the advancement of Medical Science? We have the ability among the profession to teach, the clinical material for demonstration, and the strong, healthy youthful minds to grasp the truth; but, in order to do this we must be awake to the situation and above all things let the schools of this association work in harmony.

Looking backward over the last century, no art, trade or profession has outreached that of medicine, or even kept pace with it, unless it is the application of electricity, and when we consider the brightness of the incandescent light in comparison with the tallow dip of our ancestors, we can hardly realize that both have been used for the same purpose. When we note the evolution from the crude devices, the superstition and ignorance of the medical profession of a century ago to the present time, we can see equally as great improvement, and the end of each is not yet. If Dr. Benjamin Franklin could awaken from his long sleep of one hundred and fifteen years, we could hardly imagine which would surprise him most, the progress of electricity or that of medical skill. Let us work diligently and faithfully to raise the standard of our glorious profession, and I know of no better way than through the Association of American Medical Colleges.

HIGHER ENTRANCE REQUIREMENTS.

There was a time when I thought it unnecessary to enforce the requirements we even now insist on, because I thought that so many good, honest, conscientious men, who would make good physicians, would be forced to seek other vocations; but I have changed my mind, for with the advancement of education along other lines comes the advancement of medicine. In this country, with the magnificent system of public schools, everyone has a grammar school education, which is not the case in Europe, and it is a great surprise to the educated men and women who visit our country to-day. Why then, should not the medical profession of America keep pace with that of England, Germany and France?

The idea has been advanced by some, that if we insist on every physician receiving a thorough preliminary education, supplemented by vigorous literary training, we will inculcate tastes and ambitions that may unfit him for the station in life that he may occupy, as in the case of the country practitioner, feeling that the returns, professionally, socially, or financially, would be inadequate compensation for the time or capital invested. I feel that this might be true, if the requirements were so far reaching that a man must study Latin, Greek and Hebrew, till he could converse in these dead

languages, that he must master the other branches, mathematics and the sciences, in accordance. Our farmers are no longer an ignorant class. Our universities and colleges are made up of students, principally the sons and daughters of farmers, while our city boys are being fitted for the office. So, if our graduates do come in contact with a few ignorant people, would it not be just as wise to say, "Why educate our daughters? They come in contact only with the servants and the children. Any woman can manage her household affairs without the aid of an education." Shall we go back to the dark ages and all be ignorant because we come in contact with a few people who have not had the advantages of a collegiate education? These questions need no answer. We are going to keep abreast of the times, for in the health and strength of the nation lies our only hope. We are going to raise our standard for entrance; give more time and care to our teaching; have longer school terms, and require each and every student to show grades from some reputable college, fully up to the required standard, before allowing him to enter the school of medicine. Let us have a standard and live up to it to the letter.

THE COLLEGE GRADUATE.

It is an unquestionable fact that the student who gets the greatest returns for the least mental effort, the most stimulating and continuous pleasure in the pursuit of knowledge, is the college graduate. Our colleges should be frank with the student knocking at their doors for admission. We should point out the mental, moral and physical infirmities, and, if found wanting, he should be advised against adopting a profession that he is unfitted for or unworthy to embrace, thereby averting an injustice to a future successful career in some other field of work.

I would advocate that each school have a medical society with officers, after the pattern of any state or county society, and that each senior be required to read at least one paper reporting a case or cases that have come to his notice in some clinic, and that each senior be required to deliver a didactic lecture before the society at least once before graduation; that a critic be appointed at each meeting and that each paper be discussed. I would also advise that each freshman be instructed in book-keeping, sufficiently to keep his own books and render a correct bill for his services. I have frequently asked students, who have nursed my patients during summer vacations, to make out their bill that I could collect it for them, and very few knew how. Our universities do not teach book-keeping, unless the extra business course is taken.

I find that the medical students who come to us with a baccalaureate degree from such institutions as Missouri, Kan-

sas, Illinois, Wisconsin, Minnesota and Michigan, have, as a rule, taken a preliminary course in biology, physics and chemistry. They grasp the work with ease and assurance, and are invariably better equipped for graduation after their three years of study, than the four year men who come with the high school or academic diploma.

I meet students every day who have had opportunities for the acquisition of every requirement for medical work, who have not the proper foundation for logical thought, accurate observation, or the powers of clearly describing what they know. That is the fault of the institution that graduates them, and for these reasons, I am in favor of looking into the preliminary qualifications more thoroughly in the future than in the past. I would suggest that such applicants be examined by a competent literary teacher or examining board, and if the conditions are more than two, reject the applicant; if two, as our rules require, allow him to make up the deficiency by the time he is ready for his second year's work. Then, and only then, can we carry out the policy that we are all so desirous of establishing.

When the schools of the association demand such rigid requirements, those schools that are not members will be obliged to meet them also.

FACTORS IN RAISING EDUCATIONAL STANDARDS.

1905
It has only been in the last two or three years that the Association of American Medical Colleges has had a unification of thought in medical pedagogy, and we are becoming more and more of a great Normal Institute, teaching our instructors not only how to impart knowledge, but also how to judge the requirements of the applicant. It is not that we need more doctors or less doctors, but that we want able men; men who can think and act in the right way; men who realize the responsibility and value of human life and who have the ability to rise to meet the emergency; masters of the situation, and promoters of the best and the wisest end for the health of a great country, such as ours.

I am frank to say, that in my estimation, the inspiration of our State Medical Examining and Licensing Boards, has had much to do with overcoming the widely divergent views hitherto entertained by this association. I am sorry that the minimum requirements submitted at St. Paul in 1901 and approved by the Confederation of State Medical Examining and Licensing Boards, were not carried out, forcing our body to take a subordinate position to this political board in advancing the educational standard. Or in other words, we are being led behind the wagon rather than being found in the traces, and in the lead traces, where we ought to be.]

SOME RECOMMENDATIONS.

I am further in favor of having applicants from other medical colleges, not members of our association, examined by a competent educator or committee before being admitted to the association schools, for in my own experience, we have admitted students into the sophomore, junior, and senior classes from other schools, and when the time came for examination, they would lack the power to express themselves in writing, or to give satisfactory definitions to the questions put to them in quiz. I also think the association should come to an understanding as to a definite schedule for each year, so that we could interchange students at will, if the occasion should demand. Some students come into our school from other institutions, who are hard to classify, as their schedule of lectures is different, having some of our sophomore work in their junior year, or in their freshman year. I know that other schools are confronted with the same difficulty. I might add a suggestion, that while regulating the schedules of lectures, it might be well to regulate the schedule of fees.

Hitherto medical education has been offered at a varying scale of prices. Students have obtained more than an equivalent for the sum invested by them in their education. The low fees demanded by some colleges have cheapened medical education to such an extent that medicine, as a profession, is outranked by many trades. It costs less to become a doctor of medicine than it does to learn the trade of a plumber. Medical colleges should place the value of a medical education on, at least, a uniform basis. While it is impossible at this time to demand the money equivalent of a medical education it is possible to ask that the members of this association charge at least \$100.00 for each annual course of lectures.

I further recommend a set standard of literary attainments, of requirements as to hours for each branch, as to length of scholastic year, and as to grades and conditions, and then live up to the standard. When this is done diligently, systematically, and conscientiously we can legislate against all kinds of quackery, healers, pathies, and misnamed sciences.

Colleges should demand that their students receive a grade of not less than 75 per cent., or its equivalent in any other marking system, in every subject embraced in the curriculum, and the degree of Doctor of Medicine should not be conferred on any student who has not passed every subject. Some colleges allow a student to graduate even though he may have failed to pass in one or two subjects. This is detrimental to the progress of education and should be abolished.

I hope that the time is not far distant when it will be a misdemeanor to publish long fabrications in the newspapers where people have tried every remedy known to the profession, and sought relief from all the leading physicians, and

as a last resort have been permanently cured by some widely advertised "patent" medicine, or worse still, by some magnetic healer, who gives absent treatment, or cures by the laying on of hands. It is hard after the years of research required of physicians, to be classed with, and compared to, an old woman, who never looked inside a medical book, or who knows no physiology or hygiene, to say nothing of anatomy.

Our anniversary each year has been one of hope, but not enough of labor, and consequently we have not achieved the results that this hope has aroused. The time is now on us to-day when we must raise our sluggish, iron-cast lids, and fill the postponed expectations of an intellectual world until the future generation of men bearing the degree of Doctor of Medicine will be the cream of learning and science.

THE INFLUENCE OF THIS ASSOCIATION.

Although it may not be known to you, yet examining and licensing boards of many states look to this association to set the standard of what the medical degree shall represent. Your Secretary and President have received many letters and telegrams asking for the requirements of the association so that they can be made the requirements of licensing boards. If we desire to maintain our present standing, if we desire to continue to be looked up to as a pace-maker, we must go onward and onward,—lead, not follow.

I wish to commend very highly the work of the American Confederation of Reciprocating Examining and Licensing Medical Boards, which has a membership of fourteen states. Their work is along the lines of uniformity of entrance and graduation requirements, uniformity in state board examinations, uniformity of forms, and modifications necessary in reciprocal qualifications. The work of this association has been the means of accomplishing much for the schools under their jurisdiction. The aims of this body are so highly commendable, and its work is so important and far-reaching, that we would do well to encourage this body and assist them in every way possible. Therefore, I suggest, and urge, the appointment of a committee from this association to attend the next meeting of the confederation to be held in Indianapolis, April 27, this committee to report at our next annual meeting.

In conclusion I will say that in my opinion the day of unworthy medical schools is passed, and that it is only a matter of a few years more when they will be swallowed up by the larger institutions, or cease to exist entirely; and let us hope that with them will go the petty jealousies that have existed, and that the great desire to be at the head of a medical school will have passed from the profession. Yet, I am confident that with all our faults, when the future historian reviews the work on medical education, this association will be ranked

first of all agencies laboring for the persistent and effective regulation and elevation of requirements for medical education.

On motion of Dr. David Streett, a committee of three was appointed to consider the recommendations contained in this address, to report at the afternoon session. The Chair appointed on this committee Drs. David Streett, William J. Means and P. Richard Taylor.

Entrance Requirements.

The discussion on this subject was opened by Prof. J. H. T. Main, Grinnell College, Grinnell, Ia., and was continued by Drs. George W. Webster, S. D. Williston and Albion W. Small, all of Chicago; W. H. Wathen, Louisville; H. W. Loeb, St. Louis; W. J. Means, Columbus; R. McE. Schaufler, Kansas City, Mo.; P. L. Myers, Toledo, Ohio; C. B. Stemen, Fort Wayne, Ind.; and G. Clark, Syracuse, N. Y.

On motion of Dr. George W. Webster, a committee of three was appointed to consider the suggestion made by Professor Main with reference to determining the value of the courses in the purely scientific subjects of the medical curriculum taught in the liberal arts college. The Chair appointed on this committee Drs. H. W. Loeb, Eli H. Long and R. M. Schaufler.

On motion a vote of thanks was extended by the association to Professors Main, Small and Williston for many valuable suggestions offered by them.

On motion the association adjourned until 2 p. m.

AFTERNOON SESSION.

The association reassembled at 2 p. m., and was called to order by the president.

The Chair appointed the following nominating committee: Drs. W. J. Means, H. B. Ward and T. C. Evans.

The roll-call was taken and the following colleges (42) were represented by delegates:

University of Southern California College of Medicine—Walter Lindley.

University of Denver Medical Department (Denver and Gross College of Medicine)—Thomas H. Hawkins.

George Washington University Department of Medicine—W. F. R. Phillips.

Georgetown University School of Medicine—George M. Kober.

Howard University Medical Department—Robert Reyburn.

American Medical Missionary College—J. H. Kellogg.

University of Illinois College of Medicine (College of Physicians and Surgeons)—F. B. Earle.

Northwestern University Medical School—W. S. Hall.

Rush Medical College (University of Chicago)—J. M. Dodson.

- Illinois Medical College—William Rittenhouse.
 Fort Wayne College of Medicine—C. B. Stemen.
 Central College of Physicians and Surgeons—G. D. Kahlo.
 Medical College of Indiana—H. Jameson.
 University of Indiana School of Medicine—B. D. Myers.
 Drake University College of Medicine—D. S. Fairchild.
 University of Iowa School of Medicine—J. R. Guthrie.
 Keokuk Medical College, College of Physicians and Surgeons
 —G. R. Jenkins.
 Sioux City College of Medicine—J. N. Warren.
 Kansas Medical College—H. J. Alkire.
 Hospital College of Medicine—P. R. Taylor.
 Kentucky School of Medicine—W. H. Wathen.
 Kentucky University Medical Department—T. C. Evans.
 Baltimore Medical College—D. Streett.
 Baltimore College of Physicians and Surgeons—C. F. Bevan.
 University of Maryland School of Medicine—R. D. Coale.
 Boston College of Physicians and Surgeons—H. Stern.
 Hamline University College of Medicine—G. C. Barton.
 University of Mississippi Medical Department—W. S. Leathers.
 Kansas City Medical College—R. McE. Schaufler.
 University Medical College—S. C. James.
 St. Louis University Medical Department (Marion-Sims-
 Beaumont College of Medicine)—H. W. Loeb.
 John A. Creighton Medical College—D. C. Bryant.
 University of Nebraska College of Medicine—H. B. Ward.
 University of Buffalo Medical Department—E. H. Long.
 Syracuse University College of Medicine—G. P. Clark.
 Miami Medical College—J. C. Oliver.
 Ohio Medical University—W. J. Means.
 Toledo Medical College—P. L. Myers.
 Meharry Medical College—G. W. Hubbard.
 University College of Medicine—J. A. Hodges.
 Milwaukee Medical College—W. H. Earles.
 Wisconsin College of Physicians and Surgeons—D. S. Hayes.
- There were also present: Prof. J. H. T. Main, Grinnell Col-
 lege, Ia.; Prof. A. W. Small, University of Chicago, Chicago;
 Prof. D. S. Williston, University of Chicago, Chicago; Dr.
 Randolph Winslow, University of Maryland; Dr. C. H. Eige-
 mann, University of Indiana; Dr. Geo. W. Webster, North-
 western University Medical School, Chicago; Dr. Fred. C.
 Zapffe, University of Illinois Medical Department, Chicago;
 Dr. J. F. Barnhill, Central College of Physicians and Sur-
 geons, Indianapolis; Dr. R. R. Bensley, University of Chicago;
 Dr. A. D. Bevan, Rush Medical College.

On motion, the minutes of the Atlantic City meeting, as printed, were accepted.

Report of the Committee on Uniformity of Curricula.

This committee, through its chairman, Dr. George M. Kober, reported as follows:

Your committee, appointed at the last meeting of the Association of American Medical Colleges, to co-operate with a similar committee appointed by the National Confederation of State Examining and Licensing Boards, for the purpose of presenting a minimum standard of medical education, together with such recommendations as the committee may deem proper as to the division of the subjects in a four years' graded course, beg leave to submit the following report:

It is doubtless generally known that the National Confederation of State Medical Examining and Licensing Boards, at its meeting held at Atlantic City in June, 1904, provided for a minimum standard of medical education covering a course of four terms in four separate calendar years, and consisting of not less than 3,600 hours of actual work, and that the clinical work shall constitute at least one-fourth of the total number of hours in the four-years course.

A committee of the American Confederation of Reciprocating, Examining and Licensing Medical Boards, at a meeting held in St. Louis, Mo., October 25, 1904, submitted the following report: "Upon the subject of minimum requirements for graduation in medicine, it seems probable from our work that it will be found just and equitable to recommend that a medical diploma in the future be simply treated as a matter of identification, and that the medical college course must consist of at least 4,000 hours; that the division of subjects under this limit shall be in hours multiples of twenty-five; that no college shall be recognized that falls below this standard over 20 per cent. in any one branch, or over 10 per cent. in the total. The details of division of such working standard to be decided by the coming year's work of the committee."

The report of the committee was accepted, adopted and printed, and the committee continued.

From the action of these National Associations of State Medical Examining, Licensing and Reciprocating Boards it is evident that they propose to insist on a reasonable standard of medical qualifications, believing, as they do, that it is the duty of the state to see that none but qualified men are licensed to practice one of the most difficult and responsible of all professions.

That there is an actual need for such a demand is shown by a review of the results of examinations for medical licensure presented in the very able report by Dr. Charles McIntire to the American Academy of Medicine at Atlantic City, June 4, 1904, from which the following table is taken:

	Passed	Failed.	Total.	Per cent. licensed.
1896	2,328	562	2,890	80.6
1899	2,645	560	3,205	82.5
1900	3,000	504	3,504	85.3
1901	2,436	522	3,958	82.3
1902	3,781	729	4,510	83.8
	14,190	2,877	17,067	82.9

This table shows that out of 17,067 applicants examined during the five years, from 1898 to 1902 inclusive, 2,877 or 17.1 per cent. failed. The failures are not confined to graduates from individual schools, but included men from every reputable school in the country.

Dr. McIntire, in his paper on "The Personal Equation in Examination for Licensure," read before the American Academy of Medicine in 1902, demonstrates that the charge frequently made against state examining boards, that they are too severe in their examinations, is not true, for the returns of papers marked by college professors and members of such boards show a remarkable uniformity, that with hardly an exception the men who failed would not have been licensed by any of the boards of faculties making returns, and, as a matter of fact, the colleges were more severe in their markings than the boards.

The conclusions to be drawn from such a result are: 1, That our products are not up to the standards adopted by the state licensing boards; 2, that the applicants have deteriorated since graduation; 3, that in some instances the candidates have passed the college examinations by dishonest methods. Whatever the cause, these painful facts confront us, and we can scarcely expect harmonious and satisfactory product from medical schools when the very exhaustive report by Dr. George W. Webster, published in the *New York Medical and Philadelphia Medical Journal* of July 23 and 30, 1904, shows that the total hours vary from 10,244 in one school to 958 in another school. The time devoted to clinical instruction varies from 2,000 to a little over 200 hours. Anatomy varies from 1,248 hours as a maximum to 126 as a minimum. One school devotes 756 hours to chemistry while another has less than 80 hours. General medicine has 1,900 hours in one and less than 100 hours in another school. In some schools such important subjects as physical diagnosis, pharmacology, etiology and hygiene are not taught at all, while one school devotes 780 hours to orthopedic surgery. Indeed, a careful review of Dr. Webster's work reveals a lamentable lack of uniformity in regard to the relative importance of each of the twenty-three studies tabulated by him.

Your committee is of the opinion that the problem of the medical school is to supply the community with competent medical men; and with a fixed minimum standard for admission, and a definite course of medical studies, with the pre-

scribed number of hours of didactic and practical work in each branch. We may hope for a more uniform product, and if this product should reach the requirements of our best state examining boards, the way to reciprocity between the state boards will be open and much time and annoyance will be saved in the transfer of students from one school to another. We cannot agree with those who believe that there should be a different standard in different schools and who consider it a Utopian idea to expect that all the medical schools in the country should be based on a uniform curriculum. It seems to us that the standard of state boards are no higher for the graduates of the prominent schools than for those of the smaller schools. All must possess the same qualifications.

The subject of graduate work is another question. There is, of course, no reason why schools engaged in turning out specialists and teachers should not vary their curricula with the special needs of the student.

TABLE 1.—STANDARD CURRICULUM

PROPOSED STANDARD.	Number of Hours of Lectures in Entire Course.	Number of Hours of Laboratory.	Number of Hours of Clinics.	Total.	Michigan Standard.	Average in 43 Medical Colleges.	Average in 124 Medical Schools.
1. Histology.....	30	60	...	90	...	...	...
2. Embryology.....	30	60	...	90	200	219	211
3. Osteology.....	30	...	...	30	...	...	...
4. Anatomy.....	190	230	...	420	460	549	480
5. Physiology.....	180	120	...	300	300	276	341
6. Chemistry and Toxicology.....	100	200	...	300	350	375	345
7. Materia Medica.....	40	20	...	60	100	...	216
8. Pharmacology.....	40	20	...	60	60	118	60
9. Therapeutics.....	90	...	...	90	80	...	...
10. Bacteriology.....	40	100	...	140	160	131	138
11. Pathology.....	100	140	...	240	...	...	...
12. Medical Zoology, Postmortem work and Clinical Microscopy.....	30	60	...	90	240	295	251
13. Physical Diagnosis.....	20	...	80	100	100	61	97
14. Practice of Medicine.....	180	...	360	540	400	544	490
15. Surgery.....	180	...	360	540	530	596	536
16. Obstetrics.....	100	...	60	160	140	177	169
17. Gynecology.....	50	...	110	160	170	145	181
18. Pediatrics.....	40	...	60	100	110	72	98
19. Eye and Ear.....	30	...	30	60	...	106	67
20. Nose and Throat.....	30	...	30	60	200	67	85
21. Mental and Nervous Diseases.....	60	...	60	120	120	109	130
22. Electro-Therapeutics.....	20	...	40	60	80	...	...
23. Genito-Urinary Diseases.....	30	...	30	60	60	...	74
24. Dermatology and Syphilis.....	20	...	20	40	40	64	80
25. Hygiene and Public Health.....	30	...	30	60	30	33	46
26. Dietetics.....	30	...	30	60	30	...	...
27. Medical Jurisprudence.....	30	...	30	60	30	...	36
	1750	1010	1240	4000	4000	3337	4188

Your committee is perfectly aware that an ideal plan and course of medical teaching has not as yet been devised, but there are some things which every graduate in medicine should know, and the object to be secured in undergraduate work is not to make specialists, but to fit men and women for the general practice of medicine and surgery. Every educator knows that the average student needs a certain number of hours in lectures, recitations, laboratory and clinical work, and special preparation to acquire a reasonable proficiency in the various branches, and to give him more in some subjects at the expense of others leads to unilateral development and is not fair to the student nor to the state.

TABLE 2.—PROPOSED STANDARD OF A 4,000 HOURS MEDICAL COURSE DIVIDED ACCORDING TO YEARS.

	Lecture.	Laboratory.	Clinics.	Total.
First Year.				
Histology.....	30	60	..	90
Embryology.....	30	60	..	90
Osteology.....	30	..	..	30
Anatomy.....	100	230	..	330
Chemistry.....	50	100	..	150
Physiology.....	90	60	..	150
Materia medica.....	40	20	..	60
	370	530	..	900
Second Year.				
Anatomy.....	90	60	..	90
Physiology.....	90	..	..	150
Chemistry.....	50	100	..	150
Bacteriology.....	40	100	..	140
Pathology.....	100	140	..	240
Pharmacology.....	40	20	..	60
Minor surgery.....	15	..	60	75
	425	420	60	905
Third Year.				
Postmortem medical zoology and clinical microscopy.....	30	60	..	90
Physical diagnosis.....	20	..	80	100
Practice of medicine.....	90	..	180	270
Surgery.....	90	..	105	195
Obstetrics.....	50	..	30	80
Pediatrics.....	20	..	30	50
Gynecology.....	25	..	55	80
Mental and nervous diseases.....	30	..	30	60
Therapeutics.....	90	..	..	90
Hygiene.....	30	..	..	30
Dietetics.....	30	..	..	30
	505	60	510	1075
Fourth Year.				
Practice of medicine.....	90	..	180	270
Surgery.....	90	..	180	270
Obstetrics.....	50	..	30	80
Gynecology.....	25	..	55	80
Mental and nervous diseases.....	30	..	30	60
Electrotherapeutics.....	20	..	40	60
Eye and ear.....	30	..	30	60
Nose and throat.....	30	..	30	60
Genito-urinary diseases.....	30	..	30	60
Pediatrics.....	20	..	30	50
Dermatology.....	20	..	20	40
Medical jurisprudence.....	30	..	..	30
	465	..	655	1120

RECAPITULATION.

First year.....	370	530	..	900
Second year.....	425	420	60	905
Third year.....	505	60	510	1075
Fourth year.....	465	..	655	1120
Total.....	1765	1010	1225	4000

The question naturally arises, what may be considered a minimum standard for the average student, and this we have attempted to offer in Table No. 1, being fully aware that quantitative standards are considered by many as educational evils. In Table No. 2 an attempt is made to divide the subjects into four years, indicating the logical order in which the studies may be taken.

The adoption of a standard uniform curriculum would enable students to go from one school to another without interfering in the slightest degree with their systematic course of studies.

The committee has purposely apportioned less hours to freshman and sophomore studies, as the acquisition of the sciences taught during the first two years really involves more of a mental strain than the work of the third and fourth years.

The committee recommends that the standard curriculum which is to be adopted as a minimum for the degree of M.D. conferred by any member of the Association of American Medical Colleges shall consist of the following:

1. The course shall consist of four terms in four separate calendar years.

2. Each term shall consist of at least thirty weeks of work, exclusive of holidays, and not less than thirty hours of college work in each week.

3. The entire course of four years shall consist of at least 4,000 hours, divided into the subjects as shown in the proposed standard of Table No. 1; and no college shall be recognized that falls below this standard over 20 per cent. in any one branch or over 10 per cent. in the total.

It is believed that the adoption of this standard will not only satisfy the demands of many state medical examining and licensing boards, but will subserve the interest of higher medical education.

Respectfully submitted,

(Signed)

GEORGE M. KOBER,
WILLIAM J. MEANS,
PARKS RITCHIE.

Dr. Eli H. Long moved that the report, as read, be accepted and adopted. Seconded by Dr. Reyburn.

Dr. H. W. Loeb offered as an amendment to the motion, that colleges be permitted to substitute laboratory and clinic hours for didactic hours. Seconded by Dr. Hall.

Dr. Loeb's amendment, and the original motion as amended were carried. (23 ayes; 10 nays.)

Report of Committee on Medical Education.

To the President and Delegates of the Association:

In compliance with the purposes for which this committee was appointed—to confer with similar committees from the Council on Medical Education of the American Medical Association, the National Confederation of State Licensing and Examining Medical Boards, the American Confederation of Reciprocating Licensing and Examining Medical Boards, and the Southern Medical College Association—an effort was made to get in touch with these various organizations, but up to the present time nothing definite has been accomplished. However, your committee has continued its studies of medical education begun last year, and begs leave to submit the following:

Medical Practice Acts.

The medical practice acts of the various states and territories, and the requirements of their state examining and licensing boards are as diverse as are the requirements of medical colleges. Hardly any two states, except those holding membership in the American Confederation of Reciprocating Medical Licensing and Examining Boards, have any uniformity in requirements either for entrance to medical colleges, recognition of colleges or licensure. It is impossible to tabulate the requirements, because many state boards are not very specific in stating their requirements. However, the following extracts taken from medical registration laws give the essentials: Georgia and North Carolina have a minimum requirement of three years study in a medical college. Kansas, Minnesota, New Hampshire, New York, Oregon, and South Carolina specify four years of six months, or twenty-six weeks of study; Minnesota and New York also specify what the requirements shall be and also the credits that the medical school may or may not allow. Illinois, Kentucky, Missouri, Michigan, New Jersey and Wisconsin require four years of seven months (K. 30 weeks) in college. Illinois, Michigan and Kentucky have special requirements with reference to admission to college. Indiana, Ohio and Pennsylvania require four years of eight months each, and all three have special requirements as to admission and credits that may be allowed. Arkansas has no standard whatever. Alabama, Rhode Island, Texas, Tennessee and West Virginia do not even require a medical diploma, examining all alike. Colorado also examines non-diplomats, reserving the right to exercise its own judgment in the matter. Arizona, Connecticut, Florida, South Dakota, Vermont, Utah and Wyoming recognize all reputable or legally chartered colleges. Delaware, Louisiana,

Montana and North Dakota accept the requirements of the Illinois state board of health. New Mexico, District of Columbia, Oklahoma and Washington require four years without specifying the number of weeks or months in each year.

California, Colorado, Georgia, Idaho, Iowa, Indian Territory, Maryland, Nebraska, Nevada, Virginia and Wisconsin recognize in their laws or board requirements this association. New Jersey also accepted our ruling in the case of two colleges. Thus it will be seen, that quite a number of boards are willing to abide by the decisions of this association in reference to entrance and other requirements.

In order to ascertain positively what each state and territorial board requires, your committee wrote the secretaries of these boards, and the result is as follows:

College Standards of Examining Boards.

ARIZONA: Recognizes diploma regularly issued by a medical college lawfully organized by the state or territory wherein such college is located at the time of issuance of such diploma.

ALABAMA: Law regulating the practice of medicine permits the State Board of Examiners to examine any applicant irrespective of his college of graduation or whether he ever graduated at all. If the applicant is competent to pass the examination instituted by the State Board he will receive his certificate.

ARKANSAS: No medical colleges are recognized by the board.

CALIFORNIA: Recognizes all colleges whose requirements are in no particular less than those prescribed by the Association of American Medical Colleges of that year.

CONNECTICUT: Admits to examination graduates of all reputable medical colleges—but no others.

COLORADO: Examines non-graduates as well as graduates. Graduates must furnish evidence of graduation from a legally chartered medical school in good standing requiring as a condition of graduation attendance on four courses in four separate year, in medical colleges having adopted the standard of requirements equal to that of the Association of American Medical Colleges.

DELAWARE: Medical colleges as found in the annual reports of the Illinois state board of health.

DISTRICT OF COLUMBIA: A diploma entitles the applicant to examination only when it has been issued from a legally incorporated medical college and when it is accompanied by evidence satisfactory to the Board of Medical Supervisors that the holder thereof has studied medicine not less than four years, or, if the diploma was issued prior to June 30, 1898, not less than three years.

FLORIDA: Law provides for the recognition of colleges, but

it is not carried out, except that colleges must be authorized by law to confer a degree.

GEORGIA: Incorporated medical colleges requiring three or more years of study and in good standing in the college association.

IDAHO: Recognize all members of the Association of American Medical Colleges.

ILLINOIS: Four full courses of lectures of at least seven months, or thirty weeks each, in four separate years, no two courses commencing or ending within any consecutive sixteen months. Each term should consist of not less than 800 hours of work. A minimum course of study is prescribed.

INDIAN TERRITORY: Colleges that are members of any of the associations of colleges.

INDIANA: Determined by State Board of Examiners. Four graded courses of instruction, the aggregate of which amounts to at least 104 weeks of at least thirty-six hours each, and at least 42 months must have elapsed between the date of matriculation and date of graduation.

IOWA: Association of American Medical Colleges (Reg. Ecol. and Hom.) to extent of admitting their graduates to an examination, provided the history of the medical study of the party applying is in accordance with our statute and the schedule of our board.

KANSAS: Four periods of not less than six months each, no two in the same twelve months.

KENTUCKY: Four years of 30 weeks each (exclusive of holidays); no continuous sessions, and no credits for work done in other than medical institutions. Medical students certificate for entrance to colleges.

LOUISIANA: Same as Illinois board.

MAINE: All medical schools and colleges legally chartered by the states in which they exist and having the power to confer a degree after four years of study in college.

MASSACHUSETTS: Diploma not required.

MARYLAND: Members of the Association of American Medical Colleges.

MICHIGAN: Medical course to cover a four years graded course of seven months in each calendar year, the aggregate of which amounts to at least 120 weeks of at least 36 hours each week, and at least 43 months must elapse between the student's matriculation and graduation. A minimum curriculum is prescribed.

MINNESOTA: Graduates of medical colleges giving a full four years course extending over four years, of at least twenty-six weeks in each year, not granting advance standing for work done at non-medical institutions, are eligible to the examination given by this board.

MISSOURI: Four courses of lectures of not less than seven

months each in different years and preliminary education equivalent to a Missouri State High School graduation.

MISSISSIPPI: Diploma not required.

MONTANA: That of the Illinois State Board of Health.

NEBRASKA: All colleges recognized by the Association of Medical Colleges of the school of practice to which they belong, provided the college entrance requirement is equal to a high school diploma and that they require for graduation four full years. Entrance credentials must be presented with diploma when making application for licensure.

NEW HAMPSHIRE: Four years of at least nine months each, including four satisfactory courses, of at least six months each, in four different calendar years in a medical college registered as maintaining a satisfactory standard.

NEW JERSEY: Colleges which require four years of medical study including four satisfactory courses of lectures of at least seven months each in four different calendar years; giving no credit for work done in other than medical colleges.

NEW MEXICO: Ten years continuous existence; one which requires a high school certificate or its equivalent for admission and four full courses in four separate years, and has ample clinical facilities.

NEW YORK: Determined by Board of Regents; forty-eight academic counts after eight years of grammar school preparation for admission; four full school years of at least nine months each of medical study, including four satisfactory courses of at least six months each in four different calendar years; credit of time to be given for baccalaureate degrees and medical work.

NEVADA: Graduates of colleges recognized by the Association of American Medical Colleges are exempt from examination.

OKLAHOMA: Four years college course.

OREGON: Examination from all applicants.

NORTH CAROLINA: Applicants must be "from a medical college in good standing requiring an attendance of not less than three years and supplying such facilities for clinical instruction as shall meet the approval of the said board."

NORTH DAKOTA: Same as Illinois State Board.

OHIO: Four years of eight months each; no credit for other than medical work; conforming to the entrance requirements laid down by state board of registration.

RHODE ISLAND: Diploma not necessary as examination is open to all.

PENNSYLVANIA: Four years of at least eight months in each year in four different calendar years in a legally incorporated medical college complying with the entrance requirements.

SOUTH CAROLINA: Four full courses of lectures of at least twenty-six weeks each, no two courses being in the same year.

SOUTH DAKOTA: Recognizes diplomas from medical colleges only that require at least a high school education at the time of issuing the medical diploma.

TEXAS: Examination only.

VERMONT: Legally chartered with power to confer degree.

UTAH: Recognizes colleges that are recognized by the medical authorities in the states which grant the charters to the colleges.

VIRGINIA: The medical examining board of Virginia declines to recognize the diploma of any college which does not conform to the requirements of the Association of Medical Colleges.

TENNESSEE: Recognize no colleges—all examined regardless of schools. Under the law a diploma is not a prerequisite for examination.

WASHINGTON: Four years graded course.

WEST VIRGINIA: Recognizes all medical schools; graduates and under-graduates are treated alike.

WISCONSIN: Four courses of not less than seven months each, no two courses in any one calendar year. In a general way accept as reputable medical colleges such as are members of the American Association of Medical Colleges, but make an exception for sufficient cause.

WYOMING: Regularly chartered college recognized by the state board of health or state board of medical examiners in the state in which it is located.

In strong contrast to the condition of affairs existing in this country are the regulations of the General Medical Council of Great Britain in regard to the registration and education of medical students.

General Medical Council of Great Britain.

The regulations of the General Medical Council of the British Medical Association as to registration, preliminary examination, and professional education, must be followed by all medical students seeking to obtain degrees or licenses to practice from universities or medical corporations of the United Kingdom. A degree in arts of any university of the United Kingdom or of the colonies, or of such other universities as may be specially recognized from time to time by the general medical council, is considered a sufficient testimonial of efficiency. All others must give satisfactory evidence of possessing the required preliminary education. Every medical student must be registered and the time of study dates from this registration. The minimum age of students is sixteen years. Women are admitted to several of the colleges, and on the same conditions as the men.

The preliminary examinations recognized by the General Medical Council must include the following (a) English (grammar, paraphrasing, composition, English history and

geography); (b) Latin (grammar, translation into English unprescribed Latin books and translation into Latin of a continuous English passage and of short idiomatic English sentences); (c) mathematics (arithmetic, algebra, including easy quadratic equations, geometry, including the subject matter of euclid, books I, II, III, and simple deductions); (d) one of the following subjects: 1. Greek (grammar; translation into English from unprescribed Greek books; translation into Greek of short idiomatic English sentences); or, 2, a modern language (grammar; translation into English from unprescribed books; translation of a continuous English passage and of short idiomatic English sentences).

The period of professional study between the date of registration as a medical student and the date of the final examination or a diploma, must be a period of qualified study during not less than five years. The first four of the five years must be passed at a school, or schools of medicine recognized by any of the licensing bodies; but the first year may be passed at a university or teaching institution recognized by a licensing body and approved by the council where the subjects of physics, chemistry and biology are taught; and a graduate in arts and science of any university recognized by the General Medical Council, who has spent a year in the study of physics, chemistry and biology, and has passed an examination in these subjects for the degrees in question, is held to have completed the first of the five years in medical study, provided that he has registered as a medical student with the General Medical Council. A student who has previous to registration attended a course or courses of study in one or all of the subjects in any university, school of medicine, or teaching institution, recognized by any of the licensing bodies, may, without further attendance, be admitted to examination in these subjects, provided, that such course or courses shall not be held to constitute any part of the five years course of professional study.

The General Medical Council recommends the licensing bodies to require that the fifth year be devoted to clinical work at one or more public hospitals or dispensaries, British or foreign, recognized by the medical authorities, provided, that of this year six months may be passed as a pupil to a registered practitioner possessing such opportunities of imparting medical knowledge as shall be satisfactory to the medical authorities, and that no qualification in medicine ought to be granted without evidence of clinical instruction in infectious diseases.

The course of professional study and examination must include the following fifteen subjects: Physics, including the elementary mechanics of solids and fluids, and the rudiments of light and heat and electricity. Chemistry, including the principles of the science and the details which bear on the study of medicine. Elementary biology. Anatomy. Physi-

ology. Materia medica and pharmacy. Pathology. Therapeutics. Medicine, including medical anatomy and clinical medicine. Surgery, including surgical anatomy and clinical surgery. Midwifery, including diseases of women and newborn children. Theory and practice of vaccination. Forensic medicine. Hygiene. Mental disease.

Need of Uniformity.

It must be evident to all that uniformity in medical registration and licensure is not only desirable but necessary, and it is to be hoped that the time is not far distant when such uniformity will exist, so that the requirements for entrance to medical colleges, the college curricula, graduation requirements and regulations for licensure will be the same for all colleges and states. Just how this can be accomplished with the least friction between all the bodies concerned, and with the greatest dispatch is a question that must be decided not by each body individually, but by all assembled in a mutual conference, where there can be a free interchange of ideas. Perhaps the power to regulate these matters might be centralized in one organization representing all these various bodies, and in this connection the Council on Medical Education of the American Medical Association may prove to be a most valuable ally and mediator. If medical colleges as well as state examining boards are willing to place this matter in the hands of such a committee the solution of this vexing problem is near at hand. For the present, it is desirable that these various associations co-operate with each other, or at least, make an attempt to do so, for in union there is strength. Your committee urges that this association appoint committees to attend the meetings of these organizations and confer with them, and express to them our desire and willingness to co-operate in any work that may have for its object the unification and regulation of medical registration, education and licensure.

Respectfully submitted,

(Signed)

FRED C. ZAPFFE.

On motion, the committee was continued.

Report of Secretary-Treasurer.

The report of the secretary-treasurer was called for and read as follows:

To the President and Delegates: During the past year the influence exerted by this association on medical education, as pertaining to colleges and state licensing and examining boards, has been unusually perceptible. Quite a number of boards (10) make our requirements their requirements, and ask for recognition of medical colleges observance of our rules. Indian Territory has gone even farther than this, asking for a qualification for registration a diploma granted by a college which holds membership in one of the college associations.

Students all over the country have deluged this office with letters asking for the names of colleges in certain cities, that are members of the association, or that are recognized by the association. Thus, it will be seen that the work of this body is taken cognizance of all over the country.

We have, at present, a membership of 66 colleges, with applications in the hands of the Judicial council from 5 colleges, the Ensworth Medical College (St. Joseph, Mo.); Medical Department Washington University, St. Louis; Medico-Chirurgical College, Kansas City; School of Medicine, Indiana University, Bloomington; College of Physicians and Surgeons, Los Angeles, Cal. The Arkansas University Medical Department and the University of Louisville Medical College withdrew from membership last fall. There are, at present, in the United States (including the Philippine Islands) 157 medical colleges; of this number 18 are homeopathic schools, 10 eclectic, 4 physio-medical, 1 nondescript, and 125 regular colleges. Of the total number of regular colleges, 66 hold membership in this association, and 14 hold membership in the Southern Medical College Association, leaving 45 unaffiliated regular colleges, applications from 5 of these now being in the hands of the Judicial Council.

The Columbian University Department of Medicine has changed its name to George Washington University Department of Medicine.

In conformity with the resolution passed at the last meeting that a blank form be sent to each college to be filled out and returned to this office before November 1, your secretary forwarded such blanks, but only 29 colleges have complied with the request. These blanks have been filled out with the utmost care and precision and will prove a most valuable source from which to get information with respect to the character of work done and the equipment possessed by these colleges. Your secretary respectfully requests colleges that have not already done so, to fill out and return this blank forthwith.

The exigencies arising during the past year have made more evident the necessity for possessing some means of communicating with colleges more often than by an occasional letter, imparting to them much valuable information with reference to legislation on medical matters, changes in medical colleges and such other matters as are of mutual interest. The most desirable form of communication is a bulletin, of as many pages as may be necessary, to be issued bi-monthly or quarterly, which will enable your officials to keep in touch with all work that is being done in this vast field. I respectfully suggest that the association take up this matter and make the necessary provision for the issuance of such a bulletin.

Your committee on visitation and inspection of colleges has visited during the year, the following colleges: Ohio Medical University and Starling Medical College of Columbus, Ohio;

Western Reserve University Medical College and Cleveland College of Physicians and Surgeons of Cleveland, Ohio; University Medical College and Kansas City Medical College of Kansas City; Medical Department University of Kansas at Lawrence, Kas.; Marion-Sims-Beaumont College of Medicine, and St. Louis College of Physicians and Surgeons at St. Louis, Mo. The reports of these inspections are in the hands of the Judicial Council. Owing to the fact that this meeting has been called three months earlier than usual, the number of visitations are fewer in number than they would have been if this meeting were to be held as originally contemplated.

Your committee expects to be able to complete the visitation of all the colleges holding membership in the association in the course of another year. We wish to extend our thanks to the colleges visited for the interest displayed in this work, for their co-operation, and for the many kindnesses and courtesies shown your representatives. This has facilitated the work and made it a pleasure.

Your secretary has endeavored to bring to the attention of all persons interested in and concerned with medical education the deliberations of this association. With this end in view, he has sent a copy of our transactions to all medical colleges, state examining and licensing boards, medical libraries and prominent educators. Much correspondence has developed from this departure, and there is no question but what the sphere of our function and activities has been enlarged thereby. The existence of this association has been made known generally, and our influence is felt more than ever.

It has also become necessary for this association to publish its own transactions, and your secretary begs leave to suggest that unless satisfactory arrangements can be made with some publisher for immediate publication, that he be authorized to have the proceedings gotten out at once at the expense of the association.

FINANCIAL STATEMENT.

Association of American Medical Colleges, in account with
Fred C. Zapffe, Treasurer.

RECEIPTS.

Balance on hand June 6, 1904.....	\$ 497.95	
From 65 colleges since June 6, 1904.....	650.00	
		\$1,147.98

DISBURSEMENTS.

Printing, stationery, proceedings of Atlantic City meeting, application blanks, circulars, program and committee reports.....	\$ 113.20	
Postage	32.00	
Expressage	1.70	
Exchange on checks	3.85	
Office expenses	62.55	
Reporting Atlantic City meeting	40.00	
Expenses of committee inspecting colleges in Columbus, Cleveland, Kansas City, Lawrence and St. Louis	124.50	
Expenses of Judicial Council	35.00	
		\$ 412.80

Balance on hand April 10, 1905.....\$ 735.18
Respectfully submitted.

(Signed)

FRED C. ZAPFFE.

On motion, the report was received and accepted. The financial report was referred to the following Auditing Committee: Drs. W. H. Earles, R. Winslow and J. R. Guthrie.

Report of Judicial Council.

Dr. Wm. J. Means, chairman of the council, reported as follows:

To the Officers and Members of the Association of American Medical Colleges: In presenting the annual report of the Judicial Council, we are pleased to preface our remarks with the statement that while the year has been a busy one in many ways, the work has been mainly free from charges against members of the association and practically free from investigations, therefore, pleasant and satisfactory.

There has been much correspondence seeking information concerning the construction of rules, constitution and by-laws, but the inquiries have indicated a desire on the part of the officials of the various colleges to comply with the spirit of the rules as well as with the technical and legal requirements. Several states during the last few years have enacted medical practice laws and have made their standard of requirements, both in preliminary education and professional study, that of the association.

There has been considerable correspondence with several of these Boards of Medical Examiners relative to the construction of various sections of the constitution. These inquiries emphasize the prominent position of the association in the college world to-day, and demonstrate the influence it is exercising. They also demonstrate the desire of college men and state officials to meet the modern demand for higher education.

The chairman of the council has kept in close touch with the secretary of the association, and through him with the president. Together we have sought to conduct affairs to the best advantage of the colleges holding membership in the association, and, we hope, to the best interest of medical education.

In accordance with a resolution passed two years ago giving the secretary the power to visit colleges holding membership in the association and make reports thereon, and again confirmed one year ago at Atlantic City by appropriating \$400.00 to defray the expense of these investigations, the chairman of the Judicial Council, under instruction from the secretary, visited the College of Physicians and Surgeons and the Medical Department of the Western Reserve University at Cleveland. The report of his findings was filed with the secretary.

APPLICATIONS FOR MEMBERSHIP.

- The application for membership of the Medico-Chirurgical College of Kansas City, Mo., made two years ago, and laid over at the last meeting pending further investigation, has

been rejected by the council. From a careful investigation of the teaching facilities, laboratories, and the work being done in the first and second years, the council is satisfied that the college is not up to the standard of the association. We regret very much to make this recommendation, inasmuch as we hold the gentlemen who form the faculty in the highest regard as members of the profession.

The Ensworth Medical College, at St. Joseph, Mo., also made application for membership. Dr. Ward of the council was instructed to examine the college. His report shows that the laboratories are poorly equipped; that the work is elementary and not to be commended. In the application the secretary states that the college makes a rebate of 50 per cent. in tuition to physician's and minister's sons; also that the full tuition for the four years, covering laboratory expenses, etc., is about \$240.00, or \$60.00 per year. There is a provision in the will of Mr. Ensworth in endowing the college, that a free scholarship should be maintained for each congressional district in the state. Considering these factors, the income must be exceedingly small, and would indicate that the teaching force is not receiving compensation, and, therefore, the teaching must be largely a work of love. While this may be all right in the junior and senior years with the clinical teachers, it can not bring to the chairs of anatomy, physiology and other laboratory departments the best efforts. Again, the secretary states that credentials of students are examined and passed on by members of the faculty, and that time credit is given for degrees of pharmacy, veterinary surgery, osteopathy and bachelor of arts. With these facts before us, the council recommends that the application be rejected. At this place we suggest that colleges dependent largely on the income from students for running expenses cannot afford to make an annual fee of less than \$100.00.

The application of Indiana University Medical Department, reported one year ago at the Atlantic City meeting of the association and postponed for further investigation, was carefully considered and is now recommended for membership, recognizing only the first and second years of a medical course.

Application was also made by the College of Physicians and Surgeons, Los Angeles, for membership. The council recommends that it be laid over one year pending further investigation.

Application for membership was made by the Medical Department of Washington University, St. Louis. The application is recommended.

DECISIONS OF COUNCIL.

The Baltimore University Medical College furnished evidence in the form of attested statements from teachers and students

in support of its contention that said students were in attendance during the college year of 1903-04, and asking that the college be reinstated to full membership. The council recommends that the matter be referred to Drs. Means and Zapffe for further investigation, to report in full to the council at its next annual meeting.

Information having come to the members of the council that the University of Colorado at Boulder, and the University of North Carolina, accredited as members of the association for only the first and second years of a medical course, are giving a four years course and granting the degree of M.D., the council recommends that the matter be investigated by the proper officers and a report of their findings be made at the next annual meeting.

The Medical Department of the University of Vermont has furnished the council with its annual batch of correspondence. We were pleased to make the following ruling: Two years ago the time of opening the medical course was changed to November and the term extended to seven months. The following ruling was therefore made, that the University of Vermont, by opening its annual course in November and continuing seven months, complies with the time requirements of the association up to the present time and may be classified as a winter school. Therefore, colleges members of the association may accept the credentials of students who have taken their freshman year in said university as equivalent to a full term in a four years course and give them sophomore standing. This decision was submitted to the council and sustained.

The following is a copy of a letter received from W. F. R. Phillips, Dean of George Washington University, Washington, D. C.: "Would a student who has successfully finished three years work at the Atlanta College of Physicians and Surgeons be permitted to enter our fourth year without examination? If not, what should be required of him?" In reply the chairman gave the following opinion: "The Atlanta College of Physicians and Surgeons is a member of the Southern Medical College Association and, we understand, a reputable college. Therefore, if a student from said college presents credentials meeting the conditions of Section III Article V of the constitution of the association, he would be entitled to senior standing without examination, providing he has met the entrance requirements and completed the curriculum of your college for the previous year."

On March 8, 1905, your chairman received a letter from Dr. David Streett, Dean of Baltimore Medical College, relative to the standing of Charles F. Roupp. The following is an abstract of the case: Mr. Roupp completed his sophomore year at Jefferson Medical College after an attendance of three years. He then entered the Medico-Chirurgical College, but did not

complete the year, either in time or studies, and received no credits or credentials. The next fall he went to the Baltimore Medical College and asked for senior standing on the ground that he had complied with the time requirements of the association by having attended three complete courses in three separate years. In giving our opinion we stated that the time spent by Mr. Roupp in the Jefferson Medical College counted for two years of the medical course; his time spent in the Medico-Chirurgical College counting for nothing, the Baltimore Medical College, therefore, could not give him senior standing. Our opinion was based on the following argument: If a student fails in his freshman, sophomore or junior year, and is required to take the course over, it would not be proper or right of some other school to ignore the failure and give him standing based on time spent elsewhere. This course would demoralize medical education and college ethics.

Quite a number of communications were received from boards of medical examiners of the state of California asking for the construction of constitution and by-laws and other regulations that have become a part of the association's rule of conduct. They find many difficulties in enforcing the laws owing to refractory colleges. Most of these points having been mentioned in former reports, we will, therefore, not take up your time in presenting these inquiries and answers.

An interesting question was presented to the chairman during the year relative to the legality of a college to confer the degree of M.D. on a student *in absentia*. The chairman took a very decided stand against the legality of such a procedure. After considerable correspondence the matter was finally adjusted without publicity or prejudice to any of the parties concerned, and we think it best that the names of the parties remain *sub rosa*, yet the principle is one that, we feel, should be made public. The facts are as follows:

In October, 1900, Mr. B., from Ohio, entered a medical college a member of this association, and was given advanced standing for work done in a literary college, which did not carry with it a baccalaureate degree. Said student was graduated after a three years course and returned to Ohio to take the state examination. The Ohio state board refused to accept his diploma on the ground that he had not taken four years in a medical college, no credit being allowed for preparatory work that did not carry with it an academic degree. In the fall of 1903, Mr. B. again matriculated with his alma mater, but, it seems, did not attend college. In the spring of 1904 he was graduated *in absentia* and given a diploma. The facts were laid before the chairman of the council and there followed much correspondence with the college authorities, Mr. B., and the board of examiners of the state in which the doctor was practicing. Investigation on the part of the college authorities

established the facts as above stated, but it was claimed that there had been a mistake made, and that it was unintentional. Efforts were at once made to correct the error. In one of our communications we advised that the diploma of 1904 be cancelled. In a communication of later date from the dean, he stated that the faculty had met and formally annulled the graduation, and that the doctor had returned the diploma to the college. The matter was then dropped, and the chairman advises that no further action be taken. This emphasizes the fact that colleges cannot be too careful in the scrutiny of students coming up for graduation. Their credentials should be carefully considered and any defects corrected early in the session.

A communication was received during the year asking for an opinion on the following statement of facts:

"Does the association allow any of its colleges to hold provisional graduation; that is to say, suppose a student has been matriculated for four separate calendar years, but for reasons of serious illness was compelled to stay out a part of the third year, the total number of months of actual attendance for the entire four years being about twenty-seven, and the student passes all examinations required for the degree. The question is, would the college be allowed to graduate the student provisionally, and compel said student to return the following year to make up for time lost, after having published the name of the student in the announcement as a graduate of the previous year? Would the college be justified in holding her diploma back and allowing the student to graduate or appear at graduation exercises in cap and gown with other members of the class, and when the degrees were conferred to give this student a blank piece of paper, in other words, a 'fake diploma' instead of the regular diploma? Has not a person so graduated received the degree as much as her classmates? Would the student not lawfully be allowed to use the M.D. from that state? Is it possible to compel her to make up this time after receiving the degree, which the college claims should have been put in during the regular course."

The following is the opinion rendered: "Replying to your inquiry we will say that college authorities through sympathy and respect for a student who has been unfortunate by reason of sickness, might grant him the privilege of appearing with his class in graduating exercises, with a full and explicit understanding that he should remove all conditions imposed by reason of absence, before the degree was fully conferred and a diploma passed over. There might be a technical question as to the legality of this procedure, but a student who would take advantage of a possible irregularity would be unworthy of respect and confidence among men."

We wish to call the attention of the members of the asso-

ciation to the efficient work done by the Baltimore Medical College in investigating forgeries of credentials. Owing to some suspicious credentials coming into the possession of the officials of the college, they were led to suspect irregularities and ordered an investigation. A competent detective was employed, who looked into the matter carefully and found several instances of forgeries of credentials of different colleges holding membership in the association. A full report of the findings was placed in the hands of the chairman of the council. At the request of the college, the matter was not made public. The council, however, has full liberty to use the information if the occasion demands.

The resolution offered by Dr. Egbert at the last annual meeting, and adopted, if carried out faithfully by members of the association, will make forgery of credentials an impossibility. For the benefit of the members present I will quote this resolution. "That after September, 1904, no member of this association shall admit a student to advanced standing without first communicating with the college from which such student desires to withdraw, and receiving from the dean of said college a direct written communication certifying to the applicant's professional and moral qualifications, and to the exact work he has done in said college."

The council wishes to emphasize the value of this resolution and suggests that any college failing to respond to an inquiry from another college relative to the credentials of students should be summarily dealt with by the association. We might say that Dr. Streett, who opposed this resolution, is now one of its most ardent supporters.

Respectfully submitted,

(Signed)

W. J. MEANS, Chairman.
H. B. WARD,
GEO. M. KOBER,
THOS. H. HAWKINS,
JOHN M. DODSON,
R. WINSLOW.

On motion, the report was accepted.

Report of Committee on Chairman's Address.

Dr. Streett, on behalf of the committee, reported as follows: Your committee recommends that the thanks of the association be tendered to Dr. James for his able and instructive address; that the address be printed in the proceedings, and that a copy be sent to each member of the association that due consideration may be given to the many valuable suggestions contained therein.

(Signed)

DAVID STREETT,
P. RICHARD TAYLOR,
W. J. MEANS.

The report was accepted.

Report of Auditing Committee.

The auditing committee, through Dr. Earles, reported as follows:

Your committee has audited the financial statement of the secretary-treasurer, and finds it correct. The committee recommends that the secretary-treasurer receive an honorarium of \$500.00 a year for his services.

(Signed)

WM. H. EARLES,
R. WINSLOW,
J. R. GUTHRIE.

The report was received and accepted.

Revised Constitution and By-Laws.

At this juncture, Dr. Henry B. Ward, dean of the Medical Department of the University of Nebraska, offered a revised constitution and by-laws, which, as finally adopted, is as follows:

CONSTITUTION

ARTICLE I.

This organization shall be known as the Association of American Medical Colleges.

ARTICLE II.

SECTION 1.—Any medical college conforming to the requirements of the Association, as expressed in this Constitution and in the By-laws of the Association, is eligible to membership.

SEC. 2.—A medical college desiring membership in this Association shall make application to the Secretary, on blanks provided for that purpose, and in the form and manner set forth. Said college shall also express its readiness to be inspected by some person delegated by the Judicial Council and to defray the expenses of such inspection. The application, the report of the inspector, and all other evidence and information in relation to the college applying for membership shall be brought before the Judicial Council, without delay for its consideration and action; and such action, if favorable, shall be submitted to the Association at its next annual meeting for its consideration, at which time the college shall be elected to membership if it receives the favorable ballot of a majority of the colleges represented in the meeting.

SEC. 3.—Each college is entitled to one representative at all meetings of the Association, and to one vote on all questions. The dean of the college will be its accredited representative in the absence of any other delegate.

SEC. 4.—The dues shall be \$25.00 a year, payable in advance not later than March 1. Colleges in arrears after March 1 will be dropped from the membership roll and can be reinstated only by making formal application and by a vote of two-thirds of the members present.

ARTICLE III.

SECTION 1.—Every college holding membership in this Association shall demand of each student, under the condition hereinafter stated, as a minimum requirement for admission to the medical course:

(a) A bachelor's degree from an approved college or university.

(b) A diploma from an accredited high school, normal school or academy requiring for admission evidence of the completion of an 8-year course in primary and intermediate grades, and for graduation not less than four years of study embracing not less than two years (4 points) of foreign language, of which one must be Latin, two years (4 points) of mathematics, two years (4 points) of English, one year (2 points) of history, two years (4 points) of laboratory science, and six years (12 points) of further credit in language, literature, history or science.

(c) An examination in the following branches:

A. Required (18 points): Mathematics (4 points); English (4 points); History (2 points); Language (2 must be Latin), 4 points; Science (taken from physics, chemistry, botany, zoology), 4 points.

B. Optional (to 12 points): English, 2 points; History, 6 points; Language, 6 points; Manual Training, 2 points; Mechanical Drawing, 1 point; Natural Science (botany, biology, zoology), 2 points; Physical Science (chemistry, physics), 2 points; Trigonometry, 1 point; Astronomy (1), Civics (1), Geology (1), Physical Geography (1), Physiology and Hygiene (1), Political Economy (1).

(One point in any subject in a high-school or academic course demands not less than five periods per week of forty-five minutes each for eighteen weeks.)

(d) Certificates from reputable instructors recognized by the superintendents hereinafter to be mentioned or by any state board of medical examiners duly authorized by law, may be accepted in lieu of any part of this examination.

SEC. 2.—This examination must be conducted by or under the authority of the superintendent of public instruction of the city or state in which the college is located. In no case shall it be conducted by any person connected with the faculty, medical or otherwise, of the institution to which the student is seeking admission.

SEC. 3.—A student may be allowed to enter on his medical work conditioned in not more than six points, and these conditions must be removed by satisfactory examination before he is allowed to enter on the second year of his medical course.

SEC. 4.—Colleges in membership in this Association may honor the official credentials presented by students from other colleges having the standard requirements maintained by members of this Association, excepting for the fourth year of their course, but no member of this Association shall admit a student to advanced standing without first communicating with the college from which such student desires to withdraw, and receiving from the dean of such college a direct written communica-

tion certifying to the applicant's professional and moral qualifications, and to the exact work he has done in said college.

SEC. 5.—Candidates for the degree of Doctor of Medicine shall have attended four courses of study in four calendar years, each annual course to have been of not less than thirty teaching weeks' duration, and at least ten months shall intervene between the beginning of any course and the beginning of the preceding course.

SEC. 6.—Credit may be given to the holder of a Bachelor's Degree from an approved college or university for any work in the medical branches which he has successfully completed in his college course, only so far as it is the full equivalent of corresponding work in the medical curriculum. The holder of such Bachelor's Degree may also be given time credits of not exceeding one year, provided that such student has had at least 40 hours in physics, 144 hours in chemistry, 24 hours in osteology, 292 hours in human or comparative anatomy, 124 hours in histology, 85 hours in embryology, 145 hours in physiology, and 46 hours in materia medica; provided, that the applicant for such time credits satisfies the professors of the chairs mentioned in the medical school as to his proficiency in these first-year medical studies, and satisfies the examiner, as provided for in Section 2, Article III, that his studies for which the degree was conferred include the above requirements. Such student may be allowed to complete a course for the medical degree in not less than 31 months, provided he completes the remainder of the medical curriculum in that time.

SEC. 7.—A college which gives less than a four years' course of study, but does not graduate students, and is possessed of other required qualifications, may be admitted to membership.

SEC. 8.—Each student shall be obliged to attend 80 per cent. of the exercises in every annual course of study for which he seeks credit. No student shall be given credit on examination unless he attains a grade of at least 70 per cent. or its equivalent in any other marking system. And no student shall be graduated unless he shall have attained a passing grade in each and all subjects of the required curriculum.

ARTICLE IV.

SECTION 1.—Between January 1 in any year and the annual meeting of this Association each college in membership shall prepare, on blanks of standard form and size furnished by the Secretary of this Association, a list of all students matriculated since the last report, showing for each case the character and extent of the credentials for entrance, the conditions entered against said student and the standing accorded him. Such reports shall be certified to by the dean and registrar or secretary of the college and shall be sent to the Secretary of this Association in duplicate from each college in membership.

SEC. 2.—Any violation of this Constitution or By-laws of the Association shall subject the college so offending to expulsion from this Association.

ARTICLE V.

SECTION 1.—The entire course of four years shall consist of at least 4,000 hours, divided into the subjects as shown in the following table, and no college shall be recognized that falls below this standard over 20 per cent. in any one branch or over 10 per cent. in the total. Laboratory or clinic hours may be substituted for didactic hours.

CURRICULUM.

	No. of Hours of Lectures.	Hours of Laboratory.	Hours of Clinics.	Total.
Histology.....	30	60	...	90
Embryology.....	30	60	...	90
Osteology.....	30	...	...	30
Anatomy.....	190	230	...	420
Physiology.....	180	120	...	300
Chemistry and Toxicology..	100	200	...	300
Materia Medica.....	40	20	...	60
Pharmacology.....	40	20	...	60
Therapeutics.....	90	...	...	90
Bacteriology.....	40	100	...	140
Pathology.....	100	140	...	240
Medical Zoology, Postmor- tem Work and Clinical Microscopy.....	30	60	...	90
Physical Diagnosis.....	20	...	80	100
Practice of Medicine.....	180	...	360	540
Surgery.....	180	...	360	540
Obstetrics.....	100	...	60	160
Gynecology.....	50	...	110	160
Pediatrics.....	40	...	60	100
Eye and Ear.....	30	...	30	60
Nose and Throat.....	30	...	30	60
Mental and Nervous Diseases	60	...	60	120
Electro-Therapeutics.....	20	...	40	60
Genito-Urinary Diseases.....	30	...	30	60
Dermatology and Syphilis...	20	...	20	40
Hygiene and Public Health..	30	...	...	30
Dietetics.....	30	...	...	30
Medical Jurisprudence.....	30	...	...	30
	1750	1010	1240	4000

ARTICLE VI.

SECTION 1.—In addition to the representatives of colleges in attendance at regular meetings, who are termed *active members*, there shall also be associate members and honorary members. *Associate members* shall consist of former representatives and representatives of chartered postgraduate medical schools and members of state boards of medical examiners. Distinguished teachers in medicine and surgery may be elected to *honorary membership*.

SEC. 2.—Only duly delegated and accredited active members in actual attendance whose annual dues are paid shall

have *voting power*, but associate and honorary members may participate in all other proceedings and duties and may be elected to any office.

ARTICLE VII.

SECTION 1.—The officers of this Association shall be a President, two Vice-Presidents, Secretary and Treasurer, and a Judicial Council of seven members all of whom shall be elected annually by ballot and serve until the election of their successors.

SEC. 2.—The *President*, or one of the Vice-Presidents, in the absence of the President, shall preside at all meetings and perform such duties as parliamentary usage in deliberative assemblies and the By-laws of this Association may require. The seven members constituting the Judicial Council shall serve three years each. Vacancies by expiration of term shall be filled at the annual election of officers. Vacancies by death or resignation shall be temporarily filled by the surviving members of the Judicial Council.

SEC. 3.—The *Secretary and Treasurer* shall record the proceedings of the meetings, conduct the correspondence, receive dues and assessments from members, disburse the funds of the Association as provided by resolution, issue certificates of membership, and perform such other duties as the By-laws may require.

SEC. 4.—The *Judicial Council* shall investigate and determine all questions of violation of the rules and regulations of this Association and all matters of dispute between the members of this Association. All charges or complaints shall be preferred formally in writing, and referred to the Council. The Council shall make written report at the next ensuing session of the Association upon all matters received for adjudication.

ARTICLE VIII.

SECTION 1.—The stated meetings of this Association shall occur annually on the third Monday in March at such place as the Association may designate.

SEC. 2.—A majority of the active members whose dues are paid shall constitute a quorum.

ARTICLE IX.

This Constitution shall not be altered or amended except by written notice to all members at least 30 days previous to a stated meeting and by a vote of two-thirds of all the active members present at such meeting.

BY LAWS

SECTION 1.—The presiding officer shall, on calling meetings to order, call for the reading of the minutes of the previous session, which, when approved, shall be recorded in a book kept for that purpose, signed officially by the Secretary and approved by the President.

SEC. 2.—After approval of the minutes, the Secretary shall announce the colleges represented at the meeting, and an adjournment of ten minutes shall then follow to allow other representatives present to register and pay their dues.

SEC. 3.—Order of business:

1. The reading of the minutes of the previous meeting.
2. Roll call of membership.
3. Papers and essays.
4. Reports of committees.
5. Secretary and Treasurer's report.
6. Report of Judicial Council.
7. New business.
8. Adjournment.

SEC. 4.—These By-laws may be altered or amended at any time by unanimous consent of the members present, or by written proposition, to so alter or amend, being read in open session and receiving the approval of a three-fourths vote of all the members present at an adjourned session of any stated meeting: provided, however, not more than twenty-four hours shall have elapsed between the time of the proposition to amend and the final vote thereon.

SEC. 5.—That no college, a member of this Association, shall be permitted to accord to any one any beneficiary scholarship except as provided for in the endowment funds of said college. The facts in regard to such a scholarship shall be fully set forth in the annual announcement of the college offering it.

SEC. 6.—There shall be a committee of three members of this Association, to be known as the Visitation Committee, said committee to consist of the President, Secretary and Chairman of the Judicial Council, whose duty it shall be to see that all schools which are members of this Association be visited and investigated by a member of this committee, or by some one designated by the committee, at least once every five years, for the purpose of determining whether the members are enforcing the laws of this Association.

SEC. 7.—If any school or schools shall, in the judgment of this committee, be found not to possess the qualifications necessary to membership in this Association, they shall present a detailed report on the same.

SEC. 8.—For the preservation of students' records either a ledger or the card-index system may be employed with advantage.

SEC. 9.—These records should include the full name of the student, his age and residence, the year of the curriculum to which he is admitted, the date of admission, and the credentials on which he is admitted. They should also furnish a statement of the courses taken by the student each session, and the grades made thereon. For the latter purpose we recommend the following system of marking: *A.* Excellent. *B.* Good. *C.* Passed. *D.* Failed, must take examination over again. *E.* Must take the course over. *D* and *E* should be recorded in different colors from the others. Furthermore, dishonorable conduct should be a matter for record.

SEC. 10.—At the end of each annual session there should be issued to each student a certificate of the work done by him that year. This certificate should be signed and sealed by the proper official; should show the dates of the beginning and end of the session, the studies pursued, the number of hours in each, divided into lectures, laboratory or clinical, and the grade made by the student.

SEC. 11.—In case the student desires to enter another school, this certificate may serve to admit him to advanced standing conditionally; but unconditional admission may be withheld until correspondence with the proper official of the school previously attended by the student has established the genuineness of the certificate.

SEC. 12.—Rules of the Judicial Council:

1. All complaints, charges and other questions must be submitted in writing through the Secretary of the Association or directly through the Chairman of the Council.

2. All complaints of violations of rules and regulations must be in the form of written charges and specifications, signed by the complainant.

3. All charges and specifications must be presented to the accused for answer. In all cases the written answer must be filed with the Chairman of the Council within 10 days from the receipt of the copy of charges by the accused.

4. All counter charges must be submitted to the accused for answer and pleadings in the same manner as the original charges and the Council will take no notice of any evidence not submitted through its Chairman in regular form and order.

5. As the strictest formality is necessary to insure justice equally all decisions of the Council must be rendered in writing, signed by each member taking part in the determination of any question.

6. In the intervals between the annual meetings, the Council may act upon all matters submitted in due form by its Chairman, each member communicating his decision to the Chairman, who shall immediately, or within 10 days from the date of any decision, file a certified copy with the Secretary and notify all the parties interested.

7. It will be the duty of the Chairman of the Council to file and preserve all original complaints, charges, and other matter referred to the Council, and to deliver them to the Secretary on the first day of each annual meeting next ensuing the date of final decision.

Committee on Evaluation of College Work.

Dr. Loeb, chairman of the committee appointed to consider the suggestion made by Professor Main, reported as follows:

Your committee recommends that a committee be appointed to ascertain the character of the work done by literary colleges in branches taught in medical colleges, and to determine the credit merited by each institution, to the end that the associa-

tion may then make public announcement of the fact; the committee to report at the next annual meeting.

(Signed)

H. W. LOEB,
ELI H. LONG,
R. M. SCHAUFFLER.

The Chair appointed on this committee, Dr. Fred C. Zapffe, Prof. J. H. T. Main and Dr. H. B. Ward, the committee to report at the next meeting of the association.

Conference Committees.

On motion, Drs. S. C. James and Fred C. Zapffe were appointed a committee to confer with the National Confederation of Examining and Licensing Boards at its meeting in Portland, July 10, 1905, for the purpose of recommending some uniform requirement acceptable to this association and the confederation.

Drs. Fred C. Zapffe and Wm. J. Means were appointed a committee, on motion, to attend the meeting of the American Confederation of Reciprocating Medical Licensing and Examining Boards to be held in Indianapolis, April 27, 1905, for the same purpose as mentioned above.

Officers Elected.

The nominating committee reported as follows: President, Samuel C. James, Kansas City, Mo.; first vice-president, Wm. H. Earles, Milwaukee, Wis.; second vice-president, Eli H. Long, Buffalo, N. Y.; secretary-treasurer, Fred C. Zapffe, 1764 Lexington street, Chicago; judicial council, Randolph Winslow, Baltimore, Md., and Thos. H. Hawkins, Denver, Colo.

On motion, Pittsburg, Pa., was decided on as the next place of meeting.

The association then adjourned.

SAMUEL C. JAMES, President
FRED C. ZAPFFE, Secretary.

Discussion on Entrance Requirements.

PROF. J. H. T. MAIN, Grinnell, Ia.: I wish to express my sense of appreciation of the honor conferred on me by asking me to open the discussion on this very important subject. I shall discuss the matter, in the briefest possible way, as it presents itself to me.

The question of chief interest, it seems to me, is that of the combined course. I mean by the combine course not necessarily the formulated course offered by a university or a medical college, but of permitting the student to take a subject in the liberal arts college which is also offered by the medical college. The condition that exists at the present time is the result not of any design on the part of the colleges of liberal arts, but it is the result of a natural and inevitable evolution

which has caused to be introduced into colleges of liberal arts subjects which are essentially medical subjects.

The reason for this is not far to see. It is due, partly, to the enormous enlargement of the field of knowledge which has taken place within the last fifteen or twenty years, so that reputable colleges which twenty years ago were offering two courses in zoology or biology are now offering five or even ten; colleges then offering one or two courses in chemistry are now offering ten or more; colleges at that time offering altogether fifty courses, are now offering as many as 100 or 150, or even 200 courses.

This has created what is termed the elective system. Where there are so many courses, it is necessary for the student to choose his work. There are two methods of dealing with that problem in colleges of liberal arts—unregulated and regulated election. If the college has no control over the selection of work, they merely say that when the student has completed 120 semester hours of work, he is entitled to a degree. In that way, the student who has a definite career in view can choose the subjects of study that have a direct bearing on that career. If he is going into the profession of medicine, he will naturally select courses that have reference to medicine.

In colleges where there is regulated election, there is, probably, something like the group system, some of which are science groups, literary groups, political groups, etc. The man who has selected medicine as a profession, naturally will select the science group, which embraces chemistry, zoology, and electives in histology, embryology, etc. This is absolutely necessary as conditions now are, for the man who does not do this, is likely to spend a large share of his life in college fitting himself for his life work. There are many reasons why a man should not spend eight years in college. Time may interfere; money may interfere, both vital questions for any young man looking forward to a professional career. There may be other reasons as well why a man of 28 should not spend four years more in getting ready for his life work.

The university has recognized these conditions in its territory and has provided for a combined course. The medical school has recognized these conditions in its territory, and has said that it is a good thing for a man to shorten his course, if he can do so. However, there is a debatable ground between the university on the one hand, and the medical college, on the other. That consists of the independent college which has no medical school in connection with it. There is danger in the situation, as it exists, that the independent college will be squeezed out of existence between these two contending forces.

What is the result? Many courses are offered in colleges

of liberal arts in histology, embryology, neurology, chemistry, bacteriology and toxicology, and other subjects, that have a direct bearing on medical education. The medical school requires them, and the college gives them, not because the medical school requires them, but because these subjects are pure sciences, and the college has the right to give them as a part of a liberal training. The man who is looking forward to medicine, elects these courses, and he is entitled to consideration. The college in which he takes these courses is also entitled to consideration. Such a man will come to the medical college and say that he has had such and such subjects in the college of liberal arts, and he is entitled to consideration—no more and no less—careful and deliberate consideration.

There are, however, two points of view on this matter. The college teaches these subjects as pure sciences. The medical college also teaches them as pure sciences, but with distinct reference to the medical application of these subjects. Nevertheless, a man who has taken these subjects as pure sciences in the college of liberal arts, taken them in the proper direction, with proper apparatus and an efficient teaching corps, that man has acquired a knowledge of the principles of the subject which will enable him very quickly to acquire the particular point of view required by the medical school. Medical men, I am sure, will concede this to be true.

Now the question arises, can the colleges of liberal arts teach these subjects in such a way, as pure sciences, that they are entitled to consideration by the medical school? I do not say that they can, but the facts are that colleges are teaching these subjects. Kansas University is doing it, and so are Indiana, Illinois and Chicago. Many institutions are giving these subjects with distinct reference to medicine, giving them in their department of liberal arts. The principle is clearly established that subjects of that sort may be given creditably in the college of liberal arts, and the condition is simply one of evolution and not pronouncements that any body of men may make. It is not speculative possibilities that we are dealing with, but actual facts.

It is the business of the medical school to regulate a condition that already exists so that it will not be injurious, on the one hand, to the medical college, or unjust, on the other hand, to the college of liberal arts. Is there any reason why this question should not be made an educational one, a question larger than the medical school, on the one hand, and the composite school, on the other? Is there any reason why the independent college should be excluded from credit in the medical school because it is an independent college? No. Is there any reason why the independent college should be obliged to give up these prospective physicians to institutions that give a combined course at the end of the sophomore or junior year?

Yes, there are reasons, but there are no intrinsic reasons, only reasons that are purely incidental.

The whole question rests on the quality of work done. If the college can give a course in histology that is worth credit, it ought to receive that credit, and I am not asking the independent college to pass on that. I am asking you to do that, and it is a matter well worth considering. There are many independent colleges throughout the Middle West, many of whom are not able to offer courses such as I have mentioned; consequently they are out of caste entirely. There are other colleges, however, that can offer these courses, colleges that are offering these courses, and other colleges are rapidly coming to that point where they can offer courses in subjects that are distinctly pre-medical.

The colleges that are offering these courses, and the colleges that are likely to do so ask this, that some arrangement be made between medical schools and themselves, whereby the work they give may be tested, and whereby it may be determined whether the work they give in these subjects is worthy of consideration by the medical school. These colleges do not ask for a flat credit for the A.B. degree. No college of liberal arts would ask that at the present time, although there might be some reason for it. All they ask for is that credit be given for this work.

How is credit to be given for this work? By inspection. It seems to me that this association is competent to appoint a commission for the purpose of inspecting every state university in the Middle West, and colleges of repute, to determine whether the colleges who are doing this work are giving it in such a manner that they are entitled to consideration in the medical school. That board might be composed of men in the medical college entirely, or it might include men from colleges of liberal arts for the purpose of consultation and liberal advice, although colleges would not object to have such a commission consist entirely of medical men. That commission might also formulate courses that could be offered in colleges of liberal arts, and define definitely what should be the standard of these courses; what should be the character of the teaching; how it should be done; under what conditions, and what sort of teaching force is necessary. It might credit certain colleges on the basis of actual work done.

The medical profession is the most personal of all the professions. It demands a certain amount of liberal culture as well as the most careful technical training. It seems to me worth while to give some consideration, some encouragement to the college; to say to it that you are anxious that the men who come to you should have a degree from or a course in the college of liberal arts. It is not possible to say that to every man. We have not come to that. We probably never will

come to it, and it may not be desirable to come to it; but it is proper to say to such a man that for such work, done under certain conditions, he will receive consideration at your hands.

It is a great injustice to the college of liberal arts to say that a man can enter from the high school, and to say to the graduate from a college of liberal arts that he may enter on the same conditions; it is doing the college of liberal arts an injustice, and also the man; to place him on the same basis as the high school graduate who has not received instruction in the subjects I have been talking about.

DR. GEO. W. WEBSTER: This matter of preliminary entrance requirements is the most important one before the medical profession to-day. As long ago as 1844, the late Dr. N. S. Davis pointed out, before the New York State Medical Society, a reasonable quantity of work, a reasonable medical course. In the United States we have had a wonderful development in the matter of medical education. There has been wonderful advancement along every line in the medical curriculum. It has been rendered reasonably complete. From two years it has gone on to four, with instruction in 23 separate subjects. The average time for four courses is more than 4,000 hours in all the colleges.

This matter of the medical curriculum has received abundant attention. The matter of post-graduate instruction, as exemplified in medical organization, national, state, county and local societies, has been evolved to a degree of perfection which was scarcely thought possible even a comparatively few years ago. The superstructure is noble, imposing, all that can be desired, perhaps, but the foundation has not been as strong as it should be to support the superstructure. This matter of preliminary requirements is one which has been neglected more than any other.

A year ago I read a paper on this subject before the National Confederation of State Medical Licensing and Examining Boards in which I also proposed a standard preliminary requirement which was adopted by that body. (*N. Y. Med. Jour.*, July 23-30, 1904.)

I agree with Dr. Main in what he said with reference to entrance requirements, that a man who has taken certain work in the university should be given credit for such work, so far as it may apply on the work of the first year of the medical curriculum; but I know of no college of liberal arts that has a course that is the equivalent of the first year of medicine. The first and second years of the medical course may be given anywhere where we can get together proper teachers and properly equipped laboratories. It is not necessary to have these studies taught in great centers of population. They may be taught anywhere, but until a college does teach these preparatory studies, and gives a course, both in time and quality, that is the equivalent of the work as given

in the best medical schools, credit should not be allowed for work done there.

Dr. Main said that colleges do not ask that a man with a baccalaureate degree should be granted a year of time in the medical college, because he realizes that the work done in the liberal arts course is not a foundation for the medical course but merely a matter of culture. In that I agree with him. There are, so far as I can learn, 43 medical colleges in the United States that give a year of advanced standing to men who possess a baccalaureate degree; and there are still many that give credit for degrees in dentistry, pharmacy and veterinary medicine.

This matter of preliminary requirements will gradually evolve itself from the conditions existing at the present time, and I believe that the time is not far distant when they will be such as the medical as well as the liberal arts colleges will find mutually agreeable.

DR. S. D. WILLISTON: The subject of the relation of preparatory college education to the profession of medicine has interested me for many years. For more than fifteen years the trend of education has been practically that which Dr. Main outlined. There must be a correlation between subjects of pure science started in the college and university, and the same subjects in the medical school. I believe it is inevitable that the medical profession must recognize this. There has been a tendency in education everywhere in universities to throw back the beginning of the professional career to the end of the sophomore year. The result is that now four-fifths of the men receiving the B.A. degree have made up their mind what to do in life. As has been said, no student can spend four years in the high school, four in college, and four in the medical school. Students are not making the best preparation in life when they spend four years in desultory study of odds and ends.

Pure sciences should be taught in the best laboratories, and in the near future we will see these subjects taught in the university and not in the medical school. The university has the best laboratories in embryology and chemistry. Shall the medical profession make use of them, or will they say to the student who has taken this work in the university that they will not recognize it; that it must be done over again? The profession of medicine can in no better way encourage advanced preparation than by giving recognition to those colleges and schools that try to teach these subjects and teach them well.

Shall the student take four years in high school, four in college and four in medicine? No. The chances are now that he skips the college and goes directly into medicine from the high school. If, however, the medical college will recognize

the work of the university or college as these recognize the work of the high school, the chances are that the student will take two years in college and then come to the medical school, provided his training is equivalent. You are the censors. This association should occupy precisely the same position that the university authorities occupy in recognition of the work of the high school. It was some five years ago that this body recognized the institution which I then represented, and which was almost the first to put this plan into operation. The university is situated in a city which can not contribute adequately to the support of a medical college, but it had laboratories and facilities for teaching the first two years of medicine that were second to none. I do not think that the medical colleges that have received students from that university have ever had occasion to regret that they recognized its work. The same is true of those other colleges and universities that teach the first two years of the medical course.

Now, it remains for this association to determine what shall be the requisites for this work, and if colleges and universities come up to the standard you may set, you cannot do otherwise than recognize them, and give their students such consideration as they may deserve. The medical profession can not stem the tide. It is coming and you must be prepared to go with it.

PROF. ALBION W. SMALL: The matter with all legislation with reference to medical education should be to protect the standards of medical education and not to pull down standards. All colleges, those that are connected with medical schools and those that are not, are interested in having the value of things recognized just as they are. As President Gilman, of Johns Hopkins said, "The essence of quackery is concealment." In many state laws there is an attempt made to work some sort of "hocus-pocus," that there is a special efficacy in certain kinds of instruction performed under the auspices of medical schools which the same instruction performed by capable teachers elsewhere would not have. A course in physiology given in a college where the work is on a purely scientific basis is worth precisely as much, and more under certain circumstances, as a part of the medical education, as though that same work, according to the same method, were done by a professor in a medical school.

There are schools, as mentioned by Prof. Main, that either are able or propose to make themselves able to give courses in certain subjects which the medical school must provide for some way or other, and must give credit for work done in these subjects for just what it is worth, no more or no less, if these studies are a part of the required course in the medical school. If the work done by the liberal arts school is the equal of the work done in the medical school, why should not the medical school give this work some consideration and give

credit for just what it is worth, rather than to ask the student to do the work all over again just to satisfy some state law. We desire to have such a state of things in medical schools that we may call things by their right name, and that we may recognize work done in college at its actual value,—just the value that medical instructors would place on it.

Two things are very desirable: First, that we shall arrange our courses in such a way that there will be no artificial barriers to individuals coming on as fast as possible in a profession. We do not want to put up barriers to keep men from going into medicine as soon as they get a fundamental education. Second, it is desirable to induce individuals to broaden the foundation of professional preparation to properly fit them for the station they are to occupy in life; to induce men to spend more time than they otherwise would in the atmosphere and environment of a university or liberal arts college, but that can be done only by giving these men such credits as may be due them for all work done in the college.

List of Members.

CALIFORNIA.

College of Medicine University of Southern California, Los Angeles.

University of California Medical Department, San Francisco.

COLORADO.

Colorado School of Medicine, University of Colorado, Boulder.

Denver and Gross College of Medicine, Medical Department of the University of Denver, Denver.

CONNECTICUT.

Yale University Department of Medicine (Yale Medical School), New Haven.

DISTRICT OF COLUMBIA.

George Washington University Department of Medicine, Washington.

Georgetown University School of Medicine, Washington.

Howard University Medical Department, Washington.

ILLINOIS.

American Medical Missionary College, Battle Creek, Mich., and Chicago.

College of Medicine of the University of Illinois (College of Physicians and Surgeons), Chicago.

Illinois Medical College, Chicago.

Northwestern University Medical School, Chicago.

Rush Medical College (in affiliation with University of Chicago), Chicago.

INDIANA.

Fort Wayne College of Medicine, Ft. Wayne.

Central College of Physicians and Surgeons, Indianapolis.

Medical College of Indiana, University of Indianapolis, Indianapolis.

University of Indiana School of Medicine, Bloomington.

IOWA.

Drake University College of Medicine, Des Moines.

College of Medicine University of Iowa, Iowa City.

Keokuk Medical College, College of Physicians and Surgeons, Keokuk.

Sioux City College of Medicine, Sioux City.

KANSAS.

Kansas Medical College, Medical Department of Washburne College, Topeka.

School of Medicine University of Kansas, Lawrence.

KENTUCKY.

Hospital College of Medicine, Louisville.

Kentucky School of Medicine, Louisville.

Kentucky University Medical Department, Louisville.

LOUISIANA.

Flint Medical College, Medical Department New Orleans University, New Orleans.

MARYLAND.

Baltimore Medical College, Baltimore.

College of Physicians and Surgeons, Baltimore.

Johns Hopkins University Medical Department, Baltimore.

University of Maryland School of Medicine, Baltimore.

Woman's Medical College, Baltimore.

MASSACHUSETTS.

College of Physicians and Surgeons, Boston.

MICHIGAN.

Detroit College of Medicine, Detroit.

Michigan College of Medicine and Surgery, Detroit.

University of Michigan Department of Medicine and Surgery, Ann Arbor.

MINNESOTA.

Hamline University College of Medicine, Minneapolis.

College of Medicine and Surgery of the University of Minnesota, Minneapolis.

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Kansas City Medical College, Kansas City.

University Medical College, Kansas City.

Marion-Sims-Beaumont College of Medicine, Medical Department St. Louis University, St. Louis.

St. Louis College of Physicians and Surgeons, St. Louis.

Washington University Medical Department, St. Louis.

NEBRASKA.

John A. Creighton Medical College, Medical Department of Creighton University, Omaha.

University of Nebraska College of Medicine, Lincoln and Omaha.

NEW YORK.

University of Buffalo Medical Department, Buffalo.

Syracuse University College of Medicine, Syracuse.

NORTH CAROLINA.

University of North Carolina Medical Department, Raleigh and Chapel Hill.

Wake Forest College School of Medicine, Wake Forest.

OHIO.

Medical College of Ohio, Medical Department University of Cincinnati, Cincinnati.

Miami Medical College, Cincinnati.

Cleveland College of Physicians and Surgeons, Medical Department Ohio, Wesleyan University, Cleveland.

Western Reserve University Medical College, Cleveland.

Ohio Medical University, Columbus.

Starling Medical College, Columbus.

Toledo Medical College, Toledo.

OREGON.

University of Oregon Medical Department, Portland.

Willamette University Medical Department, Salem.

PENNSYLVANIA.

Medico-Chirurgical College of Philadelphia, Philadelphia.

Woman's Medical College of Pennsylvania, Philadelphia.

Western Pennsylvania Medical College, Medical Department Western University of Pennsylvania, Pittsburg.

TENNESEE.

Meharry Medical College, Medical Department Walden University, Nashville.

VIRGINIA.

University College of Medicine, Richmond.

WEST VIRGINIA.

University of West Virginia Medical Department, Morgantown.

WISCONSIN.

Milwaukee Medical College, Milwaukee.

Wisconsin College of Physicians and Surgeons, Milwaukee.