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THE ASSOCIATION

--OF--

10

AMERICAN MEDICAL COLLEGES.

Proceedings of the Meeting at Columbus, Ohio,
June 5, 1899.

*Reprinted from the Bulletin of the American Academy of Medicine,
Vol. IV, No. 1, and No. 3.*

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OFFICERS OF THE ASSOCIATION OF AMERICAN MEDICAL
COLLEGES, JUNE, 1899, TO MAY, 1900.

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Prof. Bayard Holmes - - - - 104 E. 40th Street, Chicago, Ill.

BULLETIN

OF THE

American Academy of Medicine.

VOL. IV.

ISSUED JUNE, 1899.

NO. 1.

THE AMERICAN ACADEMY OF MEDICINE is not responsible for the sentiments expressed in any paper or address published in the BULLETIN.

This number is devoted, almost exclusively to the official notice of the Columbus Meeting of the Association of American Medical Colleges and of documents connected therewith. Colleges connected with the Association are requested to consult its pages with this fact in mind.

SECRETARY'S TABLE.

This number is issued in advance of the date in order to comply with a request of Secretary Holmes, of the Association of American Medical Colleges. Dr. Holmes desired the material contained in this number to be used in connection with the official call for the meeting of his association. We are not only willing to comply with the request, but are glad to have the opportunity. The report prepared for the forthcoming volume to be issued by the regents of the University of New York, although incomplete, is of value, and cannot but be helpful to the College Association in their deliberations at the next meeting which, probably, will be an important one. Its publication in its present form will be of use, it is hoped, to the regents as well. By far too many colleges have not replied to the letter of inquiry, and this public notice of their delay ought to stimulate them to immediate action.

Doubtless the College Association will properly express its appreciation to Mr. James Russell Parsons, Jr., director of the College Department of the University, for permitting the use of the manuscript before it has been published in the report for which

it has been prepared. The Bulletin recognizes this courtesy as indicative of an estimate of its character as a journal that is very gratifying. Two words of explanation: the abbreviations for the months are those devised by Mr. Melville Dewey, the Librarian of the New York State Library, the most convenient scheme known to the writer, but, possibly not familiar to all of our readers. Without stating the principle upon which the abbreviations are formed, the abbreviations themselves are given in the order of the months, Ja, F, Mr, Ap, My, Je, Jl, Ag, S, O, N, D. The other word is to forestall a possible criticism regarding the make-up of the number. The several manuscripts furnishing the contents were all received after the time promised, and at different dates. Because alterations were making in the office where the Bulletin is printed, the usual facilities were not available, and the matter had to be hurried to press in the order it is presented or the issue would be delayed so as to make it of no use for the purpose desired. For the same reason the proof-reading was more hurried than usual, which may result in a greater number of errors than there would be otherwise. It is hoped that no serious error will appear.

* * *

In this connection, it is opportune to state again the effort making by the Bulletin to give regularly, accurate and reasonably full information of every medical college in the country each year. And not only of medical colleges but of literary and scientific colleges and of hospitals and other institutions related to them. This information is prepared from the catalogues and reports as received and promptly published in the Bulletin. Then by means of a full index every institution and the name of every physician mentioned in connection with the institution can readily be found. In this way a volume of the Bulletin becomes a directory of the colleges and other organizations, and more, of the faculties of the medical colleges, of the superintendents of hospitals, etc. This new feature of the Bulletin has appeared in a few numbers only, and the method of tabulation thus far is experimental. Enough has been learned to make sure of the practicability of the plan if it is desired to continue it. This depends upon the financial support accorded to it.

There are from 1500 to 2000 institutions to be included in each yearly volume if any degree of completeness is attained. This will cause an increase in the number of pages, involving an increased expenditure beyond the present income of the Bulletin. The faculties of our medical colleges, members of the medical staffs of our hospitals, and all others interested in the institutions served by medical men are invited to increase the subscription list to secure the completeness of this feature of the Bulletin. In addition, the Bulletin purposes to publish the valuable papers, reports, etc., that have made its pages of value in the past.

* *

The figures prefixed to the names of the various medical colleges are not in the copy furnished by Mr. Parsons. They are inserted to be used in the future numbers of the Bulletin to furnish a method for a quick and accurate reference to this official list of medical colleges in the United States.

BIBLIOGRAPHY OF THE ASSOCIATION OF AMERICAN MEDICAL COLLEGES AND ITS PREDECESSOR THE AMERICAN MEDICAL COLLEGE ASSOCIATION.

1876-1898.

The present attempt to collect the literature of this and previous associations cannot hope to be anything but a beginning. All available indexes have been used and the journals whose editors seem to have taken an interest in the subject have been gone through page by page and all important or significant editorials, articles, and correspondence have been noted. The secretary will be greatly obliged to friends of the association and librarians for additions to this bibliography. The secretary is under obligation to Miss Grace Bryant, librarian of the College of Physicians and Surgeons of Chicago, for this work which she has undertaken with the librarian's spirit.

AMERICAN MEDICAL COLLEGE ASSOCIATION, 1876-82.

Editorials, Reports, Notices.—

Amer. Med. Bi-weekly, V. 7, 9; Atlanta Med. and Surg. Jour., V. 14, 564; V. 15, 189, 241; V. 16, 241; V. 17, 83; Bost. Med. and Surg. Jour., V. 98, 774; V. 100, 681; Chic. Med. Jour. and Exam., V. 35, 90; V.

41, 203, 396, 499; V. 42, 69; Cin. Lancet-clinic N. S., V. 2, 155, 365; V. 8, 520; Cin. Med. News, N. S., V. 7, 719; Detroit, Lancet, V. 1, 531; V. 2, 195, 421; V. 3, 75; V. 4, 36, 42, 563; V. 5, 541, 547; Gaillard's Med. Jour., V. 30, 108; V. 31, 188; V. 33, 590; Louisville Med. News, V. 2, 5, 113, 312; V. 3, 269, 282; V. 5, 160, 280, 286; V. 7, 115; V. 11, 25, 205, 233; V. 14, 1; V. 16, 106; Med. News, V. 34, 114; V. 35, 107; V. 36, 132; V. 37, 60; V. 38, 94; V. 40, 701; Med. News and Abstract, V. 39, 381; Med. Rec., V. 13, 359; V. 18, 184, 195; V. 19, 15; V. 22, 16; Med. Trib., V. 1, 350; Mich. Med. News, V. 4, 147; V. 5, 161; Ohio Med. Rec., V. 3, 429; Phil. Med. Times, V. 7, 491; V. 9, 411; V. 11, 607; Rich. and Louis. Med. Jour., V. 23, 207; V. 24, 116; V. 27, 291, 587; St. L. Clin. Rec., V. 3, 86; V. 7, 120; St. L. Cour. of Med., V. 1, 686; V. 3, 619; V. 6, 94, 556; South. Med. Rec., V. 9, 157; Toledo Med. and Surg. Jour., V. 1, 154; Va. Med. Month., V. 4, 231; V. 9, 123, 323; Western Lancet, V. 6, 165; V. 7, 296.

Publication.—

History of its organization, its constitution, by-laws, articles of confederation, and list of members. 26 pp. Detroit, 1877.

Proposed constitution of the convention of American medical colleges. 2 galley sheets. N. Y., Dec. 28, 1876.

ASSOCIATION OF AMERICAN MEDICAL COLLEGES, 1890-TO DATE.

Transactions, Reports, Notices.—

Bulletin of Amer. Acad. of Med., V. 1, 380, 395, 408, 476, 531, 541, 692, 697; V. 2, 302, 307, 311, 334, 374, 395, 434, 446, 508, 592; V. 3, 48, 399, 420; Jour. of Amer. Med. Assoc., V. 14, 796, 836; V. 16, 204, 348, 652; V. 17, 272; V. 18, 598; V. 19, 22, 664; V. 20, 485; V. 21, 1021; V. 22, 484; V. 23, 40, 523; V. 24, 778; V. 25, 121, 680; V. 26, 769, 837; V. 27, 1214; V. 28, 796; V. 29, 81; V. 30, 1189, 1432; Med. News, V. 61, 135; Med. Record, V. 46, 318; N. Y. Med. J., V. 68, 175; No. Amer. Pract., V. 10, 450; Report of Committee on Syllabus, Bull. Amer. Acad. of Med., V. 2, 392; Jour. of Amer. Med. Assoc., V. 24, 1010; V. 25, 20; V. 26, 769, 827.

Publications of Association.—

Bulletin, 1892. 40 pp. paper. St. Paul.¹

Proceedings of the meeting at Denver, June 6, 1898. 59 pp. cl. Easton, Pa. (Reprinted from Bull. of Amer. Acad. of Med., V. 3, 399, 441.)¹

Report of Committee on Syllabus. 32 pp. paper. Chic. 1895.¹

Report of Committee on Syllabus. 50 pp. paper. Chic. 1896.¹

Papers.—

Bodine, J. M.—The Standard of Medical Education (pres. address, 1897). Bull. Amer. Acad. of Med., 1897, V. 3, 24.

Crockett, M. A.—The Developing Method in the Teaching of Medicine, Bull. Amer. Acad. of Med., 1898, V. 3, 393.

Davis, N. S.—Letter at meeting held in San Francisco, June, 1894. Bull. Amer. Acad. of Med., 1894, V. 1, 528.

—To What Extent Should Clinical Instruction be Afforded Students of

¹ These reprints may be obtained by interested persons by sending a cent stamp to "Librarian, 813 W. Harrison St., Chicago," with request.

Medicine in Regular Course? (Read at 3rd annual session, 1892.) *Jour. of Amer. Med. Assoc.*, 1892, V. 19, 664.

Evans, W. A.—Teaching of Pathologic Histology to Large Classes in Unendowed Institutions. (Read at 5th annual session, 1894.) *Bull. Amer. Acad. of Med.*, 1894, V. 1, 513.

Gehrmann, Adolph.—Course of Bacteriology. (Read at 5th annual session, 1894.) *Bull. Amer. Acad. of Med.*, 1894, V. 1, 518.

Herdman, W. J.—Remarks on paper read by Dr. E. L. Holmes on "Methods of the Manual Training School in Medical Education" *Bull. Amer. Acad. of Med.*, V. 1, 443.

Holland, J. W.—Pres. address at 9th annual session, 1898, *Bull. Amer. Acad. of Med.*, V. 3, 363.¹

Holmes, Bayard.—Discussion of Dr. Vaughan's paper. (Read at 3rd annual session, 1892.) *Jour. of Amer. Med. Assoc.*, 1892, V. 19, 667; also Reprint.¹

Medical Library for the Medical School or the Small Community. (Read at 6th annual session, 1895.) *Bull. Amer. Acad. of Med.*, V. 2, 247; also, Monograph, 55 pp.¹

Holmes, E. L.—Methods of Manual Training School in Medical Education. (Read at 4th annual session, 1893.) *Bull. Amer. Acad. of Med.*, 1893, V. 1, 385.

Ingals, E. F.—Necessities of a Modern Medical College. (Pres. address at annual session, 1895.) *Bull. Amer. Acad. of Med.*, 1895, V. 2, 235.

Levy, Robert.—Free Medical Education. (Read at 5th annual session, 1894.) *Bull. Amer. Acad. of Med.*, 1894, V. 1, 525.

Reynolds, D. S.—Specialism in Regular Course. *Bull. Amer. Acad. of Med.*, V. 1, 390.

Vaughan, V. C.—Kind and Amount of Laboratory Work Which Should be Required in our Medical Schools. (Read at 3rd annual session, 1892.) *Jour. Amer. Med. Assoc.*, 1892, V. 19, 665. *Bost. Med. and Surg. Jour.* 1892, V. 127, 212.

Wesener, J. A.—Methods of Teaching Chemistry Employed in College of P. and S. Chicago. (Read at 5th annual session, 1894.) *Bull. Amer. Acad. of Med.*, 1894, V. 1, 519.

Williams, J. W.—Teaching Obstetrics, *Bull. Amer. Acad. of Med.*, 1897, V. 3, 409.

¹ These reprints may be obtained by interested persons by sending a cent stamp to "Librarian, 813 W. Harrison St., Chicago," with request.

CONDITION OF MEDICAL COLLEGES IN THE UNITED STATES.

The following statements were taken from the latest annual announcements on file in the educational library of the University of the State of New York. The work was done by Dr. H. L. Taylor under the supervision of James Russell Parsons, Jr., director of the college department of the University of the State of New York. Each statement was submitted to the dean of the school for correction and completion, with a request for a prompt reply. If no replies were received the fact is indicated in each case. Kindly report any errors that may be discovered in these statements to Director, College Department, University of the State of New York, Albany, N. Y.

UNIVERSITY OF THE STATE OF NEW YORK.

College Department.

Including universities, professional and technical schools:
Bulletin 3, June, 1899.

Register of professional education
giving the
admission requirements
to
professional practice
throughout the
civilized world.

Prepared under the superintendency of
James Russell Parsons, Jr., Director.

In six volumes.

Vol. 1,

Practice of medicine,
(Proof under revision).

Chapter 5.

Professional requirements.
Institutions.

Location.

History.

Admission requirements.

Graduation requirements.

Registration on uniform basis.

Note : In the preparation of the professional register the editing rules approved by the Regents Committee 10 Feb., 1899 are the basis, and the definitions employed are those used in the laws, ordinances, and by-laws.

The term college, includes universities and other institutions for higher education authorized to confer degrees.

Medical school means any medical school, college, or department of a university.

Academies are incorporated schools for instruction in higher branches of education, but not authorized to confer degrees, and such high schools, academic departments in union schools and similar unincorporated schools of academic grade.

The necessity of forwarding copy prevents the completion of the work as outlined. The length of session in paragraph 2 of the statements, excludes vacations with one or two exceptions which are indicated.

UNITED STATES.

Schools : regular, 128; homeopathic, 20; eclectic, 8; physio-medical, 1; total, 157.

Session opens about 10 and closes about 1 My.

Matriculates, 1897-98, 12,905; graduates, 1897-98, 2,720; matriculates, 1898-99, 7,911. (These items are partial results only.)

Fees : average matriculation, \$5.17; average course, \$74.74; average additional expenses, \$29.19; total, \$109.10.

Faculty : professors, 2,506; lecturers, 516; others, 1,907; total, 4,929. (Partial results only.)

There are no uniform admission and graduation requirements for the United States. Of the 55 political subdivisions in the United States the relations of four are so recent that present conditions are unknown and no reply to statements based on former conditions has been received. Of the remaining 51 political subdivisions the following have no medical schools: *viz.*, Alaska, Arizona, Delaware, Florida, Idaho, Indian territory, Mississippi, Montana, Nevada, New Jersey, New Mexico, North Dakota, Oklahoma, Rhode Island, South Dakota, Utah, Washington, West Virginia, and Wyoming.

While the matter of licensing physicians belongs to the several states and is not a national prerogative, there are certain associations of a seminational character that have greatly influenced

and brought into closer uniformity the laws, rules, and regulations,—professional and preliminary requirements for admission to the study and practice of medicine.

ASSOCIATION OF AMERICAN MEDICAL COLLEGES, Secretary-Treasurer Bayard Holmes, M.D., 104 E. 40th St., Chicago, Ill.

Organized May, 1890, for the consideration of medical education and for its improvement. Any medical school conforming to the requirements is eligible to membership. On application to the secretary with annual dues of \$5 accompanied by evidence of conformity with the requirements, the judicial council reports to the Association at the annual meeting and a ballot of the majority elects to membership. Each school is entitled to one representative and to one vote. Dues, \$5 per annum. Each college shall require of each student before admission to its course an examination, the minimum of which shall be :

English, a composition on some subject of general interest. This composition must be written by the student at the time of the examination, and should contain at least 200 words. It should be criticised in relation to thought, construction, punctuation, spelling, and handwriting.

Arithmetic, such questions as will show a thorough knowledge of common and decimal fractions, compound numbers, and ratio and proportion.

Algebra, such questions as will bring out the student's knowledge of the fundamental operations, factoring, and simple quadratic equations.

Physics, such questions as will discover the student's understanding of the elements of mechanics, hydrostatics, hydraulics, optics, and acoustics.

Latin, an examination upon such elementary work as the student may offer showing a familiarity usually attained by one year of study; for example, the reading of the first 15 chapters of Cæsar's Commentaries, and the translation into Latin of easy English sentences involving the same vocabulary.

In place of this examination, or any part of it, schools, members of this association, are at liberty to recognize the official *certificates of reputable* literary and scientific colleges, academies, high schools, and normal schools, and also the medical student's certificate issued by any state examining board covering the work of the foregoing entrance examination.

Schools, members of this association, may allow students *who fail in one or more branches* in this entrance examination the privilege of entering the first-year course, but such students shall not be allowed to begin the second course until the entrance requirements are satisfied.

Schools, members of this association, are free to honor official *credentials issued by medical schools of equal requirements*, except in the branches of study embraced in the last year of their own curriculum.

Candidates for the degree of Doctor of Medicine in the year 1899 and thereafter shall have attended at least *four courses* of medical instruction, each course of at least six months' duration, no two courses of which shall have been in the same calendar year.

Schools, members of this association, are free to give to students who have met the entrance requirements of the association additional *credit for time* on the four years' course as follows: to students having the A.B., B.S., or equivalent *degree* from reputable literary colleges, one year of time; to graduates and students of schools, of *homeopathic* or *eclectic* medicine, as many years as they attended those schools, provided they have met the previous requirements of the association and that they pass an examination in *materia medica* and therapeutics; to graduates of reputable schools of *dentistry*, *pharmacy*, and *veterinary* medicine one year of time.

A school not giving the whole four courses of the medical curriculum, and not graduating students, but otherwise eligible, may be admitted to membership.

NATIONAL CONFEDERATION OF ECLECTIC MEDICAL COLLEGES, Secretary John K. Scudder, M.D., 1009 Plum St., Cincinnati, O.

The National Eclectic Medical Association organized 1871 (?); at its annual meeting 19 Je, '94, on recommendation of its Committee on Medical Colleges, organized the National Confederation of Eclectic Medical Colleges composed of the delegates from each college recognized by the Association and gave the committee power to sanction any action taken by the Confederation.

Article 2 of the constitution :

'The objects of this confederation shall be to maintain organized cooperation between the eclectic medical colleges recognized by the National Eclectic Medical Association, for the purpose of promoting the mutual interests of said colleges, establishing uniform minimum requirements and curriculum, and furthering the cause of higher medical education.'

Minimum requirements, to take effect with the session of 1898-'99.

1. Preliminary requirements shall be, (a) credible certificate of good moral standing; (b) a good English education to be attested by a first-grade teacher's certificate, or a diploma from a graded high school, or from a college, or evidence of having passed the matriculation examination to a recognized college, or a medical student's certificate of the University of the State of New York; (c) also an elementary knowledge of natural history or physics, and Latin.

2. That the branches taught shall include in the course of instruction, anatomy, physiology, chemistry and pharmacy, *materia medica* and ther-

apeutics, principles and practice of medicine, pathology, surgery, obstetrics and gynecology, hygiene, jurisprudence, electro-therapeutics, microscopy, ophthalmology, and otology.

3. That the length of the course of instruction after July 1, 1897 (affecting graduates in 1901), shall not be less than four years' reading, including four annual sessions of not less than six months each, in four different calendar years.

4. Attendance and examination or quizzes : regular attendance during the entire lecture course should be required, allowance to be made only for necessary absences, such absences not to exceed more than 20 per centum of the course. Regular examination or quizzes to be made by each professor or lecturer at least twice a week. Final examination in all branches to be conducted by competent examiners.

5. Dissections, clinics, and hospital attendance : each student shall have dissected not less than a lateral half of a cadaver. Attendance during at least two terms of clinical and hospital instruction shall be required.

6. Advanced standing : graduates of reputable and regularly established colleges of dentistry, pharmacy, and veterinary medicine which require as a condition of graduation, attendance on a course extending through three or more full years, may be allowed one year's standing on a four years' medical course only on condition that they comply with the entrance requirements of the medical college, and pass all the examinations and perform all the laboratory work embraced in the course of the freshman year. Graduates of colleges which require a regular attendance of three or more years as an essential to graduation, may be admitted to the second year of the medical course without examination.

7. And every medical school must show to this Confederation that it has a sufficient and competent corps of instructors, and the necessary facilities for teaching, dissections, and clinics.

The Confederation, April 7, 1899 : The American Medical College, St. Louis, Mo. ; The Bennett College of Eclectic Medicine and Surgery, Chicago, Ill. ; The California Medical College, San Francisco, Cal. ; The Eclectic Medical Institute, Cincinnati, O. ; The Eclectic Medical College of City of New York, New York ; The Lincoln Medical College, Lincoln, Neb.

ALABAMA.

Schools : regular, 2 ; homeopathic, 0 ; eclectic, 0 ; total, 2.

Session opens about first Oct. ; closes about first Ap.

Matriculates, 1897-98, 205 ; graduates, 1897-98, 35 ; matriculates, 1898-99, —.

Admission and graduation : — State Medical Association requirements.

Course : — years for all matriculates before 189— who graduate before 190— ; four years for all others.

Fees : average matriculation, \$5.00 ; course, \$62.50 ; additional, \$62.50.

Faculty : professors, 13 ; lecturers, 9 ; others, 21 ; total, 43.

Total property, \$— ; receipts, \$— ; expenditures, \$—.

1. BIRMINGHAM MEDICAL COLLEGE, regular, coeducational, Birmingham, pop. 26,178, Dean, B. L. Wyman, M.D., A.M., —.

Session opens, 3 O, '98, closes, 3 Ap, '99 ; length, 6 mos. ; matriculates, 1897-98, 81 ; graduates, 1897-98, 9 ; matriculates, 1898-99, 98.

Admission : certificate of moral character and fitness from physician ; diploma or certificate from college, high school or county or state sup't covering first-grade teacher's certificate ; to advanced standing : work of recognized schools for other years than senior ; to 2nd year : graduates in pharmacy and dentistry.

Graduation : age 21 ; good moral character ; four years study ; attendance on four annual lecture courses of six months each, the last at this school ; two courses of dissection and of clinical and hospital instruction ; examinations ; attendance on commencement.

Course : four years for all graduating after 1901.

Fees : matriculation, \$5 per annum ; course, \$50 per annum ; dissecting, \$10 ; laboratory, \$10 ; graduation, \$30.

Subjects : theory and practice of medicine, materia medica, therapeutics, physiology, surgery, gynecology, anatomy, chemistry, toxicology, microscopy, bacteriology, normal and pathologic histology, obstetrics, diseases of children, eye, ear, nose, and throat, nervous diseases, hygiene, jurisprudence, dermatology.

Faculty : professors, 12 ; lecturers, 3 ; demonstrator, 1 ; clinical assistants, 8.

Total property, \$— ; receipts, \$— ; expenditures, \$— (1898).

Organized 1894 ; first class graduated 1895, and classes graduated in each subsequent year.

2. MEDICAL DEP'T, ALABAMA UNIV.,¹ regular, Mobile, pop. 31,076, Dean, George A. Ketchum, M.D., 7 N. Conception St.

Session opens 10 O, '98 ; closes 10 Ap, '99 ; length, 6 mos. ; matriculates, 1897-98, 124 ; graduates, 1897-98, 26 ; matriculates, 1898-99, —.

Admission : certificate of study with recognized physician and of good moral character and fitness ; graduation from some literary or scientific institution, or from a high school, or educational attainments of a first-grade teacher ; conditions may be made up before the second lecture course ; to advanced standing : on examination, the work of homeopathic and eclectic colleges ; completed courses in pharmacy, dentistry, veterinary medicine, in colleges and universities furnishing elementary branches including chemistry and biology.

¹ 24 Ap '99, no reply received.

Graduation: age 21; good moral character; certificate of attendance on three lecture courses not continuous of six months each in three separate years; two courses each in dissection and clinical or hospital instruction; one course each in chemistry, histology, pathology and bacteriology, and operative surgery; one session of laboratory work in microscopy and bacteriology; satisfactory examinations.

Course: three years for all graduating after—.

Fees: matriculation, \$5 per annum; course, \$75; special course, \$10; laboratory, \$40; diploma, \$25.

Subjects: anatomy, physiology, hygiene, chemistry, medical jurisprudence, nervous and mental diseases, materia medica, therapeutics, theory and practice, surgery, obstetrics, gynecology, pediatrics, ophthalmology, otology, laryngology, histology, pathology, bacteriology, and dermatology.

Faculty: professors, 10; adjunct, 1; lecturers, 6; demonstrators, 5; assistants, 4; directors of laboratories, 3.

Total property, \$—; receipts, \$—; expenditures, \$— (1898).

Medical College of Alabama founded 1859; first class graduated, —; no graduates, 1862–68 inclusive; recognized as Medical Department of the Univ. of Alabama, 1897.

ALASKA.

There are no medical schools in Alaska.

ARIZONA.

There are no medical schools in Arizona.

ARKANSAS.

Schools: regular, 1; homeopathic, 0; eclectic, 0; total, 1.

Session opens about middle Oct.; closes about middle April.

Matriculates, 1897–98, 104; graduates, 1897–98, 19; matriculates, 1898–99, —.

Admission and graduation: no state requirements.

Fees: average matriculation, \$5; course, \$50; additional, \$33.

Faculty: professors, 16; lecturers, 0; others, 3; total, 19.

Total property, \$—; receipts, \$—; expenditures, \$—.

3. MEDICAL DEP'T, ARKANSAS INDUSTRIAL UNIV.,¹ regular, Little Rock, pop. 25,874, Dean, —.

Session opens 17 O, '98; closes 15 Ap, '99; length, 6 mos.; matriculates, 1897–98, 104; graduates, 1897–98, 19; matriculates, 1898–99, —.

Admission: credentials of matriculates or graduates in medicine, dentistry and pharmacy, or of recognized colleges of literature, science, or arts, of high schools, academies, normal schools, or equivalent schools,

¹ 24 Ap '99, no reply received.

or teachers' certificates; examination in accordance with minimum requirements of A. A. M. C. (see p.); to advanced standing: work of homeopathic or eclectic schools on examination in materia medica and therapeutics, A.B., B.S., or equivalent degrees from recognized colleges and graduation from recognized dentistry, pharmacy, and veterinary schools give one year credit.

Graduation: age 21; certificate of matriculation at a regular school for three sessions and attendance on four courses, the last at this school, in anatomy, including dissections, physiology, chemistry, materia medica, therapeutics, obstetrics, surgery, pathology, bacteriology, and practice of medicine; in four consecutive sessions more than 35 months must intervene between the beginning of first and close of second course; a thesis or clinical report; final examinations.

Course: four years for all graduating after 1898 (?).

Fees: course, \$50; matriculation, \$5; demonstrator's ticket, \$5 each; hospital, \$3 each; graduation, \$25.

Subjects: anatomy, physiology, chemistry, principles and practice of surgery, materia medica, therapeutics, hygiene, botany, principles and practice of medicine, diagnosis, dermatology, obstetrics, ophthalmology, otology, diseases of the genito-urinary organs, gynecology, surgical pathology and bacteriology.

Faculty: professors, 14; adjuncts, 2; demonstrator, 1; assistants, 2.

Total property, \$—; receipts, \$—; expenditures, \$—, (1898).

Organized 1879, first class graduated 1880, and in subsequent years—; exceptions, —.

CALIFORNIA.

Schools: regular, 4; homeopathic, 1; eclectic, 1; total, 6.

Session opens about first Oct.; closes about first June.

Matriculates, 1897-98, 559; graduates, 1897-98, 102; matriculates, 1898-99, 557.

Admission and graduation: no state requirements.

Fees: average matriculation, \$5; course, \$101; additional, \$44.

Faculty: professors, 93; lecturers, 17; others, 75; total, 185.

Total property, \$—; receipts, \$—; expenditures, \$—.

4. CALIFORNIA MEDICAL COLLEGE, eclectic, San Francisco, pop. 298,997, Dean, D. Maclean, M.D., 710 Van Ness av.

Session opens 3 O, '98; closes 17 My, '99; length, 7 months; matriculates, 1897-98, 60; graduates, 1897-98, 6; matriculates, 1898-99, 55.

Admission: good moral character; college, high school, or first-grade teacher's certificate, or examination in mathematics, English composition, physics, and Latin; to advanced standing: work of recognized schools; to second year: graduates of colleges and of pharmacy and dental schools.

Graduation: age 21; good moral character; three sessions of anatomy,

dissection of cadaver, attendance on four annual lecture courses of eight months each, the last in this school; thesis; examinations.

Course: four years for all graduating after 1898.

Fees: matriculation, \$5; course, first three years, \$100 each; fourth year free; demonstrator's, \$10; graduation, \$40; chemistry, \$5; histology, microscopy, and bacteriology, \$5; physics and Latin, \$5; graduates of other colleges,—matriculation, \$5; course, \$50; graduation, \$40.

Subjects: anatomy, physiology, chemistry, Latin, histology, embryology, physics, pharmacology, materia medica, principles of medicine, theory and practice, surgery, sanitary science, gynecology, urinalysis, pathology, therapeutics, obstetrics, pediatry, mental, nervous, renal, genito-urinary diseases and of the chest, ophthalmology, otology, laryngology, dermatology, electro-therapeutics, and bacteriology.

Faculty: professors, 14; lecturers, 6; instructors, 3; assistant, 1; demonstrator, 1; clinical instructors, 9.

Total property, \$25,000; receipts, \$—; expenditures, \$— (1898).

Organized 1879 at Oakland; first class graduated in 1880, and classes graduated in each subsequent year; removed to San Francisco 1887.

5. COLLEGE OF MEDICINE DEP'T, UNIV. SOUTHERN CALIFORNIA, regular, coeducational, Los Angeles, pop. 50,395, Dean, H. G. Brainerd, M.D., 315 W. 6th St.

Session opens 19 O, '98; closes 14 Je, '99; length, 7½ months; matriculates, 1897-98, 93; graduates, 1897-98, 13; matriculates, 1898-99, 88.

Admission: requirements of Association American Medical Colleges; graduation from or certificate of work done in a university, college, high school, academy, or normal school; to advanced standing: graduates of recognized schools of dentistry, pharmacy or veterinary medicine, or of colleges making the last of the four years, a medical preparatory course admitted to second year upon examination in first year work,—work of recognized schools accepted for second and third years.

Graduation: age 21; good moral character; study for four years; attendance on four annual lecture courses, the last at this school; final examinations; required laboratory work, dissection of the cadaver, general fitness on vote of faculty.

Course: four years for all graduating after 1896.

Fees: matriculation, \$5; demonstration, \$10; course, \$130; special, \$25; additional special, \$20; diploma, \$40.

Subjects: anatomy, physiology, materia medica, hygiene, chemistry, histology, dissection, pathology, surgery, obstetrics, therapeutics, surgical anatomy, bacteriology, orthopedic surgery, physical diagnosis, anatomy of nervous system, orthopedics, gynecology, jurisprudence, insanity, diseases of children, skin, eye, nose, throat, and ear, toxicology, urinalysis, genito-urinary diseases.

Faculty: professors, 23; demonstrator, 1; assistant, 1; instructors, 5.

Total property, \$35,000; receipts, \$8,660; expenditures, \$7,035 (1898).

Founded 1885; first class graduated 1888 and in each subsequent year.

6. **COOPER MEDICAL COLLEGE**, regular, coeducational, San Francisco, pop. 298,997, Dean, Henry Gibbons, Jr., M.D., A.M., 920 Polk St.

Session opens 3 Ja, '99; closes, 22 Ag, '99; length, 7½ months; matriculates, 1897-98, 187; graduates, 1897-98, 47; matriculates, 1898-99, 160.

Admission: good moral character; admission to a recognized college or university; graduation from a high school, academy, state normal school; a first-grade California teacher's certificate; examination in English, U. S. History, geography, arithmetic, physics, Latin, and one optional; Greek, French, German, logic, botany, zoology, chemistry; special examination for General Council of Great Britain; to advanced standing: work of recognized schools for years other than the senior; to second year: graduates of recognized colleges and of pharmaceutical and dental schools.

Graduation: age 21; good moral character; attendance on four lecture courses unless admitted to advanced standing; the last year at this school; two courses of practical anatomy; dissection of one entire subject; a thesis; final examinations.

Course: four years for all graduating after 1898.

Fees: matriculation, \$5; demonstrators (for each of two years), \$10; course, \$100; graduation, \$25.

Subjects: anatomy, physiology, histology, biology, chemistry, materia medica, pathology, physical diagnosis, principles of medicine and surgery, obstetrics, gynecology, pediatrics, genito-urinary diseases, therapeutics, neurology, ophthalmology, otology, puerperal and mental diseases, jurisprudence, dermatology.

Faculty: professors, 15; adjuncts, 2; lecturer, 1; instructors, 3; assistants, 10.

Total property, \$500,000; receipts, \$20,016.50; expenditures, \$18,424.74 (1898).

Medical Dep't, Univ. of the Pacific, organized, 1859; ceased 1864; revived 1870; became Medical Dep't, Univ. College San Francisco 1873; with title Medical College of the Pacific, present title 1882; first class graduated 1860; classes graduated in each subsequent year; exceptions, 1865-69 inclusive.

7. **HAHNEMANN HOSPITAL COLLEGE**,¹ homeopathic, San Francisco, pop. 298,997, Dean, A. C. Peterson, address—.

8. **MEDICAL DEP'T, COLLEGE PHYSICIANS AND SURGEONS**, San Francisco, regular, coeducational, San Francisco, pop. 298,997, Dean, Winslow Anderson, M.D., 1220 Sutter St.

Session opens 3 O, '98; closes 12 Jl, '99; length, 9 months; matriculates, 1897-98, 93; graduates, 1897-98, 16; matriculates, 1898-99, 91.

Admission: diploma from recognized college, academy, or high school; certificate of admission to a recognized college or university; other evidence of scholarship accepted by faculty or examination in English, his-

¹ 24 Ap '99, no reply received.

tory and government, geography, physics, arithmetic, algebra and Latin; special examination for General Council of Great Britain; to advanced standing: work of recognized schools for other years than senior; to second year: graduates of recognized colleges, pharmaceutical, veterinary, and dental schools on examination of first-year subjects.

Graduation: age 21; good moral and professional character; attendance on four annual lecture courses of six months each unless admitted to second year as above stated, the last year at this school; two courses each of practical anatomy and clinical and hospital instruction; the dissection of one entire subject; final examinations.

Course: four years for all graduating after 1899.

Fees: matriculation, \$5; each preliminary course (optional), \$25; regular course, \$75; anatomy (each course, two obligatory), \$10; graduation, \$25; special courses, \$25.

Subjects: comparative and human anatomy, physiology, materia medica, pharmacology, pharmacy, chemistry, histology, biology, embryology, theory and practice of medicine and of surgery, surgical anatomy, physical diagnosis, therapeutics, gynecology, obstetrics, diseases of children, ophthalmology, otology, laryngology, rhinology, pathology, bacteriology, hygiene and dietetics, orthopedic surgery, nervous and mental diseases, electro-therapeutics, dermatology, jurisprudence, abdominal surgery.

Faculty: professors, 16; adjuncts, 3; lecturers, 9; assistants, 9.

Total property, \$50,000; receipts, \$10,000; expenditures, \$10,000 (1898).

Organized 1896; first class graduated 1897.

9. MEDICAL DEP'T, UNIV. CALIFORNIA, regular, coeducational, San Francisco, pop. 298,997, Dean, Robert A. McLean, M.D., 305 Kearney St.

Session opens 1 S, '98; closes 29 Ap, '99; length, 8 months; matriculates, 1897-98, 126; graduates, 1897-98, 20; matriculates, 1898-99, 163.

Admission: certificates of admission from recognized colleges or universities, of graduation from recognized high school, academy, or normal; examination in English, arithmetic, algebra, plane geometry, civics, Latin, ancient history and geography, mediaeval and modern history, physics, chemistry, botany; to second class: completion of three years' medical preparatory course at the university; graduation from a recognized college, or school of pharmacy or dentistry; to third-year class: work of recognized schools for years other than the senior are accepted on examination.

Graduation: age 21; good moral character; study for four years and attendance on four lecture courses in different years, the last at this school; final examination; at least two sessions of practical anatomy; dissection of every part of a cadaver.

Course: four years for all graduating after 1897.

Fees: matriculation, \$5; practical anatomy, two years, \$10 each; course, \$100; graduation, \$25.

Subjects: anatomy, physiology, histology, chemistry, materia medica, pharmacy, urinalysis, toxicology, pathology, hygiene, jurisprudence, therapeutics, principles and practice of medicine, of surgery, gynecology, obstetrics, diseases of children, nervous and mental diseases, ophthalmology, otology, laryngology, and bacteriology.

Faculty: professors, 20; instructors, 12; lecturer, 1; demonstrator, 1; assistants, 19.

Total property, \$150,000; receipts, \$12,426.35; expenditures, \$7,816.55 (1898).

Toland Medical College organized 1863; first class graduated 1865; classes graduated in each subsequent year; organized under present title 1873.

COLORADO.

Schools: regular, 3; homeopathic, 1; eclectic, 0; total, 4.

Session opens about middle Sept.; closes about first May.

Matriculates, 1897-98, 214; graduates, 1897-98, 51; matriculates, 1898-99, —.

Admission and graduation: no state requirements.

Fees: average matriculation, \$5; course, \$72.50; additional, \$11.25.

Faculty: professors, 99; lecturers, 14; others, 43; total, 156.

Total property, \$——; receipts, \$——; expenditures, \$——.

10. DENVER HOMOEOPATHIC MEDICAL COLLEGE, coeducational, Denver, pop, 106,713, Dean, S. S. Smythe, M.D., 403 California Bldg.

Session opens 7 O, '98; closes 14 Ap, '99; length, 6 months; matriculates, 1897-98, 42; graduates, 1897-98, 13; matriculates, 1898-99, 50.

Admission: graduation from college, academy, normal or high school, matriculation in recognized school, college, or pharmacy, dental or veterinary school, or first-grade teacher's certificate, or examination in orthography, English composition, arithmetic, geography, chemistry, modern history; to advanced standing: work of recognized schools for other years than senior; to third year: graduates of pharmacy, dental, or veterinary schools on credentials and examinations.

Graduation: age 21; good moral character; four years' study exclusive of preparatory work; attendance on four lecture courses of six months each, the last at this school; two years of anatomy; dissection of lateral half; three years of clinics; examinations.

Course: four years for all graduating after 1898.

Fees: matriculation, \$5; course, \$100 per annum; graduates from other colleges, \$50; laboratory deposit against breakage, \$5.

Subjects: anatomy, physiology, physics, chemistry, pharmacology, botany, history of medicine and organon, theory and practice, surgery,

histology, Latin, bacteriology, embryology, materia medica, hygiene, sanitary science, pathology, obstetrics, gynecology, dermatology, pedology, climatology, genito-urinary, mental and nervous diseases, physical diagnosis, ophthalmology, otology, rhinology, laryngology, technology, jurisprudence.

Faculty: professors, 17; instructors, 12.

Total property, \$32,000; receipts, \$8,500; expenditures, \$6,000 (1898).

Organized 1894; first class graduated, 1895; and classes graduated in each subsequent year.

11. MEDICAL DEP'T, ROCKY MOUNTAIN UNIV., regular, coeducational, Denver, Col., pop. 106,713, Dean, T. H. Hawkins, 1740 Welton St.

Session opens 6 S, '98; closes 14 Ap, '99; length, 7 months; matriculates, 1897-98, 78; graduates, 1897-98, 26; matriculates, 1898-99, 85.

Admission: requirements of A. A. M. C. (see p.—); to advanced standing: work of colleges in affiliation with A. A. M. C.; graduates of recognized colleges and universities completing courses in chemistry and biology; graduates and matriculates of schools of homeopathy, eclectic, veterinary medicine, pharmacy, and of dentistry requiring two or more lecture courses; admitted on examination in subjects below class entered.

Graduation: age 21; good moral character; four annual lecture courses of six months each; dissection of entire body; two years' attendance on hospital and college clinics; examinations.

Course: four years for all graduating after 1898.

Fees: course, \$75.

Subjects: anatomy, physiology, chemistry, histology, materia medica, therapeutics, pathology, bacteriology, hygiene, practice of medicine, surgery, orthopedic surgery, genito-urinary diseases, obstetrics, gynecology, diseases of children, nervous system, and mind, ophthalmology, otology, laryngology, rhinology, jurisprudence.

Faculty: professors, 28; adjunct, 1; lecturers, 8; instructors, 3; assistants, 14.

Total property, \$15,000; receipts, \$—; expenditures, \$— (1898).

Gross Medical College organized 1887; first class graduated 1888; present title from organization; classes graduated in each subsequent year.

12. MEDICAL DEP'T, UNIV. OF COLORADO, regular, coeducational, Boulder, pop. 3,330, Dean, Luman M. Griffin, M.D., Boulder.

Session opens 6 S, '98; closes 3 Je, '99; length, 9 mos; matriculates, 1897-98, 29; graduates, 1897-98, none; matriculates, 1898-99, 50.

Admission: requirements of A. A. M. C. (see p.); to advanced standing: work of colleges in affiliation with A. A. M. C.; work of non-recognized colleges accepted on examination if entrance requirements are met.

Graduation: age 21; good moral character; attendance on four annual lecture courses of six months each, last at this school; examinations.

Course: four years for all graduating after 1899.

Fees: course, \$40 per annum.

Subjects: anatomy, physiology, chemistry, histology, materia medica, therapeutics, pathology, bacteriology, hygiene, pathology, practice, surgery, orthopedics, obstetrics, gynecology, diseases of children, of the nervous system, ophthalmology, otology, laryngology, rhinology, jurisprudence.

Faculty: professors, 15; assistant professor, 1; lecturers, 2; demonstrators, 2.

Total property, \$15,000; receipts, \$6,500; expenditures, \$6,500 (1898).

Opened 1883; first class graduated 1885; present title Colorado School of Medicine, from organization; classes graduated in subsequent years, — (?); exceptions 1898 and 1899.

13. MEDICAL DEP'T, UNIV. DENVER,¹ regular, coeducational, Denver, pop. 106,713, Dean, Samuel A. Fisk, M.D., A.M., 37 18th av.

Session opens 20 S, '98; closes 22 Ap, '99; length, 7 mos.; matriculates, 1897-98, 65; graduates, 1897-98, 12; matriculates, 1898-99, —.

Admission: requirements of A. A. M. C. (see p.); to advanced standing: A. A. M. C. constitution (see p.).

Graduation: age 21; good moral character; unless admitted to advanced standing as specified; attendance on four lecture courses in as many years, the last at this school; required course in laboratory and clinical work; examinations; present at commencement exercises unless excused.

Course: four years for all graduating after —.

Fees: matriculation, \$5; registration, \$1 per annum; course, \$75; dissecting, \$5 per part; laboratory, \$10; final examination, \$25.

Subjects: anatomy, physiology, chemistry, histology, materia medica, pharmacology, bacteriology, embryology, medicine, surgery, diseases of children, obstetrics, gynecology, nervous and mental diseases, urinary analysis, ophthalmology, dermatology, otology, laryngology and rhinology, jurisprudence, syphilology.

Faculty: professors, 38; lecturers, 4; assistants, 11.

Total property, \$——; receipts, \$——; expenditures, \$—— (1898).

Organized, 1881; first class graduated 1882; present title from organization (?); classes graduated in subsequent years (?); exceptions(?).

CONNECTICUT.

Schools: regular, 1; homeopathic, 0; eclectic, 0; total, 1.

Session opens about first Oct; closes about last June.

Matriculates, 1897-98, 122; graduates, 1897-98, 31; matriculates, 1898-99, 109.

Admission and graduation: no state requirements.

Fees: average matriculation, \$5; course, \$150; additional, \$50.

¹ 24 Ap '99, no reply received.

Faculty : professors, \$10 ; lecturers, 2 ; others, 25 ; total, 37.
Total property, \$———; receipts, \$———; expenditures, \$———.

14. MEDICAL DEP'T, YALE UNIV., regular, New Haven, pop. 81,298,
Dean, Herbert E. Smith, M.D., 150 York St.

Session opens 6 O, '98 ; closes 28 Je, '99 ; length, 8½ mos. ; matriculates,
1897-98, 122 ; graduates, 1897-98, 31 ; matriculates, 1898-99, 109.

Admission : certificate of good moral character ; degree in arts or
sciences ; examination in English, arithmetic, algebra, physics and Latin ;
certificate of study of above subjects at college ; graduation from high
school, academy, or preparatory school ; certificate of admission to ap-
proved professional school ; to advanced standing : on examination, work
of recognized schools for other than junior and senior years ; to 2d year :
with conditions, graduates in arts, philosophy, or science having studied
in undergraduate courses chemistry, physiology, anatomy, and histology.

Graduation : age 21 ; good moral character ; four years study, last two
at this school ; examinations ; thesis.

Course : four years for all graduating after 1898.

Fees : matriculation, \$5 ; course, \$150 for each of first three years, last
year \$100 ; anatomy, \$15 ; pharmacy, \$5 ; graduation, \$30.

Subjects : chemistry, anatomy, histology, embryology, physiology,
materia medica, pharmacy, pathology, medicine, therapeutics, obstetrics,
diseases of women and children, surgery.

Faculty : professors, 10 ; clinical, 2 ; assistants, 2 ; lecturers, 2 ; instruc-
tors, 7 ; demonstrator, 1 ; assistants, 13.

Total property, \$105,325.40 ; receipts, \$22,949.48 ; expenditures, \$22-
949.48 (1898).

Medical Institution of Yale College chartered 1810 ; organized 1812 ; in-
struction began 1813 ; first class graduated 1814 ; new charter Medical
Dep't, Yale College, 1879 ; Connecticut Medical Society retired from ex-
amining board 1884 ; classes graduated in subsequent years annually.

CUBA.

No reply received from the statement. 24 Ap, '99.

DELAWARE.

There are no medical schools in Delaware.

DISTRICT OF COLUMBIA.

Schools : regular, 4 ; homeopathic, 0 ; eclectic, 0 ; total, 4.

Session opens about first Oct. ; closes about middle May.

Matriculates, 1897-98, 464 ; graduates, 1897-98, 86 ; matricu-
lates, 1898-99, 450.

Admission and graduation : no state requirements.

Fees : average matriculation, \$5 ; course, \$92.50 ; additional, \$—.

Faculty : professors, 100 ; lecturers, 2 ; others, 70 ; total, 172.

Total property, \$—; receipts, \$—; expenditures, \$—.

15. MEDICAL DEP'T, COLUMBIAN UNIV., regular, Washington, pop. 230,392, Dean, E. A. de Schweinitz, M.D., Ph.D., 1325 H St., N. W.

Session opens 3 O, '98 ; closes 31 My, '99 ; length 7½ mos. ; matriculates, 1897-98, 209 ; graduates, 1897-98, 24 ; matriculates, 1898-99, 214.

Admission : examination in English composition, Latin, algebra, or higher arithmetic, physics, or certificate of attainments ; to advanced standing : work of recognized schools on examination.

Graduation : age 21 ; good moral character ; four years study ; dissection of four parts in two sessions ; attendance on two courses of clinical instruction ; examination.

Course : four years for all graduating after 1895.

Fees : course, \$110.

Subjects : anatomy, physiology, chemistry, materia medica, therapeutics, histology, surgery, medicine, obstetrics, dermatology, ophthalmology, bacteriology, pathology, gynecology, mental and nervous diseases, jurisprudence, pediatrics, otology, laryngology, orthopedics, hygiene.

Faculty : professors, 28 ; demonstrators, 13 ; assistants, 7 ; assistants, 2 ; prosectors, 2 ; director of laboratory, 1.

Total property, \$25,000 ; receipts, \$25,000 ; expenditures, \$150,000 (1898).

Medical Dep't, Columbian College, organized 1821 with title National Medical College ; first class graduated 1822 ; operations suspended 1834 to 1838, 1861 to 1863, inclusive ; Columbian College became Columbian Univ. 1873 ; classes graduated each subsequent year.

16. MEDICAL DEP'T, GEORGETOWN UNIV., regular, Washington, D. C., pop. 230,392, Dean, G. L. Magruder, M.D., A.M., 815 Vermont Ave.

Session opens 3 O, '98 ; closes 15 My, '99 ; length 7½ mos. ; matriculates 1897-98, 96 ; graduates, 1897-98, 17 ; matriculates, 1898-99, 86.

Admission : requirements of A. A. M. C. (see p. 8) ; to advanced standing : work of recognized schools on examination or certificates.

Graduation : age 21 ; good moral character ; four years study ; four lecture courses, the last at this school ; two courses of practical anatomy ; laboratory courses in physiology, chemistry, histology, pathology, bacteriology, and clinics.

Course : four years for all graduating after 1895.

Fees : matriculation, \$5 ; course, \$100 per annum ; special courses, \$20 each ; dissection, \$10 ; practical chemistry, \$25 ; laboratory courses, \$25 each ; operative surgery, \$20.

Subjects : anatomy, osteology, histology, embryology, physiology, materia medica, therapeutics, chemistry, toxicology, physics, theory and practice of medicine, hygiene, diseases of children, of the mind, surgery,

pathology, bacteriology, obstetrics, gynecology, ophthalmology, otology, laryngology, rhinology, zoology, dermatology, state medicine, military surgery, and surgical pathology.

Faculty: professors, 30; instructors, 2; assistants, 7; lecturer, 1; demonstrators, 10; assistants, 10.

Total property, \$50,000; receipts, \$—; expenditures, \$— (1898).

Organized 1850; first class graduated 1851, and in subsequent years without exception.

17. MEDICAL DEP'T, HOWARD UNIV., regular, coeducational, Washington, pop. 230,392, Dean, Thomas B. Hood, M.D., A.M., 1009 O st., N. W.

Session opens 30 S, '98; closes 12 My, '99; length, 7 mos.; matriculates, 1897-98, 111; graduates, 1897-98, 32; matriculates 1898-99, 116.

Admission: certificate of good moral standing; diploma from recognized college, high school, second-grade teacher's certificate, or examination in common school branches; to advanced standing: work of recognized schools for other years than last.

Graduation: age 21; good moral character; attendance on four lecture courses, the last at this school; examinations.

Course: four years for all graduating after 1895.

Fees: course, \$60.

Subjects: anatomy, physiology, histology, materia medica, therapeutics, chemistry and toxicology, obstetrics, practice of medicine, surgery, hygiene, pathology, bacteriology, gynecology, pediatrics, ophthalmology, otology, jurisprudence.

Faculty: professors, 15; demonstrators, 4; assistants, 2; lecturer, 1; attending physician, dispensary clinic, 1.

Total property, \$250,000; receipts, \$9,000; expenditures, \$9,000 (1898).

Organized 1867; first class graduated 1871, and in each subsequent year.

18. MEDICAL DEP'T, NATIONAL UNIV., regular, coeducational, Washington, pop. 230,392, Dean, Howard H. Barker, M.D., 1116 H. St., N. W.

Session opens 3 O, '98; closes 20 My, '99; length, 7 months; matriculates, 1897-98, 48; graduates, 1897-98, 13; matriculates, 1898-99, 34.

Admission: requirements A. A. M. C. (see p. 8); admission to advanced standing: work of recognized schools for other than senior year on examination.

Graduation: age 21; good moral character; four lecture courses, the last at this school; necessary dissections of body.

Course: four years for all graduating after 1897.

Fees: matriculation, \$5; course, \$100.

Subjects: theory and practice, obstetrics, and the diseases of women, children, genito-urinary organs, mind, nervous system, nose, throat, and rectum, surgery, anatomy, materia medica, therapeutics, physiology, hygiene, chemistry, jurisprudence, anthropology, dermatology, syphilol-

ogy, histology, bacteriology, toxicology, gynecology, ophthalmology, and otology.

Faculty: professors, 27; demonstrators, 5; assistant demonstrators, 3; assistant, 1.

Total property, \$30,000; receipts, \$——; expenditures, \$—— (1898).
Organized 1884; first class graduated 1885, and in subsequent years.

FLORIDA.

There are no medical schools in Florida.

GEORGIA.

Schools: regular, 3; homeopathic, 0; eclectic, 1; total, 4.

Session opens first Oct.; closes about first April.

Matriculates, 1897-98, —; graduates, 1897-98, —; matriculates, 1898-99, —.

Admission and graduation: no state requirements.

Fees: average matriculation, \$5; course, \$91.66; additional, \$35.

Faculty: professors, 32; lecturers, 5; others, 20; total, 57.

Total property, \$——; receipts, \$——; expenditures, \$——.

19. ATLANTA COLLEGE PHYSICIANS AND SURGEONS, regular, Atlanta, pop. 65,533, Dean, W. S. Kendrick, M.D., 93 Capitol Sq.

Session opens 5 O, '98; closes 3 Ap, '99; length, 5½ mos.; matriculates, 1897-98, 141 A. M. C., and 84 S. M. C.; total, 225; graduates, 1897-98, 34 A. M. C. and 27 S. M. C.; total, 61; matriculates, 1898-99, 214.

Admission: —————; to advanced standing: work of recognized schools for other years than senior.

Graduation: age 21; good moral character; three years' study; attendance on three lecture courses of six months each, the last at this college; examinations.

Course: three years for all graduating after 1895.

Fees: course, \$100; graduation, \$30; for physicians, registration, \$5; graduates of other colleges, additional fee, \$25.

Subjects: diseases of the eye, ear, throat, nose, and skin, anatomy, materia medica, therapeutics, obstetrics, gynecology, surgery, chemistry, medicine, gastro-intestinal, rectal, and clinical surgery; pharmacy, jurisprudence.

Faculty: professors, 13; demonstrators, 2; lecturers, 5; assistants, 7.

Total property, \$50,000; receipts, \$——; expenditures, \$—— (1898).

Atlanta Medical College organized 1854; first class graduated 1855; suspended 1862-65 inclusive; reorganized 1865; union 1898 with Southern Medical College; organized 1879; first class graduated —, and in each subsequent year except — inclusive.

20. GEORGIA COLLEGE OF ECLECTIC MEDICINE AND SURGERY, eclectic, coeducational, Atlanta, pop. 65,533, Pres., A. G. Thomas, M.D., LL.D., 121 Park St., W. E.

Session opens 4 O, '98; closes 1 Ap, '99; length, 6 mos.; matriculates, 1897-98, 61; graduates, 1897-98, 14; matriculates, 1898-99, 60.

Admission: satisfactory evidence of academic education; to advanced standing: work of recognized schools for other years than senior; to second year: graduates in dentistry or pharmacy.

Graduation: good moral character; attendance on three lecture courses, the last at this school; thesis; dissection of body; examinations.

Course: three years for all graduating after 1895.

Fees: course, \$70; college (paid on matriculating), \$30; examination, \$25.

Subjects: principles of medicine, osteology, myology, hygiene, physics, chemistry, neurology, practice, materia medica, therapeutics, surgery, physiology, bacteriology, histology, obstetrics, gynecology, diseases of eye, ear, nose, throat, jurisprudence.

Faculty: professors, 9; emeritus, 2; demonstrator, 1.

Total property, \$25,000; receipts, \$—; expenditures, \$— (1898).

Southern Botanic-Medical College, Forsyth, chartered 1839; first class graduated 1841, and classes graduated in each subsequent year; removed to Macon 1845; title Reform Medical College of Georgia 1859; title College American Medicine and Surgery 1874; removed to Atlanta 1881; Georgia Eclectic Medical College organized 1877; first class graduated 1878, and classes graduated in each subsequent year; united under present title 1884.

21. MEDICAL DEP'T, GEORGIA UNIV.,¹ regular, Augusta, pop. 33,300, Dean, Eugene Foster, M.D., 311 Washington St.

Session opens 1 O, '98; closes 1 Ap, '99; length, 5½ mos.; matriculates, 1897-98,—; graduates, 1897-98,—; matriculates, 1898-99—.

Admission: certificate of moral character from recognized physician; graduation from college; certificate from high school: teacher's second-grade certificate; examination.

Graduation: age 21; good moral character; attendance on three courses of six months each in different years, the last at this college; two courses in anatomy, physiology, theoretical chemistry, materia medica and therapeutics; dissection of body; laboratory courses in histology, pathology, chemistry, and operative surgery.

Course: four years for all graduating after —.

Fees: matriculation, \$5 per annum; course, \$75; practical anatomy, \$10 each; laboratory, \$10; examination, \$30.

Subjects: anatomy, materia medica, therapeutics, physiology, pathology, chemistry, pharmacy, surgery, principles and practice, obstetrics, pediatrics, ophthalmology, otology, laryngology, gynecology.

Faculty: professors, 10; demonstrator, 1; instructors, 7.

¹ 24 Ap '99, no reply received.

Total property, \$—; receipts, \$—; expenditures, \$— (1898).

Medical Academy organized 1821; first class graduated —, and in subsequent years, —; exceptions, —; suspended, 1861-65 (?); Medical Dep't, Georgia Univ., 1872; Medical College of Georgia part of present title.

22. WOMAN'S MEDICAL COLLEGE OF GEORGIA AND TRAINING SCHOOLS FOR NURSES.

24 Ap '99, no reply from the statement.

HAWAII.

24 Ap '99, no reply from the statement.

IDAHO.

There are no medical schools in Idaho.

ILLINOIS.

Schools: regular, 9; homeopathic, 5; eclectic, 1; physio-medical, 1; total, 16.

Session opens about middle Sept.; closes about middle Apr.

Matriculates, 1897-98, 1845; graduates, 1897-98, 305; matriculates, 1898-99, 1539.

Admission and graduation: see state requirements.

Course: three years for all graduates before 1900; four years for all others.

Fees: average matriculation, \$5; course, \$89; additional, \$37.50.

Faculty: professors, 448; lecturers, 80; others, 248; total, 776.

Total property, \$—; receipts, \$—; expenditures, \$—.

STATE REQUIREMENTS.

To be held in good standing, schools have been required to comply with the schedules of minimum requirements, adopted at different periods.

In 1880, a schedule was adopted as the standard entitling to recognition any diplomas issued after the session of 1882-83, and the board accorded recognition to fifty-seven medical schools in the United States, declining to recognize degrees issued by twenty-four.

The first schedule remained in force until the close of the ses-

sion of 1890-91, when the second took effect, which was adopted and promulgated by the board in 1887.

This schedule was amended by a resolution adopted on April 26, 1893, declining to recognize the degree of Ph.G., D.D.S., or V.S. as the equivalent of any part of the minimum requirements.

Again amended in part in April, 1896, students can be graduated in 1898 and 1899 after an attendance on three courses of lectures in three separate years.

The third schedule adopted on January 4, 1898, and slightly amended, is now in force and goes actively into effect with the session of 1898-99.

Conditions of admission to lecture courses : creditable certificates of good moral character signed by two physicians of good standing in the state in which the applicant last resided ; a diploma or certificate of graduation from a high school ; evidence of having passed the matriculation examination to a recognized college ; a certificate of having successfully passed the medical student's examination conducted by a recognized college or university or state superintendent of public instruction or principal of a high school in the following named branches, in each of which the applicant should possess, at least, the knowledge required at the completion of one year of study in such school ; *viz.*, English grammar, arithmetic, elementary physics, United States history, geography, and Latin. One year is allowed in which to make up defects in knowledge of Latin, but the student must be provided with a certificate of proficiency in this branch of learning from the designated authorities before he can be accepted as a second-course student, or be given a certificate of attendance on the first year's course.

Advanced standing : graduates of reputable and regularly established schools of dentistry, of pharmacy, and of veterinary medicine, which require as a condition of graduation attendance on a course extending through two or more full years, may be allowed one year's advanced standing on a four-year medical course only on condition that they comply with the entrance requirements of the medical school, and pass all the examinations and perform all the laboratory work embraced in the course of the freshman year ; graduates of medical schools recognized by

this board may be admitted to any class without examination. Students from said schools who possess certificates of attendance and of successful examinations, can enter, without examination, the class immediately following that previously attended. Students who have attended one or more full courses in schools not fully recognized by this board can be granted advanced standing in accordance with such attendance, on complying with the entrance requirements and passing all examinations and performing all laboratory work of the classes below that which they enter. Graduates of or students from schools to which no recognition is given by the Illinois State Board of Health can be granted no advanced standing whatever; graduates of colleges which require a regular attendance of three or more years as an essential to graduation, may be admitted to the second year of the medical course without examination, provided they furnish, beside their diploma or certificate of graduation, formal and satisfactory evidence of having creditably done at least one full year's work in the following named branches, for which they may receive credit in the medical school without examination: chemistry, biology or comparative anatomy, histology, embryology, experimental physics, physiologic botany, laboratory physiology or experimental psychology, zoology; that they make up their other deficiencies in the first year's work by attendance and examination, the same as other students.

Branches of medical science to be included in the course: anatomy, physiology, chemistry, materia medica and therapeutics, theory and practice of medicine, pathology and bacteriology, surgery, obstetrics, gynecology, hygiene, jurisprudence.

Length and number of regular or graduating courses: the time occupied in each regular course or session shall not be less than six months, or 26 weeks; the curriculum must extend over three (after 1 Ja, 1900, four) calendar years; the interval between the required courses of lectures shall be at least three months of time, and no two courses which commence or end in the same calendar year shall be recognized.

Attendance and examinations or quizzes: regular attendance during the entire lecture courses shall be required, allowance being made only for absences occasioned by the student's sick-

ness, such absence not to exceed 20 per centum of the course ; regular examinations or quizzes to be made by each lecturer or professor at least once each week ; final examinations on all branches to be conducted.

Dissections, clinics, and hospital attendance : each student must have dissected the entire cadaver during two or more courses of lectures, must have received at least two (after January 1, 1900, three) terms of clinical and hospital instruction.

The time of professional study shall not be less than three (after January 1, 1900, four) full calendar years before graduation and attendance on lectures and at clinics and hospital.

Instruction : the school must have a sufficient and competent corps of instructors, and facilities for teaching, dissections, ambulatory and hospital clinics which obtain in the majority of schools in the United States. The teachers and instructors in the branches of medical science which are required to be included in the course of instruction (chemistry and jurisprudence excepted) shall invariably be physicians, authorized to practise in the state in which the school is located.

RECOGNITION OF MEDICAL SCHOOLS.

Rule 1.—Only regularly conducted and legally chartered medical schools which conform to the conditions of admission to lecture courses, the course and period of study, the number character, and length of lecture terms, the duration of attendance on hospital and clinical instruction, as set forth in the schedule of minimum requirements (see p. 26), and the other requirements of a medical education which obtain as the practice of a majority of the established medical schools of the United States shall be considered medical institutions in good standing.

Rule 2.—No medical school can be held to be in good standing entitling its diploma to full recognition until it has established its claim to such standing by an active existence of not less than four years, and then only on compliance with the terms of *Rule 1*, provided that schools which, after a personal investigation made by a committee of the board, are shown to comply with the schedule of minimum requirements, and to possess a sufficient and competent corps of instructors, all legally

qualified physicians, and the necessary facilities for teaching, may, at the discretion of the board, be granted full recognition during the second year of existence.

Rule 3.—Graduates of medical schools who do not fully comply with the schedule of minimum requirements, and graduates of institutions of less than four years' existence which are not considered as in good standing, will be required to pass an examination before receiving a state certificate to practise medicine and surgery, in the following branches: practice of medicine, surgery, obstetrics and gynecology, or at the discretion of the board, in the branches of the usual medical school course; to wit, anatomy, physiology, chemistry, materia medica and therapeutics, theory and practice of medicine, pathology, bacteriology, surgery, obstetrics, gynecology, hygiene, jurisprudence; will pay a fee of \$10, to be returned if applicant fails. No further charge will be made for a certificate if issued.

No medical school shall be recognized in good standing that does not require, after January 1, 1900, of all the students excepting graduates of colleges, or of schools of dentistry, pharmacy, or veterinary medicine, to whom advanced standing is given in accordance with the requirements of this board, as a condition of graduation, an attendance of four full courses of lectures in four separate years.

Diplomas issued by schools in good standing, in 1898 and 1899, to students after an attendance on three full courses of lectures in three separate years, will be recognized. Foreign diplomas will not be recognized as a basis on which to issue a certificate and all applicants will be required to pass an examination.

Medical colleges in the United States, in active existence 1 Je, 1899, to which recognition complete or partial is accorded by the Illinois State Board of Health are indicated by the letters ISBH after registration.

23. AMERICAN MEDICAL MISSIONARY COLLEGE,¹ regular, coeducational, Chicago, pop. 1,099,850, Pres., J. H. Kellogg, M.D., 28 College Pl.

Session opens 19 O, '98; closes 27 Je, '99; length, 8 mos.; matriculates, 1897-98, 99; graduates, 1897-98, —; matriculates, 1898-99 —.

Admission: age under 20; physician's certificate of health; examination in grammar, rhetoric, English and American literature, arithmetic,

¹ 24 Ap '99, no reply received.

algebra, geometry, geography, physics, physiology, botany, zoology, civics, general history, Latin, or a certificate covering these subjects; to advanced standing: work of recognized schools for other years than two, the last of which must be at this school.

Graduation: age 23; good moral character; four years' study, the last and one other of which must be at this school; examinations.

Course: four years for all graduating after —.

Fees: course, \$100 per annum.

Subjects: anatomy, physiology, histology, chemistry, hygiene, physics, biology, bacteriology, embryology, sanitary science, hydrotherapy, materia medica, toxicology, therapeutics, practice of medicine, surgery, obstetrics, diseases of women, eye, ear, nervous system, heart, digestive and respiratory organs, children, genito-urinary, skin and mental diseases, gynecology, dermatology.

Faculty: professors, 14; demonstrator, 1; lecturers and instructors, 7.

Total property, \$—; receipts, \$—; expenditures, \$— (1898).

Organized 1895; first class graduated —, and classes graduated in each subsequent year except — inclusive.

24. BENNETT COLLEGE OF ECLECTIC MEDICINE AND SURGERY,¹ coeducational, Chicago, pop. 1,099,850, Dean, Anson L. Clark, M.D., A.M., 78 N. Ada St.

Session opens —, '98; closes —, '99; length; — mos.; matriculates, 1897-98, —; graduates, 1897-98, —; matriculates, 1898-99, —.

Admission: graduation from college or high school; teacher's or state board of health certificate including Latin; to advanced standing: work of recognized schools; to second year: graduates of recognized pharmacy, dental, or veterinary schools.

Graduation: age 21; good moral character; attendance on four lecture courses of eight months each; two courses of anatomy; dissection of lateral half; satisfactory standing; examinations.

Course: four years for all graduating after —.

Fees: matriculation, \$5; course, \$100 per annum; graduates from other colleges, \$30, and matriculation fee, fourth year, \$100; partial, \$5; matriculation, \$5, \$10 each chair.

Subjects: anatomy, chemistry, osteology, histology, materia medica, physiology, pathology, therapeutics, surgery, bacteriology, principles and practice of medicine, diseases of respiratory and circulatory systems, children, nervous system, eye, ear, nose, throat, venereal diseases, jurisprudence, gynecology, obstetrics, electro-therapeutics, therapeutics, orthopedics, dermatology.

Faculty: professors, 24; emeritus, 1; assistants, 3; lecturers, 4; assistants, 7; clinical instructors, 2; director of laboratories, 1.

Total property, \$—; receipts, \$—; expenditures, \$— (1898).

Organized 1868; first class graduated 1869 (?), and classes graduated in each subsequent year except — inclusive.

¹ 24 Ap '99, no reply received.

25. THE CHICAGO HOMOEOPATHIC MEDICAL COLLEGE, Chicago, pop. 1,099,850, Pres., J. R. Kippax, M.D., LL.B., 3154 Indiana Ave.

Session opens 13 S, '98; closes 21 Mr, '99; length, 6 mos.; matriculates, 1897-98 (undergraduate), 140; (post-graduate), 42; graduates, 1897-98, 30; matriculates, 1898-99, 156.

Admission: requirements of Illinois State Board of Health (see p. 26); to advanced standing: work of recognized schools for other years than the senior; to second class: college graduates completing one year's work in biology, histology, inorganic chemistry, embryology, experimental physics, physiologic botany, laboratory, physiology, zoology, and materia medica or pharmacognosy, and making up first year's work; dentists, pharmacists, and veterinary surgeons on examination.

Graduation: age 21; good moral character; four years' study; attendance on four lecture courses in separate years, the last at this college; two sessions of practical anatomy; dissection of lateral half; course in clinics; examinations.

Course: four years for all graduating after 1898.

Fees: registration, \$5; course, \$65; full course, \$200; partial, \$10 each; hospital, \$5; anatomy, \$10; laboratories, \$5 each per annum; examination, \$10 per annum; breakage, \$5 per annum.

Subjects: anatomy, histology, physiology, chemistry, biology, embryology, pharmacology, botany, materia medica, dental surgery, pathology, bacteriology, hygiene, sanitary science, toxicology, urinary analysis, practice of medicine and surgery, venereal diseases, obstetrics, nervous diseases, electro-therapeutics, gynecology, jurisprudence, ophthalmology, otology, laryngology, rhinology, dermatology, pediatrics, renal, mental, and nervous diseases, physical diagnosis.

Faculty: professors, 27; adjuncts, 2; lecturers, 13; demonstrators, 7; instructors, 11.

Total property, \$125,000; receipts, \$16,000; expenditures, \$15,000 (1898). Organized 1876; first class graduated 1877, and subsequent classes every year.

26. CHICAGO PHYSIO-MEDICAL COLLEGE, coeducational, Chicago, pop. 1,099,850, Dean, Anton Mueller, M.D., 297 S. Halsted St.

Session opens 20 S, '98; closes 20 Ap, '99; length, 6½ mos.; matriculates, 1897-98, 31; graduates, 1897-98, 7; matriculates, 1898-99, —.

Admission: requirements of Illinois State Board of Health (see p. 26); to advanced standing: requirements of Illinois State Board (see p. 26).

Graduation: age 21; four years of study; attendance on four lecture courses, in as many years, the last in this college; three years' hospital instruction; three years of clinics; two sessions of practical anatomy; dissection of body; two courses in practical chemistry; regular attendance; examinations.

Course: four years for all graduating after 1900.

Fees: matriculation, \$5; course, \$50 per annum; breakage, \$10; hospital, \$5.

Subjects: anatomy, chemistry, physiology, histology, materia medica, therapeutics, urinalysis, electro-therapeutics, principles and practice of medicine and surgery, obstetrics, gynecology, pathology, pharmacy, jurisprudence, ophthalmology, otology, rhinology, bacteriology, dermatology, rectal and venereal diseases.

Faculty: professors, 27; assistants, 1; assistant demonstrator, 1.

Total property, \$—; receipts, \$—; expenditures, \$— (1898).

Physio-Medical Institute, Cincinnati, O., organized 1859; first class graduated —, and in subsequent years without exceptions; extinct 1885; succeeded by Chicago Physio-Medical Institute —; first class graduated —, and without exceptions; present title 1891.

27. COLLEGE OF MEDICINE AND SURGERY, CHICAGO.¹

28. DUNHAM MEDICAL COLLEGE, homeopathic, coeducational, Chicago, pop. 1,099,850, Dean, C. S. Fahnestock, M.D., 370 S. Wood St.

Session opens 14 S, '98; closes 6 Ap, '99; length, 6½ mos.; matriculates, 1897-98, 40; graduates, 1897-98, 6; matriculates, 1898-99, 50.

Admission; requirements of Illinois State Board (see p. 26); to advanced standing: Illinois State Board (see p. 26).

Graduation: age 21; good moral character; four years' study; attendance on four annual lecture courses of six months each, the last at this college; two years of practical anatomy; dissection of lateral half; laboratory courses in chemistry, microscopy, histology, embryology and bacteriology; two years of hospital instruction; examinations.

Course: four years for all graduating after 1899.

Fees: matriculation, \$5; course, \$100; four courses, \$300; graduates of other colleges, \$50; laboratory, \$15; bacteriology, \$10; partial course, \$25 each.

Subjects: anatomy, physiology, chemistry, histology, pathology, biology, Latin, pharmacology, institutes of medicine, chemistry and toxicology, embryology, materia medica and the organon, urinary analysis, hygiene, ethics, bandaging, theory and practice, obstetrics, gynecology, bacteriology, ophthalmology, otology, rhinology, laryngology, jurisprudence, genito-urinary diseases, pedology, dental surgery, dermatology, orthopedics, neurology, diseases of the throat and chest, surgery.

Faculty: professors, 36; lecturers, 2; demonstrator, 1; instructress, 1.

Total property, \$50,000; receipts, \$4,500; expenditures, \$4,300 (1898).

Organized 1895; first class graduated 1896, and in subsequent years except — inclusive.

29. HAHNEMANN MEDICAL COLLEGE AND HOSPITAL of Chicago, homeopathic, coeducational, Chicago, pop. 1,099,850, Dean, C. H. Vilas, M.D., 24 Central Music Hall.

Session opens 13 S, '98; closes 23 Mr, '99; length, 6 mos.; matriculates, 1897-98, 28; 1898-99, 198.

Admission: certificate of good moral character signed by two phy-

¹ No additional information furnished in manuscript.—ED. BULLETIN.

sicians; graduation from high school; college matriculation; certificate from college or equivalent certificate of having passed in English grammar, physics, arithmetic, algebra, U. S. history, geography, and Latin, or diploma, from normal school, academy, military training school, or other institution; to advanced standing: work of recognized schools or preparatory courses covering work of first year; college graduates in arts or science having studied biology, botany, inorganic chemistry, anatomy, and physiology in college course admitted to second year; graduates of pharmacy, dentistry, and veterinary medicine admitted to second year on examination.

Graduation: age 21; good moral character; four years' study; attendance on four lecture courses of six months each in school recognized by Illinois State Board (see p. 26), the last year at this school; course in practical anatomy; dissection of entire cadaver; laboratory courses in chemistry, microscopy, histology, embryology, bacteriology and pathology; two years of hospital instruction; examinations.

Course: four years for all graduating after 1897.

Fees: matriculation, \$5; course, \$65; three courses, \$150; four courses, \$200; examination, \$10; partial course, \$20 each; demonstrators, \$10; two hospital tickets, \$5 each; laboratories, \$5 each.

Subjects: anatomy, physiology, chemistry, physics, microscopy, histology, biology, materia medica, the history and institutes of medicine, botany, pharmacology, embryology, bacteriology, medical botany, obstetrics, physical diagnosis, sanitary science, pathology, surgery, pediatrics, electro-therapeutics, jurisprudence, theory and practice of medicine, gynecology, ophthalmology and otology, rhinology, laryngology, skin and venereal diseases.

Faculty: professors, 24; adjunct professors, 6; lecturers, 13; clinical assistants, 5.

Total property, \$191,000; receipts, \$37,000; expenditures, \$— (1898).

Organized 1859; first class graduated 1861, and in each subsequent year 1899 inclusive.

30. HARVEY MEDICAL COLLEGE,¹ regular, coeducational, Chicago, pop. 1,099,850, Dean, _____, address, _____.

Session opens — '98; closes — '99; length, — mos.; matriculates 1897-98. —; graduates, 1897-98, —; matriculates, 1898-99, —.

Admission: requirements Illinois State Board (see p. 26); to advanced standing: work of recognized schools for other years than senior; work of unrecognized schools on matriculation requirements and examination; to second year: those having completed prescribed science courses of approved colleges; graduates of pharmacy, dental, and veterinary schools.

Graduation: age 21; good moral character; four years' study; attendance on four annual lecture courses, the last at this school; one year of

¹ 24 Ap, '99, no reply received.

Cook County clinics; dissection of lateral half; examinations; attendance on 12 obstetric cases.

Course: four years for all graduating after —.

Fees: matriculation, \$5; course, \$75 per annum; laboratory, \$25 per annum; final examination, \$30.

Subjects: osteography, neurography, splanchnography, myography, antiography, anthrography, syndesmography, materia medica, pharmacology, histology, physiology, chemistry, physics, Latin, therapeutics, pathology, bacteriology, principles and practice of medicine and of surgery, rhinology, laryngology, obstetrics, pediatrics, otology, dermatology, ophthalmology, gynecology, embryology, mental, nervous, and venereal diseases, microscopy.

Faculty: professors, 44; clinical, 3.

Total property, \$—; receipts, \$—; expenditures, \$— (1898).

Organized —; first class graduated —, and classes graduated in each subsequent year except — inclusive.

31. HERING MEDICAL COLLEGE¹ of Chicago, homeopathic, coeducational, Chicago, pop. 1,099,850, Dean, H. C. Allen, M.D., 5142 Washington Ave.

Session opens 8 S, '98; closes 10 Ap, '99; length, 6½ mos.; matriculates, 1897-98, —; graduates, 1897-98, —; matriculates, 1898-99, —.

Admission: certificate of good moral character signed by two physicians; graduation from high school; college matriculation; college or equivalent certificate of having passed in English grammar, arithmetic, U. S. history, physics, algebra, geography, Latin; diploma from normal school, academy, military training school or other institution giving instruction in above subjects; to advanced standing: work of recognized schools or preparatory courses covering work of first year; college graduates having studied biology, botany, inorganic chemistry, anatomy, and physiology in college course; graduates of pharmacy, dentistry, and veterinary medicine admitted to second year on examination.

Graduation: age 21; good moral character; four years' study; attendance on four lecture courses of six months each, the last at this college; courses of materia medica, principles and practice, organon, obstetrics, and surgery in this school; clinics; examinations.

Course: four years for all graduating after 1900.

Fees: course, \$100; full course, \$300; laboratory (for two years), \$5; graduates of other colleges, \$100; materia medica and the organon, \$50; single courses, \$25 each; clinical course, \$25; special dissections, \$20.

Subjects: anatomy, physiology, histology, chemistry, bacteriology, materia medica, Latin, pharmacology, botany, hygiene, sanitary science, the organon, physical diagnosis, diseases of the chest, principles and practice of medicine, pediatrics, obstetrics, diseases of women, jurisprudence, dental surgery, therapeutics, gynecology, ophthalmology, otology, laryngology, mental and nervous diseases, dermatology.

¹ Ap '99, no reply received.

Faculty: professors, 24; assistant, 1; lecturers, 11; demonstrators, 2. Total property, \$—; receipts, \$—; expenditures, \$— (1898). Organized, 1892; first class graduated 1893, and in subsequent years except — inclusive.

32. ILLINOIS MEDICAL COLLEGE, regular, coeducational, Chicago, pop. 1,099,850, Dean, William Francis Waugh, M.D., A.M., 103 State St.

Session opens 1 Mr, '99; closes 31 Ag, '99; length, 6 mos.; matriculates, 1897-98, 75; graduates, 1897-98, 26; matriculates, 1899, 80.

Admission: requirements of Illinois State Board (see p. 26), and A. A. M. C.; to advanced standing: requirements of Illinois State Board (see p. 26).

Graduation: age 21; good moral character; attendance on four lecture courses of six months each, in separate years, the last at this college; two courses in practical anatomy; dissection of lateral half; examinations.

Course: four years for all graduating after —.

Fees: matriculation, \$5 per annum; course, \$100; obstetrics (optional), \$10; breakage, \$10.

Subjects: anatomy, chemistry, physiology, materia medica and pharmacology, histology, sanitary science, pathology, bacteriology, practice of medicine, therapeutics, applied and regional anatomy, nervous and mental diseases, obstetrics, gynecology, pediatrics, ophthalmology, diseases of ear, nose, and throat, skin and venereal diseases, genito-urinary, surgery, jurisprudence, electro-therapeutics.

Faculty: professors, 24; assistants, 12; lecturer, 1; instructor, 1; demonstrators, 5.

Total property, \$7500; receipts, \$7500; expenditures, \$8000 (1898).

Organized 1894; first class graduated 1895, and in subsequent years except — inclusive.

33. JENNER MEDICAL COLLEGE¹ of Chicago, evening, regular, coeducational, Chicago, pop. 1,099,850, Dean, —, address, —.

Session opens 5 S, '98; closes 22 Je, '99; length, 9 mos.; matriculates, 1897-98, 81; graduates, 1897-98, 20; matriculates, 1898-99, —.

Admission: requirements of Illinois State Board (see p. 26); to advanced standing: requirements of Illinois State Board (see p. 26).

Graduation: age 21; attendance on four annual lecture courses, the last at this college; good moral character; two years of clinics; dissection of lateral half; examinations.

Course: four years for all graduating after —.

Fees: matriculation, \$5; course, \$80; laboratory, \$20; anatomic laboratory, \$10; examination, \$25.

Subjects: anatomy, histology, pathology, physiology, chemistry, toxicology, bacteriology, principles and practice of medicine, materia medica, therapeutics, surgery, rectal, nervous, genito-urinary, mental diseases,

¹ 24 Ap '99, no reply received

gynecology, rhinology, ophthalmology, otology, obstetrics, dermatology, laryngology, hygiene, electro-therapeutics, jurisprudence, serum therapy.

Faculty: professors, 27; lecturer, 1; assistants, 4; demonstrators, 5.

Total property, \$—; receipts, \$—; expenditures, \$— (1898).

Organized 1892; first class graduated —, and in subsequent years except — inclusive.

34. MEDICAL DEP'T, ILLINOIS UNIV.,¹ regular, coeducational, Chicago, pop. 1,099,850, Dean, William E. Quine, M.D., 3160 Indiana Ave.

Session opens 20 S, '98; closes 19 Ap, '99; length, 7 mos.; matriculates, 1897-98, 408; graduates, 1897-98, 106; matriculates, 1898-99, —.

Admission: good moral character certified by two recognized physicians; diploma from college, high school, academy, or other satisfactory evidence of scholarship, or examination in English, physics, arithmetic, algebra and Latin; to advanced standing: work of schools affiliated with A. A. M. C. (see p. 8), and recognized by Illinois State Board (see p. 26); work of non-recognized schools on examination; preparatory course equivalent to that of this university, on graduation from recognized schools of pharmacy, veterinary, and dental surgery, admits to second year.

Graduation: age 21; good moral character; attendance on four lecture courses of six months each in separate years, the last at this college; two sessions of practical anatomy; dissection of lateral half; two courses each of dispensary and hospital clinics.

Course: four years for all graduating after —.

Fees: matriculation, \$5; course, \$105; laboratory, \$25; spring term matriculation, \$5; course, \$20; laboratory, \$10.

Subjects: biology, embryology, anatomy, histology, materia medica, chemistry, physiology, pathology, bacteriology, jurisprudence, therapeutics, dental surgery, practice of medicine, of surgery, orthopedics, genito-urinary surgery, venereal diseases, otology, gynecology, obstetrics, dermatology, laryngology, rhinology, ophthalmology, diseases of the chest, of children, of the mind, of nervous system.

Faculty: professors, 43; lecturers, 7; instructors, 26; assistant, 1; demonstrator, 1.

Total property, \$—; receipts, \$—; expenditures, \$— (1898).

The College of Physicians and Surgeons organized 1882; first class graduated 1883, and in subsequent years except — inclusive; affiliated present title 1897.

35. MEDICAL DEP'T NORTHWESTERN UNIV.,¹ regular, Chicago, pop. 1,099,850, Dean, Nathan Smith Davis, M.D., LL.D., 65 Randolph St.

Session opens 4 O, '98; closes 15 Je, '99; length, 8 mos.; matriculates, 1897-98, —; graduates, 1897-98, —; matriculates, 1898-99, —.

Admission: certificates from colleges, academies, high schools; exam-

¹ 24 Ap '99, no reply received.

ination admitting to liberal arts college of this university; to advanced standing: work of other recognized schools for other years than senior; work on particular branches accepted on examination.

Graduation: age 21; good moral character; attendance on four annual lecture courses of eight months each; dissection of median half; three years of clinics; examinations.

Course: four years for all graduating after —.

Fees: matriculation, \$5; course, \$125; breakage, \$5.

Subjects: chemistry, anatomy, histology, embryology, physiology, materia medica, hygiene, therapeutics, pathology, surgery, medicine, obstetrics, dermatology, laryngology, rhinology, pediatrics, therapeutics, diseases of eye and ear, gynecology, neurology, mental diseases, and jurisprudence.

Faculty: professors, 38; assistants, 2; demonstrators, 10; instructors, 44; director of laboratories, 1; curator, 1.

Total property, \$—; receipts, \$—; expenditures, \$— (1898).

Medical Dep't, Lind Univ., organized 1859; first class graduated —, and classes graduated in each subsequent year except — inclusive; severed connection with Lind, 1864, and became Chicago Medical College, present relation 1869.

36. MEDICAL SCHOOL FOR WOMEN, DEP'T NORTHWESTERN UNIV.,¹ regular, Chicago, pop. 1,099,850, Dean, Isaac Newton Danforth, M.D., A.M., 70 State St.

Session opens 5 O, '98; closes 15 Je, '99; length, 8 mos.; matriculates, 1897-98, —; graduates, 1897-98, —; matriculates, 1898-99, —.

Admission: degrees of recognized colleges; high school, academy, or teacher's certificates, including Latin, algebra, and physics; to advanced standing: work of other recognized schools; preparatory course in this or other recognized universities admits to second year but anatomy and organic chemistry of first year are required.

Graduation: age 21; good moral character; four years' study; attendance on four lecture courses, the last at this school; one course each in practical chemistry, laboratory histology, pathology, bacteriology, practical pharmacy, clinical pathology; courses in practical anatomy; two courses in hospital clinics; dissection; examinations.

Course: four years for all graduating after 1898.

Fees: matriculation, \$5; course, \$75; final examination, \$30; material for dissection, \$10; laboratory, \$15; hospital, \$5; special courses, \$15 each.

Subjects: anatomy, chemistry, physiology, pharmacy, physics, histology, embryology, materia medica, pathology, hygiene, therapeutics, physiologic chemistry, bacteriology, surgery, obstetrics, gynecology, practice of medicine, including nervous, renal, chest, throat diseases, orthopedics, electrolgy, dermatology, ophthalmology, otology, children's diseases, jurisprudence.

24 Ap '99, no reply received.

Faculty : professors, 28, assistants, 11 ; lecturers, 2 ; instructors, 8.

Total property, \$— ; receipts, \$— ; expenditures, \$— (1898).

Woman's Hospital Medical College organized 1870 ; first class graduated 1871, and classes graduated in each subsequent year except 1872 ; known as Woman's Medical College of Chicago ; assumed present title 1892.

37. NATIONAL MEDICAL COLLEGE CHICAGO, homeopathic, coeducational, Chicago, pop. 1,099,850, Dean, Thomas C. Duncan, M.D., LL.D., 100 State St.

Session opens 12 S, '98 ; closes 30 Mr, '99 ; length, 6½ mos. ; matriculates, 1897-98, 114 ; graduates, 1897-98, 15 ; matriculates, 1898-99, 136.

Admission : certificate of good moral character signed by two physicians ; graduation from high school, college, matriculation college or equivalent certificate of having passed in English grammar, arithmetic, geography, algebra, physics, U. S. history, Latin ; diploma from normal school, academy, military training school or other institution giving instruction in above subjects ; to advanced standing : work of recognized schools or preparatory courses covering work of first year ; college graduates having studied biology, botany, inorganic chemistry, anatomy and physiology ; credit given for special work ; one year credit given graduates of recognized schools.

Graduation : age 21 ; good moral character ; attendance on lecture courses the required time, the last at this college ; four years' study ; attendance on six cases of labor ; service in hospital, dispensary, or preceptor's office ; examinations.

Course : four years for all graduating after 1900.

Fees : matriculation, \$5 ; one course, \$65 ; two courses, \$110 ; three courses \$150 ; full course, \$200 ; partial course, \$10 ; demonstrators, \$5 ; laboratories, \$5 each ; examination, \$25 ; graduates of other colleges, \$50.

Subjects : anatomy, histology, physiology, chemistry, biology, materia medica, physics, and electricity, sanitation, pathology, bacteriology, physical diagnosis, hygiene, pharmacology, toxicology, obstetrics, embryology, medicine, neurology, etiology, laryngology, rhinology, ophthalmology, otology, gynecology, pedology, mental science, jurisprudence, electro-therapeutics, psychiatry, brain diseases, diseases of the chest, abdomen, of the skin, urinary, venereal diseases.

Faculty : professors, 39 ; lecturers, 22 ; instructors, 2 ; demonstrators, 3.

Total property, \$— ; receipts, \$— ; expenditures, \$— (1898).

Organized 1891 ; first class graduated 1892, and in each subsequent year.

38. RUSH MEDICAL COLLEGE, affiliated with Chicago Univ., regular, Chicago, pop. 1,099,850, Dean, Henry M. Lyman, M.D., A.M., 100 State St.

Session opens 27 S, '98 ; closes 24 My, '99 ; length, 7½ mos. ; matriculates, 1897-98 (undergraduate), 541 ; (post-graduate), 97 ; graduates, 1897-98, 67 ; matriculates, 1898-99, 919.

Admission : certificate of good moral character, signed by two physicians ; high school, normal, academy, equivalent diploma requiring three years of

study; admission to recognized colleges; examination in English composition, grammar, rhetoric, arithmetic, algebra, plane geometry, Latin, physics, U. S. history, geography, conducted by state superintendent, high school principal, or Chicago Univ. examiner; to advanced standing: work of school recognized by state board for other years than the senior; graduates of colleges requiring three years' attendance, admitted to second year on evidence of 140 hours' work in chemistry, biology or comparative anatomy, botany, zoology, physics, physiology, histology, embryology, without deficiencies in first year.

Graduation: age 21; good conduct; four years' study; attendance on four annual lecture courses, the last at this college; two years of clinics; two courses in anatomy, chemistry, physiology; one course in experimental physiology and histology, pathology, bacteriology, pathologic anatomy, materia medica, therapeutics, auscultation and percussion, obstetric manipulations, operative surgery on cadaver, bandaging and minor surgery, the use of the laryngoscope, ophthalmoscope, otoscope including refraction and fitting of spectacles; examinations.

Course: four years for all graduating after 1897.

Fees: matriculation, \$5; course, \$130.

Subjects: anatomy, histology and physiology, chemistry, medical pharmacy and physics, bacteriology, urinalysis, toxicology, materia medica, pathology, medicine, surgery, therapeutics, principles of surgery, obstetrics, chest, throat, nose, skin, genito-urinary, venereal diseases, hygiene, jurisprudence, dental surgery, gynecology, diseases of children, eye and ear, mental diseases.

Faculty: professors, 21; assistant professors, 16; instructors, 19; associates, 13; assistants, 9; fellows, 3.

Total property, \$258,813; receipts, \$83,737; expenditures, \$81,198 (1898).

Rush Medical College chartered 1837; organized 1842; first class graduated 1843, and in subsequent years; became Medical Dep't., Lake Forest Univ., 1887; new relation 1898.

INDIAN TERRITORY.

There are no medical schools in Indian Territory.

INDIANA.

Schools: regular, 5; homeopathic, 0; eclectic, 0; total, 5.

Session opens about —; closes about —.

Matriculates, 1897-98, —; graduates, 1897-98, —; matriculates, 1898-99, —.

Admission and graduation: no state requirements.

Fees: average matriculation, \$5; course, \$48; additional, \$28.

Faculty: professors, 109; lecturers, 23; others, 39; total, 171.

Total property, \$—; receipts, \$—; expenditures, \$—.

39. **CENTRAL COLLEGE OF PHYSICIANS AND SURGEONS**, regular, coeducational, Indianapolis, pop. 105,436, Dean, Samuel E. Earp, M.D., M.S., Secretary, 24½ Kentucky Ave.

Session opens 15 S, '98; closes, 23 Mr, '99; length, 7 mos.; matriculates, 1897-98, 101; graduates, 1897-98, 34; matriculates, 1898-99, 82.

Admission: college or high school certificate; examination in English composition, mathematics, physics and Latin; to advanced standing: work of recognized schools for other years than senior; to second year: degree from recognized college; graduation from schools of dentistry, pharmacy, veterinary medicine.

Graduation: age 21; good moral character; four years' study with recognized physician; four lecture courses, the last at this school; laboratory courses; dissection of body; examination.

Course: four years for all graduating after 1898.

Fees: matriculation, \$5; laboratory, \$5; course, \$40; demonstrators, \$10; hospital, \$6; graduation, \$25.

Subjects: anatomy, osteology, dissection, physiology, materia medica, chemistry, histology, bacteriology, principles and practice of surgery, of medicine, therapeutics, pathology, anatomy, ophthalmology, obstetrics, diseases of nose and throat, of mind, of nervous system, of children, of women, genito-urinary and venereal diseases, jurisprudence, otology, dermatology, surgery.

Faculty: professors, 22; assistants, 9; demonstrators, 2; lecturers, 4; instructors, 4.

Total property, \$15,000; receipts, \$5,500; expenditures, \$5,000 (1898).

Organized 1879; first class graduated 1880, and subsequent years except — inclusive.

40. **FORT WAYNE COLLEGE OF MEDICINE**, regular, coeducational, Fort Wayne, pop. 35,393, Dean, Christian B. Stemen, M.D., LL.D., 25 Broadway.

Session opens 20 S, '98; closes 20 Mr, '99; length, 5½ mos.; matriculates, 1897-98, 31; graduates, 1897-98, 13; matriculates, 1898-99, 28.

Admission: requirements A. A. M. C. (see p. 8); to advanced standing: graduates of recognized colleges or universities completing chemistry and biology; graduates and matriculates of homeopath, eclectic, veterinary, pharmacy and dental schools requiring two lecture courses for degree on examination.

Graduation: age 21; good moral character; four years' study; attendance on four lecture courses of six months each, in separate years, the last at this school; two courses of dissections; dissection of lateral half; two courses of clinical instruction; examinations; present at public commencement.

Course: four years for all graduating after 1899.

Fees: matriculation, \$5; course, \$70.

Subjects: osteology, syndesmology, histology, embryology, physiology, materia medica, chemistry, physics, bacteriology, anatomy, pathology, therapeutics, gynecology, surgery, obstetrics, practice of medicine, hygiene,

pathologic histology, surgery, dermatology, pediatrics, nervous, mental diseases, orthopedics, ophthalmology, otology, laryngology, rhinology, jurisprudence.

Faculty: professors, 21; lecturers, 4; demonstrators, 1.

Total property, \$10,000; receipts, \$3,500; expenditures, \$3,000 (1898).

Organized 1879; first class graduated 1880, and classes graduated each subsequent year except 1899.

41. MEDICAL COLLEGE OF INDIANA, regular, coeducational, Indianapolis, pop. 105,436, Dean, Henry Jameson, M.D., 28 E. Ohio St.

Session opens 27 S, '98; closes 29 Mr, '99; length, 6 mos.; matriculates, 1897-98, 188; graduates, 1897-98, 81; matriculates, 1898-99, 156.

Admission: requirements A. A. M. C. (see p. 8); to advanced standing: requirements A. A. M. C. (see p. 9).

Graduation: age 21; good moral character; four years' study under recognized physician; attendance on four lecture courses, the last at this school, of six months each, unless admitted to advanced standing; dissection of body.

Course: four years for all graduating after 1898.

Fees: matriculation, \$5; course, \$70; dissecting, \$5; hospital, \$6; partial course, \$10; graduation, \$25.

Subjects: physiology, physics, histology, osteology, syndesmology, chemistry, materia medica, botany, Latin, anatomy, embryology, principles of medicine and surgery, therapeutics, pathology, bacteriology, pharmacy, obstetrics, pediatrics, physical diagnosis, ophthalmology, otology, gynecology, dermatology, syphilology, genito-urinary, nervous and mental diseases, diseases of rectum, laryngology, rhinology, jurisprudence.

Faculty: professors, 21; adjuncts, 3; lecturers, 7; demonstrators, 7; assistants, 6.

Total property, \$75,000; receipts, \$18,000; expenditures, \$10,000 (1898).

Indiana Medical College organized 1868; first class graduated 1869, and classes graduated each subsequent year. College of Physicians and Surgeons of Indiana organized 1873; first class graduated 1874; united 1878 in Medical College of Indiana; first class graduated 1879; became Dep't Butler Univ. 1879; severed its connection 1883; became Dep't of Medicine, University of Indianapolis 1895.

42. PHYSIO-MEDICAL COLLEGE, Indiana, regular,¹ coeducational, Indianapolis, pop. 105,436, Sec'y, C. J. Bedford, 531 Mass. Ave.

Session opens 20 S, '98; closes 22 My, '99; length, 5½ mos.; matriculates, 1897-98, 51; graduates, 1897-98, 23; matriculates, 1898-99, 39.

Admission: good moral character, certified by two physicians; college, high school graduation; college matriculation; college or equivalent examination; medical student's certificate from state board; to advanced standing: work of recognized schools for other years than senior.

Graduation: age 21; good moral character; four years' study; attendance

¹? Ed. Bulletin.

on four annual lecture courses of 26 weeks each, the last at this school ; four terms of clinics ; dissection of body ; examinations.

Course : four years for all graduating after 1898.

Fees : full course, \$60 per annum ; graduation, \$25 ; clinics, \$3 per annum ; laboratory, \$5.

Subjects : obstetrics, principles and practice of medicine, hygiene, sanitary science, materia medica, therapeutics, pharmacy, gynecology, diseases of the rectum, eye, ear, nose, throat, anatomy, dermatology, bacteriology, chemistry, physiology, histology, pediatrics, jurisprudence, electro-therapeutics.

Faculty : professors, 17 ; lecturers, 6 ; demonstrators, 7 ; curator, 1.

Total property, \$20,000 ; receipts, \$1,851.07 ; expenditures, \$1,851.07 (1898).

Organized 1873 ; first class graduated 1874, and classes graduated each subsequent year.

43. UNIVERSITY OF MEDICINE,¹ regular (?), coeducational, Indianapolis, pop. 105,436. Dean, Russell C. Kelsey, M.D., 211 E. Ohio st.

Session opens—'98 ; closes—'99 ; length,—mos. ; matriculates, 1897-98,— ; graduates, 1897-98,— ; matriculates, 1898-99,—.

Admission: matriculation in another recognized school or college ; second-grade teacher's academy or high school certificate ; to advanced standing : work of recognized schools for other than senior year.

Graduation: age 21 ; good moral character ; attendance on four annual lecture courses, the last at this school.

Course: four years for all graduating after 1898.

Fees: graduation, \$25.

Subjects: anatomy, physiology, histology, chemistry, materia medica, pharmacy, hygiene, jurisprudence, electro-therapeutics, dermatology, therapeutics, practice of medicine, surgery, obstetrics, gynecology, pathology, ophthalmology, laryngology, rhinology, otology, orthopedics, pediatrics, neurology.

Faculty: professors, 25 ; lecturers, 2 ; clinical professor, 1 ; associate, 1.

Total property, \$— ; receipts, \$— ; expenditures, \$— (1898).

Organized 1883 ; first class graduated—, and classes graduated in each subsequent year except— inclusive.

Indiana Eclectic Medical College organized— ; first class graduated—, and classes graduated in each subsequent year except— inclusive.

American Medical College organized— ; first class graduated—, and classes graduated in each subsequent year except— inclusive.

IOWA.

Schools : regular, 5 ; homeopathic, 1 ; eclectic, 0 ; total, 6.

Session opens about middle Sept. ; closes about first Apr.

Matriculates, 1897-98, 577 ; graduates, 1897-98, 171 ; matriculates, 1898-99, 554.

¹ 24 Ap '99, no reply received.

Admission and graduation : no state requirements.¹

Fees : average matriculation, \$5 ; course, \$49.70 ; additional, \$18.60.

Faculty : professors, \$60 ; lecturers, \$14 ; others, 14 ; total, 88.

Total property, \$— ; receipts, \$— ; expenditures, \$—.

44. COLLEGE OF PHYSICIANS AND SURGEONS,² regular, coeducational (?), Keokuk, pop. 14,101, Dean, J. C. Hughes, M.D., address,

45. KEOKUK MEDICAL COLLEGE, regular, coeducational, Keokuk, pop. 14,101, Dean, O. D. Walker, Keokuk.

Session opens 20 S, '98 ; closes 21 Mr, '99 ; length, 6 mos. ; matriculates, 1897-98, 223 ; graduates, 1897-98, 80 ; matriculates, 1898-99, 210.

Admission : requirements A. A. M. C. (see p. 8) ; certificates of good moral character ; high school graduation ; college or equivalent matriculation or examination in English grammar, arithmetic, elementary physics, U. S. history, geography, Latin ; one year condition ; to advanced standing : work of recognized schools for other years than senior ; graduates of pharmacy, dental, and veterinary schools admitted to second year.

Graduation : age 21 ; good moral character ; attendance on four annual lecture courses, of six months each, the last at this school ; dissection of median half ; examinations.

Course : four years for all graduating after 1898.

Fees : matriculation, \$5 per annum ; hospital \$3 per annum ; course, \$40 ; fourth course, \$22.

Subjects : anatomy, physiology, chemistry, materia medica, histology, therapeutics, embryology, diseases of children, of the nervous system, dermatology, jurisprudence, pathology, principles and practice of medicine, of surgery, obstetrics, gynecology, ophthalmology, otology, and rhinology, laryngology, rectal diseases, dentistry.

Faculty : professors, 13 ; lecturers, 3 ; instructor, 1 ; assistant, 1.

Total property, \$25,000 ; receipts, \$12,390 ; expenditures, \$7,000 (1898).

Organized 1890 ; first class graduated 1891, and classes graduated in each subsequent year.

46. MEDICAL DEP'T, DRAKE UNIV., regular, coeducational, Des Moines, pop. 50,093, Dean, Lewis Schooler, M.D., LL.D., 5th and Walnut Sts.

Session opens 12 S, '98 ; closes 5 Ap, '99 ; length, 6½ mos. ; matriculates, 1897-98, 58 ; graduates, 1897-98, 21 ; matriculates, 1898-99, 56.

Admission : requirements Iowa State Board³ ; member A. A. M. C. (see p. 8) ; to advanced standing : requirements Iowa State Board.

Graduation : age 21 ; good moral character ; four years' study ; attendance

¹ Iowa has graduation requirements at least.—ED. BULLETIN.

² 24 Ap '99, no reply received.

³ Requirements not included in this report.—ED. BULLETIN.

on four annual lecture courses of 26 weeks each, the last at this school; two courses in practical anatomy; examinations.

Course: four years for all graduating after 1898.

Fees: matriculation, \$5; course, \$45; final examination, \$25; laboratories, \$5 each; chemical laboratory, \$10; dissection, \$10; hospital, \$5; Latin, \$5.

Subjects: anatomy, chemistry, histology, Latin, physiology, materia medica, bacteriology, pathology, hygiene, theory and practice of medicine, surgery, therapeutics, obstetrics, ophthalmology, otology, gynecology, dermatology, diseases of children, genito-urinary, of rectum, kidney, laryngology, rhinology, uriology, nervous diseases, psychiatry.

Faculty: professors, 16; adjunct, 1; lecturers, 5.

Total property, \$5,000; receipts, \$3,365; expenditures, \$3,300 (1898).

Iowa College of Physicians and Surgeons organized 1882; first class graduated 1883, and classes graduated each subsequent year.

47. MEDICAL DEP'T STATE UNIVERSITY OF IOWA, homeopathic, coeducational, Iowa City, pop. 7,016. Registrar, James G. Gilchrist, M.D., A.M., University of Iowa.

Session opens 14 S, '98; closes 28 Mr, '99; length, 6 mos.; matriculates 1897-98, 62; graduates, 1897-98, 8; matriculates, 1898-99, 64.

Admission: diploma from high school or its equivalent, or examination in English branches and Latin, sufficient to admit to college; to advanced standing: work of recognized schools for other years than senior; graduates of non-homeopathic schools on matriculation in the university and on examination in therapeutics of this school.

Graduation: age 21; four years' study; attendance on four lecture courses of six months each, the last at this school.

Course: one pre-matriculate year; four regular for all graduating after 1898.

Fees: course, \$65; breakage, \$3.

Subjects: anatomy, physiology, histology, chemistry, theory and practice, ophthalmology, otology, laryngology, rhinology, pedology, materia medica, surgery, gynecology, obstetrics, pathology, jurisprudence, insanity.

Faculty: professors, 5; assistants, 5.

Total property, \$—; receipts, \$—; expenditures, \$— (1898); see State Univ. of Iowa regular.

Organized 1877; first class graduated 1878, and classes graduated in each subsequent year.

The teaching of this department is supplementary. Common subjects are taught by the professors of the regular dep't.

48. MEDICAL DEP'T, STATE UNIVERSITY OF IOWA, regular, coeducational, Iowa City, pop. 7,016, William Drummond Middleton, M.D., A.M., Dean, University of Iowa.

Session opens 13 S, '98; closes 29 Mr, '99; length, 6 mos.; matriculates, 1897-98, 200; graduates, 1897-98, 50; matriculates, 1898-99, 182.

Admission: good moral character, certified by two physicians; college

graduates or matriculates ; normal or high school graduates with one year of Latin ; examination in English, Latin, physics, U. S. history, arithmetic, algebra, plane and solid geometry and botany, or some other science ; to advanced standing : work of recognized schools on examination ; to second year : college graduates having completed prescribed courses in chemistry, physics, botany, physiology, histology, and human anatomy, but the pharmacy, materia medica, and dissecting of first year must be made up.

Graduation : age 21 ; good moral character ; attendance on four annual lecture courses of 26 weeks each, the last at this school ; four courses in practical anatomy ; satisfactory standing ; examinations.

Course : four years for all graduating after 1898.

Fees : course, \$55 ; breakage, \$1 to \$2.

Subjects : anatomy, physiology, chemistry, histology, pharmacy, materia medica, therapeutics, pathology, bacteriology, practice of medicine, surgery, obstetrics, gynecology, ophthalmology, otology, rhinology, laryngology, jurisprudence, insanity, sanitary science, hygiene.

Faculty : professors, 12 ; lecturers, 2 ; instructor, 1 ; demonstrators, 4 ; assistant, 1.

Total property, \$210,000 ; receipts, \$30,320 ; expenditures, \$46,145 (1898).

Organized, 1870 ; first class graduated 1871, and in subsequent years except — inclusive.

49. SIOUX CITY COLLEGE OF MEDICINE, Dep't Univ. of Northwest, regular, coeducational, Sioux City, pop. 37,806, Dean, Hiram A. Wheeler, M. D., Sioux City.

Session opens 14 S, '98 ; closes 5 Ap, '99 ; length, 6½ mos. ; matriculates, 1897-98, 34 ; graduates, 1897-98, 12 ; matriculates, 1898-99, 42.

Admission : requirements A. A. M. C. ; college matriculates ; normal or high school graduates ; credential required by New York state ; examinations in arithmetic, English, algebra, physics, Latin ; to advanced standing : work of recognized schools for other years than senior ; graduates of pharmacy, dental, and veterinary schools admitted to second year.

Graduation : age 21 ; good moral character ; attendance on four annual lecture courses of seven months each, the last at this school ; dissection of body ; two cases of obstetrics ; examinations.

Course : four years for all graduating after 1898.

Fees : matriculation, \$5 ; course, \$48 ; hospital, \$5 ; examination, \$20.

Subjects : chemistry, anatomy, histology, materia medica, therapeutics, pharmacy, physiology, hygiene, sanitary science, pathology, bacteriology, obstetrics, gynecology, theory and practice of medicine, surgery, ophthalmology, laryngology, otology, diseases of the nervous system, orthopedics, history and ethics, genito-urinary diseases, diseases of the mind, of children, dermatology, electro-therapeutics, jurisprudence.

Faculty : professors, 13 ; lecturers, 4 ; demonstrator, 1.

Total property, \$16,000 ; receipts, \$— ; expenditures, \$— (1898).

Organized 1890 ; first class graduated 1893, and in each subsequent year.

KANSAS.

Schools: regular, 3; homeopathic, 0; eclectic, 0; total, 3.

Session opens about first Sept.; closes about first May.

Matriculates, 1897-98, 85; graduates, 1897-98, 18; matriculates, 1898-99, —.

Admission and graduation: no state requirements.

Fees: average matriculation, \$5; course, \$60; additional, \$35.

Faculty: professors, 30; lecturers, 8; others, 4; total, 42.

Total property, \$—; receipts, \$—; expenditures, \$—.

50. KANSAS MEDICAL COLLEGE OF TOPEKA,¹ regular, coeducational, Topeka, pop. 31,007, Dean, John E. Minney, M.D., A.M., address—.

Session opens 13 S, '98; closes 24 Mr, '99; length, 6 mos.; matriculates 1897-98, 85; graduates, 1897-98, 18; matriculates 1898-99—.

Admission: certificate of good moral character signed by two physicians; high school graduation; college matriculation; college or equivalent examination in English grammar, arithmetic, algebra, physics, U. S. history, geography, Latin; to advanced standing: work of recognized schools for other years than senior; to second year: dental, pharmaceutical, veterinary graduates on examination in subjects of first year.

Graduation: age 21; good moral character; attendance on three annual lecture courses of six months each, the last in this college; two terms of clinical and hospital instruction; three courses of dissection; examinations.

Course: three years for all graduating after—.

Fees: matriculation, \$5; breakage, \$5; course, \$60; third year, no fee; two courses, \$100; final examination, \$30.

Subjects: anatomy, chemistry, physiology, materia medica, therapeutics, principles and practice of medicine, venereal diseases, diseases of children, skin, chest, of the mind, nervous system, laryngology, rhinology, jurisprudence, surgery, obstetrics, gynecology, dental pathology, ophthalmology, psychiatry, histology, pathology, bacteriology.

Faculty: professors, 21; lecturers, 8; assistant, 1; demonstrators, 2; prosector, 1.

Total property, \$—; receipts, \$—; expenditures, \$— (1898).

Organized 1890; first class graduated—, and in subsequent years except — inclusive.

Oldest medical school of the state.

51. MED. DEP'T, KANSAS CITY UNIV.,¹ College of Physicians and Surgeons, regular, coeducational (?), Kansas City, Kas., pop. 31,007, Dean, J. W. May, address —.

¹ 24 Ap '99, no reply received.

52. PREPARATORY MEDICAL COURSE, KANSAS UNIV., regular, Lawrence, Kas., pop. 9,997, Dean, S. W. Williston, M.D., State Univ., Lawrence.

Session opens 6 S, '98; closes 7 Je, '99; length, 9 mos.; matriculates, 1898-99, —.

Admission: high school diploma covering three years' course.

Course: one year.

Fees: \$ —.

Subjects: chemistry, pharmacy, pharmacognosy, osteology, anatomy, toxicology, urinary analysis, chemistry, materia medica, histology, physiology, bacteriology.

Faculty: professors, 9.

This is a preparatory course¹ of one year; a certificate of the completion of the year's course admits to the second year of any medical college recognized by Illinois State Board of Health.

Total property in medical department \$100,000; receipts, —; expenditures, \$18,000 (1898).

Organized 1880.

KENTUCKY.

Schools: regular, 6; homeopathic, 1; eclectic, 0; total, 7.

Session opens about —; closes about —.

Matriculates, 1897-98, —; graduates, 1897-99, —; matriculates, 1898-99.

Admission and graduation: no state requirements.

Fees: average matriculation, \$4.857; course, \$67.857; additional, \$56.50.

Faculty: professors, 88; lecturers, 12; others, 73; total, 173.

Total property, \$ —; receipts, \$ —; expenditures, \$ —.

53. KENTUCKY SCHOOL OF MEDICINE, regular, Louisville, pop. 161,129, Dean, William H. Wathen, M.D., L.L.D., the Fonda, Fourth Ave.

Session opens 3 Ja, '99; closes, 3 Jl, '99; length, 6 mos.; matriculates, 1898, 333; graduates, 1898, 135; matriculates, 1899, 173.

Admission: certificate of good moral character signed by two physicians; college graduation or certificate from academy, high school, normal school or equivalent required for first- or second-grade teachers' certificates; a satisfactory knowledge of English, mathematics, physics, and Latin; requirements A. A. M. C. (see p. 8); to advanced standing: work of recognized schools for other years than senior; work of unrecognized schools on examination; requirements of A. A. M. C. (see p. 9).

Graduation: age 21; good moral character; four years' study; attendance on four annual lecture courses of six months each, the last at this college; two years of clinics; two laboratory courses in anatomy and chemistry; one

¹ Enlarged to two years' course for session 1899-1900 including all studies of first two years of a regular four years' course.

laboratory course in histology, pathology, bacteriology and operative surgery; practical work in physical diagnosis; obstetric manipulations and other departments; examinations.

Course: four years for all graduating after 1898.

Fees: matriculation, \$5 per annum; course, \$75; anatomic and chemic laboratories, \$20 each; others, \$10; hospital, \$10.

Subjects: anatomy, histology, physiology, physics, chemistry, materia medica, pharmacy, pathologic, histology, bacteriology, principles and practice of medicine, diseases of children, of the nervous system, of the eye, ear, nose, throat, rectum, genito-urinary diseases, electro-therapeutics, jurisprudence, obstetrics, gynecology, pediatrics, dermatology, orthopedics, ophthalmology.

Faculty: professors, 11; associate professor, 1; lecturers, 5; assistants, 11; director, 1; instructors, 2.

Total property, \$—; receipts, \$—; expenditures, \$— (1898).

Medical Dep't, Transylvania Univ., organized 1817; first class graduated 1817, and classes graduated each subsequent year; succeeded by Kentucky School of Medicine, organized 1850; first class graduated 1850, and classes graduated in each subsequent year except — inclusive.

54. LOUISVILLE MEDICAL COLLEGE, regular, Louisville, pop. 161,129, Dean, C. W. Kelly, M.D., C.M., 204 West Green st.

Session opens 26 S, '98; closes 28 Mr, '99; length, 6 mos.; matriculates, 1897-98, 180; graduates, 1897-98, 73; matriculates, 1898-99, 100.

Admission: good moral character, certified by two physicians; college, academy, high or normal school diploma; equivalent certificate or examination in English, arithmetic, algebra, physics, and Latin; to second year: college graduates; graduates of pharmacy, dentistry, and veterinary schools requiring two years' attendance on examination and laboratory work of first year.

Graduation: lawful age; good moral character; attendance on four annual lecture courses of six months each, the last at this college; two sessions of dissection; two courses of clinics; one laboratory course in chemistry, histology, bacteriology, pathology, and surgery; examinations.

Course: four years for all graduating after 1898.

Fees: matriculation, \$5 per annum; course, \$75; anatomy, \$12; histologic laboratory, \$10; chemic laboratory, bacteriology, \$5 each; operative surgery, \$10; examination, \$30; surgical dressings, \$5.

Subjects: anatomy, physiology, chemistry, materia medica, histology, pathology, bacteriology, urinalogy, surgery, medicine, diseases of children, of the eye, ear, nose and throat, genito-urinary, rectal, nervous and mental diseases, neurology, obstetrics, gynecology, ophthalmology, hygiene, pediatrics, dermatology, jurisprudence.

Faculty: professors, 11; lecturer, 1; instructors, 11; directors of laboratories, 4.

Total property, \$150,000; receipts, \$20,000; expenditures, \$20,000 (1898).

Organized 1869; first class graduated 1870, and classes graduated in each subsequent year.

55. LOUISVILLE NATIONAL MEDICAL COLLEGE,¹ regular, coeducational, Louisville, pop. 161,129, Dean, H. Fitzbutler, M.D., 112 W. Green St.

Session opens —, '98; closes —, '99; length, — mos.; matriculates, 1897-98, —; graduates, 1897-98, —; matriculates, 1898-99, —.

Admission: good moral character; matriculation in another approved school, college, dental or pharmacy school, teacher's or school certificate, or examination in reading, spelling, arithmetic, grammar, natural philosophy; to advanced standing: work of recognized schools for other years than senior.

Graduation: age 21; three years' study, the last at this school; two sessions of dissection; examinations.

Course: four years for all graduating after —.

Fees: matriculation, \$4; course, \$25; laboratory, \$9; anatomy, \$9; final examination, \$20.

Subjects: anatomy, chemistry, physiology, materia medica, dermatology, histology, pathology, hygiene, jurisprudence, obstetrics, nosology, principles and practice of medicine, surgery, bacteriology.

Faculty: professors, 11.

Total property, \$—; receipts, \$—; expenditures, \$— (1898).

Organized 1888; first class graduated —, and classes graduated in each year except — inclusive.

56. MEDICAL DEP'T, CENTRAL UNIVERSITY OF KENTUCKY, regular, Louisville, pop. 161,129, Dean, P. Richard Taylor, M.D., 229 West Chestnut St.

Session opens 2 Ja, '99; closes 29 Je, '99; length, 6 mos.; matriculates, 1898, 427; graduates, 1898, 130; matriculates, 1899, 467.

Admission: good moral character; graduation from literary or scientific institution of learning; certificate from high school or first- or second-grade teachers' certificate; examination requirements of A. A. M. C. (see p. 8); to advanced standing: work of recognized schools for other years than senior; graduates of colleges, homeopathic and eclectic schools included, having completed courses in elementary branches of medicine, including chemistry and biology, may apply for advanced standing; to second year: graduates of pharmacy, dentistry, and veterinary medicine on examination in subjects of first year.

Graduation: age 21; good moral character; four years' study; attendance on four annual lecture courses of six months each, the last at this college; two sessions of dissection; two courses in clinics; one laboratory course in chemistry, histology, pathology, bacteriology, surgery; examinations.

Course: four years for all graduating after 1898.

Fees: matriculation, \$5; course, \$75; final examination, \$30; hospital, \$5; laboratory courses, \$10 each.

¹ 24 Ap '99, no reply received.

Subjects: anatomy, materia medica, physiology, chemistry, histology, pathology, bacteriology, therapeutics, principles and practice of medicine, of surgery, hygiene, gynecology, pediatrics, ophthalmology, otology, jurisprudence, dermatology, diseases of the rectum, of the nervous system, of the chest, obstetrics, otology, rhinology and laryngology, dermatology, Latin.

Faculty: professors, 11; adjuncts, 2; lecturer, 1; demonstrators, 3; chiefs of clinic, 3; assistants, 16; instructor, 1.

Total property, \$—; receipts, \$—; expenditures, \$— (1898).

Hospital College of Medicine organized 1873; first class graduated 1875, and classes graduated each subsequent year.

57. MEDICAL DEP'T, KENTUCKY UNIV., regular, Louisville, pop. 161,129, Dean, Thomas C. Evans, M.D., 419 W. Chestnut St.

Session opens 2 Ja, '99; closes 30 Je, '99; length, 6 mos.; matriculates, 1899, 65.

Admission: good moral character; college matriculation or graduation; academy, high or normal school and teachers' certificates; examination in English, arithmetic, algebra, physics, and Latin; to advanced standing: requirements, A. A. M. C. (see p. 9); work of unrecognized colleges on examination.

Graduation; age 21; good moral character; four years' study; attendance on four annual lecture courses of six months each, the last at this college; two sessions of dissection; course in each laboratory; examinations.

Course: four years for all graduating after 1899.

Fees: matriculation, \$5; course, \$75; final examination, \$30; hospital, \$5; laboratories, \$10 each.

Subjects: anatomy, physiology, chemistry, materia medica, therapeutics, principles and practice of medicine, obstetrics, hygiene, pathology, gynecology, pediatrics, ophthalmology, otology, laryngology, jurisprudence, dermatology, diseases of the rectum, chest, of the nervous system, rhinology, orthopedics, dermatology, surgery.

Faculty: professors, 12; directors, 4; instructor, 1; demonstrator, 1.

Total property, \$30,000.

Organized 1898; first class graduated 1899.

58. MEDICAL DEP'T, LOUISVILLE UNIV., regular, Louisville, pop. 161,129, Dean, J. M. Bodine, M.D., 739 4th St.

Session opens 26 S, '98; closes 27 Mr, '99; length, 6 mos.; matriculates, 1897-98, 202; graduates, 1897-98, 86; matriculates, 1898-99, 140.

Admission: examination in English, arithmetic, algebra, physics, Latin; college, high school, normal, academy and medical student certificates from state board covering above subjects; to advanced standing: requirements of A. A. M. C. (see p. 9).

Graduation: age 21; good moral character certified by two physicians; four years' study and attendance on four annual lecture courses of six months each the last at this college; two courses of dissection; two courses of clinics or hospital instruction; attendance on commencement exercises.

Course : four years for all graduates after 1900.

Fees : matriculation, \$5 per annum ; course, \$75 ; dissection, \$12 per session ; normal histology and microscopic technology, \$10 ; pathologic histology, \$10 ; bacteriology, \$10 ; surgical dressings, \$5 ; operative surgery, \$12 ; ophthalmoscopy, \$5 ; examination, \$30.

Subjects : anatomy, physiology, chemistry, physics, materia medica, histology, pathology, surgery, medicine, neurology, obstetrics, gynecology, hygiene, genito-urinary diseases, ophthalmology, diseases of children, bacteriology, jurisprudence.

Faculty : professors, 10 ; lecturer 1 ; demonstrators, 6 ; assistants 6 ; chief of clinics, 1 ; anesthetist, 1.

Total property, \$100,000 ; receipts, \$— ; expenditures, \$— (1898).

Louisville Medical Institute organized 1837 ; present title 1846 ; first class graduated 1838, and classes graduated in each subsequent year except 1863.

59. SOUTHWESTERN HOMEOPATHIC MEDICAL COLLEGE,¹ coeducational, Louisville, pop. 161,129, Dean, A. Leight Monroe, M.D., 909 4th St.

Session opens 28 S, '98 ; closes ——— ; length, 6 mos. ; matriculates, 1897-98, 29 ; graduates, 1897-98, 13 ; matriculates, 1898-99, —.

Admission : college, academy, high or normal school diploma ; first-grade teachers' certificate ; college matriculation or evidence of fitness for profession ; to advanced standing : work of recognized schools for other years than senior ; college graduates admitted to second year on examination in first year's work.

Graduation : age 21 ; four years' study under physician ; attendance on four lecture courses, the last at this college.

Course : four years for all graduating after ———.

Fees : matriculation, \$5 ; one course, \$75 ; three courses, \$175 ; four courses, \$225 ; graduates of other colleges, \$50.

Subjects : anatomy, physiology, histology, chemistry, pathology, materia medica, embryology, hygiene, obstetrics, organon, principles and practice of medical surgery, pediatrics, gynecology, rhinology, laryngology, ophthalmology, otology, nervous diseases, bacteriology.

Faculty : professors, 20 ; lecturers, 4.

LOUISIANA.

Schools : regular, 2 ; homeopathic, 0 ; eclectic, 0 ; total, 2.

Session opens about first Oct. ; closes about middle March.

Matriculates, 1897-98, 338 ; graduates, 1897-98, 91 ; matriculates, 1898-99, 388.

Admission and graduation : no state requirements.

Fees : average matriculation, \$5 ; course, \$75 ; additional, \$46.25.

Faculty : professors, 16 ; lecturers, 7 ; others, 13 ; total, 36.

¹ 24 Ap '99, no reply received.

Total property, \$220,000; receipts, \$—; expenditures, \$—.

60. MEDICAL DEP'T, NEW ORLEANS UNIV., regular, coeducational, New Orleans, pop. 242,039, Dean, —, address—.

Session opens 2 S, '98; closes 10 F, '99; length, 5 mos.; matriculates, 1897-98, 17; graduates, 1897-98, 5; matriculates, 1898-99, 22.

Admission: age 17; good moral character; students of other schools; graduates of colleges, normal schools, and holders of first-grade teachers' certificate without examination; or examination in English, mathematics, physics and Latin; to advanced standing: work of recognized schools; persons having studied for one year, admitted on examination; college graduates of scientific courses; graduates of pharmacy schools requiring three years, and of dental schools requiring two years' course admitted to second year.

Graduation: age 21; good moral character; four years' study; attendance on four lecture courses, the last at this school; examinations.

Course: four years, for all graduating after 1898.

Fees: course, \$30; graduation, \$10; anatomic material, \$10; histology, \$1; chemistry, \$6.50.

Subjects: anatomy, histology, physiology, chemistry, Latin, materia medica, hygiene, bacteriology, embryology, laboratory work, dissecting, pathology, practice of medicine, of surgery, obstetrics, diseases of the nervous system, of women, children, electro-therapeutics, dermatology, jurisprudence.

Faculty: professors, 9.

Total property, \$20,000; receipts, \$—; expenditures, \$— (1898).

Organized 1889; first class graduated 1892; classes graduated in each subsequent year except 1896.

61. MEDICAL DEP'T, TULANE UNIV. OF LOUISIANA, regular, coeducational, New Orleans, pop. 242,039, Dean, Stanford E. Chaillé, M.D., address —.

Session opens 20 O, '98; closes 19 Ap, '99; length, 6 mos.; matriculates, 1897-98, 321; graduates, 1897-98, 86; matriculates, 1898-99, 366.

Admission: good moral character and professional fitness certified by physician as preceptor; college diploma; certificate from high school; county or state superintendent or parish board of attainments required of first-grade teachers; to advanced standing: work of recognized schools for other years than senior; graduates of dentistry, pharmacy, veterinary, homeopathic, and eclectic schools, and of recognized colleges having completed preparatory courses including chemistry and biology, on examination.

Graduation: age 21; good moral character; attendance on three lecture courses of six months each, the last at this school; two courses of dissection; two courses of clinics or hospital instruction; one laboratory course in chemistry, bacteriology, and histology and operative surgery; thesis; examinations.

Course: four years for all graduating after 1902.

Fees: matriculation, \$5 per annum; professor's fees, \$120; demonstra-

tor of anatomy, \$10; laboratories, \$15 each; operative surgery, \$10; diploma, \$30.

Subjects: physics, chemistry, jurisprudence, pharmacy, histology, anatomy, physiology, hygiene, materia medica, therapeutics, practice, dermatology, surgery, diseases of the eye, ear, nose, throat, of children, obstetrics, gynecology.

Faculty: professors, 7; lecturers, 7; demonstrators, 13.

Total property, \$200,000; receipts, \$—; expenditures, \$— (1898).

Medical College, Louisiana, organized 1834; first class graduated—, and classes graduated in each subsequent year except 1863-65 inclusive; transferred to Medical Dep't, Univ. of Louisiana 1847; present title 1884.

MAINE.

Schools: regular, 2; homeopathic, 0; eclectic, 0; total, 2.

Session opens about first Jan.; closes about last June.

Matriculates, 1897-98, —; graduates, 1897-98, —; matriculates, 1898-99, —.

Admission and graduation: no state requirements.

Fees: average matriculation, \$5; course, \$—; additional, \$—.

Faculty: professors,—; lecturers,—; others,—; total,—.

Total property, \$—; receipts, \$—; expenditures, \$—.

62. MEDICAL DEP'T, BOWDOIN COLLEGE, regular, Brunswick, Me., pop. 6,012, Dean, Alfred Mitchell, M.D., A.M., Brunswick.

Session opens 5 Ja, '99; closes 21 Je, '99; length, 6 mos.; matriculates, 1897-98, 126; graduates, 1897-98, 33; matriculates, 1898-99, 130.

Admission: examination in English composition, physics, Latin, elementary algebra, geometry, chemistry; graduates of colleges, normal or high schools or matriculates of colleges admitted without examination, if previous course includes Latin and chemistry; to advanced standing: work of recognized schools for other years than senior.

Graduation: age 21; good moral character; three years' study under physician; attendance on three annual lecture courses, the last at this school; examinations; thesis.

Course: four years for all graduating after 1902.

Fees: matriculation, \$5 per annum; course, \$78 each for first and second; \$50 for third.

Subjects: anatomy, chemistry, physiology, hygiene, materia medica, therapeutics, practice of medicine, bacteriology, pathology, diseases of women and children and of the eye, surgery, midwifery, jurisprudence.

Faculty: professors, 13; assistant, 1; demonstrators, 3; librarian, 1.

Total property, \$10,000; receipts, \$10,443; expenditures, \$2,075 (1898).

Medical School of Maine organized 1820; first class graduated 1820, and

classes graduated in each subsequent year; present title Medical School of Maine.

63. PORTLAND SCHOOL FOR MEDICAL INSTRUCTION,¹ regular, Portland, pop. 36,425, Dean, —, address —.

Session opens 6 Je, '99; 5 O, '99; closes 21 S, '99; 21 D, '99.

Incorporated 1858; the school was organized in accordance with resolutions adopted by the American Medical Association, "cordially approving the establishment of private schools, to meet the increasing desire of medical students for a higher grade of professional education than can usually be acquired under the direction of a single instructor."

MARYLAND.

Schools: regular, 7; homeopathic, 1; eclectic, 0; total, 8.

Session opens about first Oct.; closes about first May.

Matriculates, 1897-98, 1316; graduates, 1897-98, 325; matriculates, 1898-99, —.

Admission and graduation: — state requirements.

Fees: average matriculation, \$5; course, \$97.187; additional, \$33.857.

Faculty: professors, 120; lecturers, 48; others, 137; total, 305.

Total property, \$—; receipts, \$—; expenditures, \$—.

64. BALTIMORE MEDICAL COLLEGE, regular, Baltimore, pop. 434,439, Dean, David Streett, M.D., 712 Park Ave.

Session opens 29 S, '98; closes 29 Mr, '99; length, 5½ mos.; matriculates, 1897-98, 400; graduates, 1897-98, 147; matriculates, 1898-99, 334.

Admission: examination in Latin, physics, arithmetic, algebra, English composition; graduates and matriculates of colleges, normal or high schools, academies or equivalent schools; those holding teachers' or regents' certificates as required by New York; pharmacy graduates and matriculates in other schools are exempt from examination; to advanced standing: work of recognized schools for other years than senior; to second year: a scientific course including biology, graduation from pharmacy or veterinary schools, or degrees Ph.D. and B.S.

Graduation: age 21; good moral character; attendance on four lecture courses, the last at this school.

Course: four years for all graduating after 1898.

Fees: matriculation, \$5; full course, \$90.

Subjects: biology, embryology, anatomy, osteology, syndesmology, histology, physiology, chemistry, pathology, materia medica, principles and practice of medicine, of operative and clinical surgery, obstetrics, nervous and mental diseases, medical diagnosis, therapeutics, diseases of eye and ear,

¹ 24 Ap '99, no reply received.

of nose, of throat, of chest, of children, gynecology, hygiene, jurisprudence, bacteriology, dermatology.

Faculty : professors, 18 ; lecturers, 8 ; demonstrators, 9 ; clinical assistants, 16 ; fellows, 3.

Total property, \$300,000 ; receipts, \$70,000 ; expenditures, \$65,000 (1898).

Organized 1881 ; first class graduated 1882, and classes graduated in each subsequent year.

65. COLLEGE OF PHYSICIANS AND SURGEONS,¹ Baltimore, regular, Baltimore, pop. 434,439, Dean, Thomas Opie, M.D., Cor. Calvert and Saratoga Sts.

Session opens 1 O, '98 ; closes 31 Mr, '99 ; length, 5½ mos. ; matriculates, 1897-98, 249 ; graduates, 1897-98, 36 ; matriculates, 1898-99, —.

Admission : examinations in English, Latin, physics, algebra, higher arithmetic, except matriculates of colleges ; graduates of normal and high schools ; certificates of University State of New York are exempt ; to advanced standing : work of recognized schools for other years than senior ; graduates and matriculates in pharmacy, dental, and veterinary schools are given advanced standing ; a college chemic-biologic course admits to second year.

Graduation : age 21 ; good moral character ; attendance on four annual lecture courses, the last at this school ; examinations.

Course : four years for all graduating after 1897.

Fees : course, \$100 ; graduation, \$30 ; for graduates of other colleges, course (including spring course), \$60 ; spring course alone, \$50 ; diploma, \$30.

Subjects : surgery, practice of medicine, obstetrics, diseases of women, of the eye, ear, skin, of children, anatomy, materia medica, physiology, chemistry, pathology, bacteriology, jurisprudence, nervous, mental, genito-urinary diseases, pharmacology, therapeutics, electricity, hygiene.

Faculty : professors, 13 ; associates, 6 ; clinical, 1 ; lecturer, 1 ; demonstrators, 6 ; assistant demonstrators, 5 ; prosectors, 3.

Total property, \$— ; receipts, \$— ; expenditures, \$— (1898).

Organized 1872 ; first class graduated 1873 ; united 1877 with Washington Univ. School of Medicine ; organized 1827, Medical Department, Washington College, Penn. ; Maryland empowers title Washington Univ. School of Medicine 1840.

66. MARYLAND MEDICAL COLLEGE OF BALTIMORE, regular, Baltimore, pop. 434,439, Dean, Bernard Purcell Muse, M.D., 1002 Edmondson Ave.

Session opens 20 S, '98 ; closes 20 My, '99 ; length, 8 mos. ; matriculates, 1898-99, 73.

Admission : examinations in English, Latin, algebra or arithmetic, physics ; college matriculates or graduates ; graduates of dentistry, pharmacy, normal or high schools and matriculates in other schools are exempt.

Graduation : age 21 ; good moral character ; attendance on three lecture courses, the last at this school ; examinations.

¹ 24 Ap '99, no reply received.

Course : three years, for all graduating after 1898.

Fees : matriculation, \$5 ; full course, \$50 ; special, \$25 ; laboratory, \$10 each.

Subjects : obstetrics, diseases of women, children, of the eye, ear, nose, throat, chest, nervous system and mind, surgery, chemistry, toxicology, anatomy, materia medica, therapeutics, pharmacy, physiology, histology, hygiene, principles and practice of medicine, jurisprudence, pathology, bacteriology, dermatology.

Faculty : professors, 17 ; lecturers, 2 ; demonstrators, 2 ; chiefs of clinic, 11.

Total property, \$25,000.

Organized 1898 ; first class graduated 1899.

67. MEDICAL DEP'T, BALTIMORE UNIV., regular, Baltimore, pop. 434,439, Dean, Hampson H. Biedler, M.D., A.M., 119 W. Saratoga St.

Session opens 1 O, '98 ; closes 15 Ap, '99 ; length, 6 mos. ; matriculates, 1897-98, 195 ; graduates, 1897-98, 102 ; matriculates, 1898-99, 130.

Admission : examinations in English, Latin, algebra or arithmetic, physics, except college graduates ; graduates of pharmacy, dentistry, of normal and high schools ; those holding certificates of the University State of New York ; matriculates of other schools.

Graduation : age 21 ; good moral character ; four years' study ; attendance on four annual lecture courses, of six months each, the last at this school ; examination.

Course : four years, for all graduating after 1900.

Fees : matriculation, \$5 per annum ; histology, \$5 ; anatomy, \$20 ; chemistry, \$10 ; pathology, \$5 ; full course, \$50 ; graduation, \$30.

Subjects : practice of medicine, obstetrics, surgery, diseases of women, of the eye, ear, skin, nervous system, throat, chest, of children, chemistry, toxicology, materia medica, therapeutics, anatomy, physiology, pathology, bacteriology, histology, hygiene, jurisprudence.

Faculty : professors, 11 ; demonstrators, 5 ; lecturers, 10.

Total property, \$35,000 ; receipts, \$16,000 ; expenditures, \$13,000 (1898).

Organized 1884 ; first class graduated 1885, and classes graduated in each subsequent year.

68. MEDICAL DEPARTMENT, JOHNS HOPKINS UNIVERSITY,¹ regular, coeducational, Baltimore, pop. 434,439, Dean, William Osler, M.D., LL.D., 1 W. Franklin St.

Session opens 1 O, '98 ; closes 13 Je, '99 ; length, 8 mos. ; matriculates, 1897-98 (undergraduate), 167 ; (post-graduate), — ; graduates, 1897-98, — ; matriculates, 1898-99, —.

Admission : completion of chemic-biologic course in the university ; completion of college courses including Latin, French, German, physics, chemistry, and biology ; examinations in above subjects and in subjects leading to degree in arts or science, or examinations for matriculation in this university and chemic-biologic course examinations and evidence of

¹ 24 Ap '99, no reply received.

required laboratory work ; to advanced standing : work of recognized schools for other years than senior, on examination.

Graduation : attendance on four lecture courses, the last at this school.

Course : four years.

Fees : course, \$200 per annum ; for renting apparatus, \$7.

Subjects : anatomy, physiology, chemistry, pharmacology, therapeutics, pharmacy, pathology, bacteriology, medicine, surgery, obstetrics, gynecology, practice of medicine and surgery, dermatology, diseases of children, of the nervous system, genito-urinary diseases, laryngology, rhinology, zoology, jurisprudence, ophthalmology, otology, psychiatry, hygiene.

Faculty : professors, 10 ; clinical, 6 ; associates, 5 ; lecturers, 4 ; associates, 11 ; instructors, 4 ; assistants, 12.

Organized 1898.

69. SCHOOL OF MEDICINE OF THE UNIVERSITY OF MARYLAND, regular, Baltimore, pop. 434,439, Dean, C. W. Mitchell, M.D., 1021 Cathedral St.

Session opens 3 O, '98 ; closes 20 Ap, '99 ; length, 6 mos. ; matriculates, 1897-98 (undergraduate), 238 ; (post-graduate), 15 ; graduates, 1897-98, 33 ; matriculates, 1898-99, 273.

Admission : examinations in English, Latin, physics, algebra, higher arithmetic, except college matriculates or graduates ; graduates of normal or high schools ; certificates University of the State of New York ; to advanced standing : work of recognized schools.

Graduation : attendance on four annual lecture courses of six months each ; examinations ; good moral character.

Course : four years for all graduating after 1897.

Fees : matriculation, \$5 per year ; practical anatomy, \$20 ; course, \$100 per annum ; laboratory, \$5 per annum ; graduation, \$30.

Subjects : physiology, chemistry, anatomy, osteology, materia medica, histology, surgery, therapeutics, embryology, pathology, bacteriology, practice of medicine, diseases of women and children, of the eye and ear, jurisprudence, hygiene, obstetrics.

Faculty : professors, 23 ; lecturers, 7 ; demonstrators, 7 ; prosector, 1 ; anatomic assistants, 3.

Total property, \$250,000 ; receipts, \$27,000 ; expenditures, \$26,500 (1898).

Medical College, city of Baltimore, organized 1807 ; first class graduated 1810 (?), and classes graduated each subsequent year except — inclusive ; present title 1812.

70. SOUTHERN HOMEOPATHIC MEDICAL COLLEGE, coeducational, Baltimore, pop. 434,439, Dean, Henry Chandlee, M.D., 704 W. North Ave.

Session opens 3 O, '98 ; closes 18 Ap, '99 ; length, 6 mos. ; matriculates, 1897-98, 35 ; graduates, 1897-98, 7 ; matriculates, 1898-99, 40.

Admission : good moral character ; college high school, academy, teacher's certificate, or high school entrance examinations including Latin ; matriculates in dentistry, pharmacy and matriculates and graduates of other recognized schools are exempt from examinations ; to advanced standing : evi-

dence of qualification in first-year studies admits to second year, work of recognized schools for other years than senior.

Graduation : age 21 ; good moral character ; four years' study ; attendance on four annual lecture courses, the last at this school ; one course each in histology, anatomy, chemistry, obstetrics, and surgery.

Course : four years for all graduating after 1897 (?).

Fees : matriculation, \$5 ; course, \$100 ; four courses, \$350 ; graduates of other colleges, \$100 ; partial course, \$10 each ; examination, \$30.

Subjects : sanitary science, jurisprudence, materia medica, pharmacy, practice of medicine, pediatrics, neurology, dermatology, obstetrics, gynecology, anatomy, ophthalmology, otology, laryngology, rhinology, physiology, chemistry, pathology, histology, bacteriology, surgery.

Faculty : professors, 14 ; lecturers, 11 ; demonstrators, 4.

Total property, \$30,000 ; receipts, \$3,300 ; expenditures, \$3,300 (1898).

Organized 1890 ; first class graduated 1892, and classes graduated in each subsequent year.

71. WOMAN'S MEDICAL COLLEGE OF BALTIMORE, regular, Baltimore, pop. 434,439, Sec'y, Joseph T. Smith, M.D., 1010 Madison Ave.

Session opens 3 O, '98 ; closes 18 My, '99 ; length, 7 mos. ; matriculates, 1897-98, 17 ; graduates, 1897-98, none ; matriculates, 1898-99, 21.

Admission : requirements A. A. M. C. (see p. 8) ; to advanced standing : requirements A. A. M. C. (see p. 9).

Graduation : age 21 ; attendance on four lecture courses, the last at this school ; certificate of two dissections ; examinations.

Course : four years for all graduating after 1897.

Fees : matriculation, \$5 per annum ; course, \$100 for first three years ; fourth year, \$50 ; special, \$15 each ; final examination, \$30 ; breakage, \$5 ; full course for missionary work, \$75.

Subjects : anatomy, osteology, physiology, chemistry, materia medica, pharmacy, embryology, therapeutics, hygiene, histology, pathology, bacteriology, dissection, practice, surgery, obstetrics, diseases of women and children, of the eye, ear, chest, nose and throat, jurisprudence, orthopedics, dermatology, mental diseases, neurology, clinical microscopy, physical diagnosis.

Faculty : professors, 14 ; associates, 4 ; lecturers, 5 ; demonstrators, 3 ; instructor, 1 ; curators, 2 ; clinical assistants, 7.

Total property, \$36,884 ; receipts, \$9,062.59 ; expenditures, \$7,428.97 (1898).

Organized 1882 ; first class graduated 1883, and classes graduated in each subsequent year except 1898.

MASSACHUSETTS.

Schools : regular, 3 ; homeopathic, 1 ; eclectic, 0 ; total, 4.

Session opens about first Oct. ; closes about middle June.

Matriculates, 1897-98, 1116 ; graduates, 1897-98, 232 ; matriculates, 1898-99, 1066.

Admission and graduation : no state requirements.

Fees : average matriculation, \$5 ; course, \$118.75 ; additional, \$40.75.

Faculty : professors, 82 ; lecturers, 29 ; others, 148 ; total, 259.

Total property, \$— ; receipts, \$— ; expenditures, \$—.

72. COLLEGE OF PHYSICIANS AND SURGEONS, regular, coeducational, Boston, pop. 448,447, Dean, Augustus P. Clarke, M.D., A.M., 825 Massachusetts Ave., Cambridge.

Session opens 21 S, '98 ; closes 21 Je, '99 ; length, 9 mos. ; matriculates, 1897-98, 112 ; graduate, 1897-98, 1 ; matriculates, 1898-99, 95.

Admission : requirements A. A. M. C. (see p. 8) ; to advanced standing : requirements A. A. M. C. (see p. 9).

Graduation : age 21 ; four years' study ; attendance on four annual lecture courses of six months each, the last at this school ; dissection of entire cadaver ; attendance on six cases of obstetrics ; thesis ; good moral character.

Course : four years for all graduating after 1897.

Fees : matriculation, \$5 per annum ; course, first year, \$75 ; second, third, and fourth years, \$100 each ; four courses, \$300 ; graduation, \$30 ; laboratory, \$5.

Subjects : chemistry, materia medica, physiology, biology, histology, embryology, anatomy, therapeutics, hygiene, bacteriology, pathology, anthropometry, laryngology, dermatology, syphilis, theory and practice, surgery, medicine, obstetrics, gynecology, mental and nervous diseases, ophthalmology, otology, pediatrics, genito-urinary surgery, jurisprudence.

Faculty : professors, 28 ; lecturers, 15 ; and other instructors.

Total property, \$100,000 ; receipts, \$50,000 ; expenditures, \$50,000 (1898).

Organized 1880 ; first class graduated 1882, and classes graduated in each subsequent year.

73. MEDICAL DEP'T, BOSTON UNIV., homeopathic, coeducational, Boston, pop. 448,477, Dean, I. Tisdale Talbot, M.D., 687 Boylston St.

Session opens 6 O, '98 ; closes 7 Je, '99 ; length, 7½ mos. ; matriculates, 1897-98 (undergraduate), 190 ; (post-graduate), 6 ; graduates, 1897-98, 46 ; matriculates, 1898-99, 164.

Admission : age 18 ; college graduates or examination in orthography, English composition, arithmetic, geography, grammar, physics, Latin ; to advanced standing : special scientific courses in other schools on laboratory books and credentials ; to second year : college graduates with conditions in first-year human anatomy and physiology.

Graduation : age 21 ; good moral character ; four years' study, the last at this school ; final examinations ; thesis ; satisfactory standing.

Course : four years for all graduating after —.

Fees : matriculation, \$5 ; course, first year, \$100, second, third, and fourth,

\$125 each; graduates of other medical colleges, one year, \$125; graduation as Bachelor of Medicine or Surgery, \$10; Doctor of Medicine, \$30.

Subjects: chemistry, anatomy, zoology, physiology, microscopy, botany, embryology, histology, surgery, sanitary science, dietetics, pharmaceuticals, materia medica, pathology, therapeutics, obstetrics, gynecology, pedology, dermatology, ophthalmology, otology, diseases of chest, throat, rectum, nervous and venereal diseases, insanity, electro-therapeutics, jurisprudence, history and ethics of medicine, bacteriologic technique, physical development and medical gymnastics.

Faculty: professors, 16; emeritus, 2; associate, 8; lecturers, 9; instructors, 12; demonstrator, 1; assistants, 6; librarian, 1.

Total property, \$200,000; receipts, \$31,220.41; expenditures, \$16,993.45 (1898).

Organized 1873; first class graduated 1874, and classes graduated in each subsequent year; New England Female Medical College organized 1848; first class graduated 1852, and classes graduated in subsequent years till 1874; united 1874.

74. MEDICAL SCHOOL, HARVARD UNIV., regular, Boston, pop. 448,447, Dean, William L. Richardson, M.D., Boylston and Exeter Sts.

Session opens 29 S, '98; closes 28 Je, '99; length, 8½ mos.; matriculates, 1897-98, 588; graduates, 1897-98, 126; matriculates, 1898-99, 560.

Admission: examination in English, Latin, physics, general chemistry, qualitative analysis, French or German, algebra, geometry or botany; certificate of examination in above subjects from Harvard or Lawrence Scientific School; college degrees exempt from examination except general chemistry and qualitative analysis; to advanced standing: three years in recognized colleges, technical or scientific schools with courses in human anatomy, physiology, histology, and chemistry.

Graduation: age 21; good moral character; four years' study in school, the last at this school; examinations.

Course: four years for all graduating after 1895.

Fees: matriculation, \$5; first three years, \$200 each; fourth year, \$100 to regular members of school for three years; graduation, \$30; dissection, \$6; material, \$7.

Subjects: anatomy, histology, embryology, bacteriology, physiology, physiologic and clinical chemistry, therapeutics, materia medica, pathology, advanced anatomy, surgery, clinical surgery, dermatology, syphilis, theory and practice, clinical medicine, neurology, psychiatry, pediatrics, obstetrics, gynecology, ophthalmology, otology, laryngology, genito-urinary, surgery, orthopedics, hygiene, legal medicine, municipal sanitation.

Faculty: professors, 22; assistants, 8; demonstrators, 3; curator, 1; lecturer, 1; instructors, 22; assistants, 43; special clinical instructors, 10.

Total property, \$—; receipts, \$—; expenditures, \$— (1898).

Organized 1782; first class graduated 1788, and classes graduated in each subsequent year.

75. TUFTS COLLEGE MEDICAL SCHOOL, regular, coeducational, Boston, pop. 448,447, Dean, Harold Williams, M.D., A.B., 528 Beacon St.

Session opens 21 S, '98; closes 31 My, '99; length, 8 mos.; matriculates, 1897-98, 220; graduates, 1897-98, 59; matriculates, 1898-99, 247.

Admission: examination in English, Latin, arithmetic, physics; matriculates or graduates of other recognized schools and of dentistry and pharmacy; college matriculates and graduates of normal and high or equivalent schools, or those holding N. Y. regents' certificates are exempt from examinations; to advanced standing: college graduates completing preparatory course equivalent to that of this college are admitted to second year; college graduates admitted to second year on examination; students passing majority of first-year subjects are admitted to second year; all first-year and majority of second-year examinations admit to third year; all first- and second-year and majority of third-year examinations admit to fourth year.

Graduation: age 21; good moral character; attendance on four annual lecture courses, the last at this school; examinations; attendance on two cases of obstetrics; dissection of half of body.

Course: four years for all graduating after 1898.

Fees: matriculation, \$5 per annum; demonstrator, \$5; laboratory, \$20; three courses, \$100 each; four courses, \$300; lecture, \$50; graduation, \$30; instruction in single branch, \$40; graduates of other schools, \$50; dissecting material at cost.

Subjects: anatomy, histology, embryology, physiology, general and medical chemistry, materia medica, therapeutics, pathology, bacteriology, theory and practice of medicine, neurology, mental diseases, diseases of children, of rectum, surgery, gynecology, jurisprudence, obstetrics, otology, electrotherapeutics, genito-urinary diseases, military sanitation and life insurance, laryngology, ophthalmology, dermatology, orthopedic surgery, hygiene.

Faculty: professors, 16; assistants, 2; lecturers, 4; instructors, 17; demonstrator, 1; assistants, 5; laboratory, 6.

Total property, \$100,000; receipts, \$20,000; expenditures, \$20,000 (1898).

Organized 1893; first class graduated 1894 (?), and classes graduated in each subsequent year except — inclusive.

MICHIGAN.

Schools: regular, 5, homeopathic, 1; eclectic, 0; total, 6.

Session opens about last Sept.; closes about last May.

Matriculates, 1897-98, —; graduates, 1897-98, —; matriculates, 1898-99, —.

Admission and graduation: no state requirements.

Fees: average matriculation, \$11.66; course, \$50; additional, \$78.66.

Faculty: professors, 108; lecturers; 26; others, 108; total, 242.

Total property, \$—; receipts, \$—; expenditures, \$—.

76. DEP'T OF MEDICINE AND SURGERY, Michigan Univ., regular, coeducational, Ann Arbor, pop. 9,431, Dean, Victor C. Vaughan, M.D., Ph.D., 221 S. State St.

Session opens 27 S, '98; closes 22 Je, '99; length, 8½ mos.; matriculates, 1897-98 (undergraduate), 432; (post-graduate), 8; graduates, 1897-98, 69; matriculates, 1898-99, 445.

Admission: age 17; good moral character; examination in English, arithmetic, algebra, geometry, physics, biology, history, Latin; matriculation in college; classical or Latin course certificate of graduation from high schools, academies and equivalent schools exempt from examination; to advanced standing: work of recognized schools for other years than the last two, but graduates may enter third year.

Graduation: age 21; good moral character; four years' study; attendance on four lecture courses, the last two at this school unless a graduate of another recognized school.

Course: four years for all graduating after 1892 (?).

Fees: matriculation, for Michigan students, \$10; all others, \$25; course, for Michigan students, \$35 per annum; all others, \$45 per annum; diploma, \$10; laboratory and demonstration, \$140.

Subjects: anatomy, osteology, chemistry, physics, bacteriology, histology, zoology, hygiene, embryology, pathology, electro-therapeutics, physiology, theory and practice, surgery, materia medica, nervous diseases, obstetrics, gynecology, ophthalmology, otology, laryngology, pharmacology, dermatology, syphilology, jurisprudence.

Faculty: professors, 13; assistants, 2; lecturers, 4; instructors, 8; demonstrators, 4; assistants, 12; assistant demonstrators, 4; officials, 5; in University Hospital, special lecturers, 6.

Total property, \$250,000; receipts, \$51,522; expenditures, \$69,000 (1898).

Organized 1850; first class graduated 1851, and classes graduated in each subsequent year.

77. DETROIT COLLEGE OF MEDICINE,¹ regular, Detroit, pop. 205,876, Dean, Theodore G. McGraw, M.D., 73 Cass St.

Session opens 28 S, '98; closes 10 Je, '99; length, 8½ mos.; matriculates, 1897-98, 191; graduates, 1897-98, 30; matriculates, 1898-99, —.

Admission: examination in English, arithmetic, algebra, Latin, U. S. history, physics, or certificate of college, academy, normal, or high school, and certificate of state board covering above subjects; to advanced standing: college degree admits to second year; work of homeopathic and eclectic schools accepted; graduates of pharmacy, dental, and veterinary schools given credit for one year less than course pursued by them.

Graduation: age 21; good moral character; attendance on four annual lecture courses, the last at this school; dissection of cadaver; laboratory courses in histology, pathology, surgery, chemistry, physiology, bacteriology, practical physical diagnosis, clinics, examinations.

¹ 24 Ap '99, no reply received.

Course : four years for all graduating after 1897 (?).

Fees : matriculation, \$5 ; course, \$60 per annum ; hospital, \$10 per annum ; obstetrics, \$10 ; laboratory, \$10 each ; graduation, \$30.

Subjects : anatomy, histology, chemistry, physiology, biology, embryology, materia medica, bacteriology, pathology, genito-urinary, rectal and orthopedic surgery, otology, ophthalmology, gynecology, laryngology, pediatrics, neurology, dermatology, jurisprudence.

Faculty : professors, 21 ; adjuncts, 3 ; lecturers, 11 ; assistants, 9 ; instructors, 13 ; demonstrator, 1 ; prosector, 1 ; director of clinic, 1 ; clinic professors, 10.

Detroit Medical College organized 1868.

Michigan College of Medicine organized 1880.

Consolidated under present title 1885.

78. HOMEOPATHIC MEDICAL COLLEGE, MICHIGAN UNIV., coeducational, Ann Arbor, pop. 9,431, Dean, Wilbert B. Hinsdale, M.D., M.S., 611 Forest Ave.

Session opens 27 S, '98 ; closes 22 Je, '99 ; length, 8½ mos. ; matriculates, 1897-98, 48 ; graduates, 1897-98, 59 ; matriculates, 1898-99, 69.

Admission : age 17 ; good moral character ; college matriculation or graduation from college, or approved schools, or examination in English, arithmetic, algebra, geometry, physics, botany, zoology, history, and Latin ; to advanced standing : work of other schools for other years than senior.

Graduation : age 21 ; good moral character ; four years' study, the last at this school ; laboratory work ; examinations.

Course : four years for all graduating after 1892.

Fees : matriculation, for Michigan students, \$10 ; all others, \$25 ; course, for Michigan students, \$35 per annum ; all others, \$45 per annum ; diploma, \$10 ; laboratory, \$72.

Subjects : osteology, anatomy, chemistry, bacteriology, materia medica, pharmacy, physics, histology, gynecology, principles of medicine, theory and practice, surgery, physiology, hygiene, embryology, obstetrics, ophthalmology, otology, laryngology, pathologic histology, nervous diseases, dermatology, jurisprudence.

Faculty : professors, 13 ; assistant, 1 ; lecturer, 1 ; instructors, 9 ; assistants, 8 ; assistant demonstrators, 3 ; clinical assistants, 8, 1 in charge of training school for nurses.

Total property, \$60,000 ; receipts, \$18,000 ; expenditures, \$21,000 (1898).

Organized 1875 ; first class graduated 1877, and classes graduated in each subsequent year.

79. MEDICAL DEP'T, GRAND RAPIDS MEDICAL COLLEGE,¹ regular, coeducational, Grand Rapids, pop. 60,278, Dean, William Fuller, M.D., C.M., 35 Monro St.

Session opens 19 S, '98 ; closes 12 My, '99 ; length, 7½ mos.

Admission : age 18 ; good moral character ; graduation from college,

¹ 24 Ap '99, no reply received.

academy, normal or high school; teacher's certificate; or examination in English, arithmetic, U. S. history, geography, grammar, unless registered pharmacist; to advanced standing: graduates from pharmacy, dental, veterinary schools and preparatory courses in college.

Graduation: age 21; good moral character; attendance on three lecture courses, the last at this school; two courses of dissection; one year of clinics; final examinations.

Course: three years for all graduating after —.

Fees: matriculation, \$5; course, \$50 per annum. laboratory, \$30; diploma, \$25.

Subjects: anatomy, physiology, materia medica, therapeutics chemistry, bacteriology, pathology, toxicology, histology, embryology, gynecology, electro-therapeutics, principles and practice of medicine and surgery, hygiene, sanitary science, venereal, genito-urinary, mental and nervous diseases, diseases of chest and of children, jurisprudence, orthopedics, ophthalmology, otology, rhinology, laryngology, dermatology, syphilography, pediatrics.

Faculty: professors, 22; emeritus, 2.

80. MICHIGAN COLLEGE OF MEDICINE AND SURGERY, regular, coeducational, Detroit, pop. 205,876, Dean, Hal C. Wyman, M.D., 46 W. Adams Ave.

Session opens 23 S, '98; closes 28 Mr, '99; length, 6 mos.; matriculates, 1897-98 (undergraduate), 141; (post-graduate), 4; graduates, 1897-98, 18; matriculates, 1898-99, 64.

Admission: matriculation in other recognized schools; college, high school, or first class teacher's certificate; or examination in English, arithmetic, algebra, physics, Latin, general history; to advanced standing: work of recognized schools for other years than senior.

Graduation: age 21; good moral character; four years' study; attendance on four lecture courses, the last at this school; examinations.

Course: four years for all graduating after 1898.

Fees: matriculation, \$5 per annum; course, \$50 per annum; chemic material, \$15; anatomic, \$20; bacteriology and microscopy, \$10; graduation, \$25.

Subjects: anatomy, physiology, chemistry, histology, biology, materia medica, botany, physics, bacteriology, pathology, embryology, principles of surgery, principles of medicine, jurisprudence, ophthalmology, otology, therapeutics, obstetrics, gynecology, hygiene, venereal diseases, diseases of children, mind, neurology, laryngology, rhinology, dermatology.

Faculty: professors, 14; lecturers, 4; instructor, 1; assistant demonstrator, 1; clinical assistant, 1.

Total property, \$50,000; receipts, \$7,500; expenditures, \$7,500 (1898).

Organized 1888; first class graduated 1889, and classes graduated in each subsequent year.

81. SAGINAW VALLEY MEDICAL COLLEGE, regular, coeducational, Saginaw, pop. 46,322, Dean, L. W. Bliss, M.D., Saginaw, W. S.

Session opens 21 S, '98; closes 18 My, '99; length, 7½ mos.; matriculates, 1897-98, 60; graduates, 1897-98, 8; matriculates, 1898-99, 76.

Admission : age 18 ; good moral character ; certificate, diploma, degree, or other evidence of scholarship, or examination ; to advanced standing : work of recognized schools for other years than senior ; to second year : those completing preparatory course, and graduates of pharmacy, dental, and veterinary schools.

Graduation : age 21 ; good moral character ; attendance on three lecture courses, the last at this school ; two courses in practical anatomy ; dissection of body ; examinations.

Course : three years.

Fees : matriculation, \$5 ; course, \$50 per annum ; anatomy, \$10 ; hospital, \$10 per annum ; laboratories, \$10 each ; final examination, \$25.

Subjects : anatomy, physiology, chemistry, hygiene, materia medica, histology, bacteriology, therapeutics, medicine, surgery, obstetrics, gynecology, nervous and mental diseases, diseases of children, eye, nose, throat and ear, jurisprudence.

Faculty : professors, 22 ; demonstrator, 1 ; assistants, 2.

Total property, \$5,000 ; receipts, \$5,500 ; expenditures, \$5,500 (1898).

Organized 1896 ; first class graduated 1897, and classes graduated each subsequent year.

MINNESOTA.

Schools : regular, 2 ; homeopathic, 1 ; eclectic, 0 ; total, 3.

Session opens last Sept. ; closes about first June.

Matriculates, 1897-98, 350 ; graduates, 1897-98, 29 ; matriculates, 1898-99, 428.

Admission and graduation : — state requirements.

Course : four years for all matriculates before 189— who graduate before 190— ; four years for all others.

Fees : average matriculation, \$1.66 ; course, \$85 ; additional, \$2.33.

Faculty : professors, 73 ; lecturers, 2 ; others, 69 ; total, 144.

Total property, \$— ; receipts, \$— ; expenditures, \$—.

82. COLLEGE OF HOMEOPATHIC MEDICINE AND SURGERY, Minnesota Univ., coeducational, Minneapolis, pop. 164,738, Dean, Alonzo P. Williamson, M.D., LL.B., 602 Nicollet Ave.

Session opens 20 S, '98 ; closes 28 My, '99 ; length, 7½ mos. ; matriculates, 1897-98, 27 ; graduates, 1897-98, none ; matriculates, 1898-99, 22.

Admission : diploma from approved college or school or preparatory course in approved colleges or schools, representing one year of Latin, or examinations in English composition, algebra, physics, Latin, U. S. history, physiology ; to advanced standing : complete college course in history, physiology, and chemistry admit to second year.

Graduation : age 21 ; good moral character ; attendance on four lecture courses of eight months each.

Course : four years for all graduating after 1897.

Fees : course, \$100 per annum for first two years ; \$80 per annum for last two years ; microscope, \$2 per annum.

Subjects : history, methodology, terminology of medicine, botany, chemistry, histology, embryology, anatomy, physiology, homeopathic pharmacy, materia medica, urinalysis, hygiene, bacteriology, therapeutics, practice of medicine, organon, obstetrics, diseases of women, of nose, throat, and ear, genito-urinary, orthopedics, pedology, ophthalmology, jurisprudence, sanitary science, mental and nervous diseases, dermatology, clinical obstetrics, principles and practice of surgery.

Faculty : independent professors, 16 ; professors, 7 ; instructors, 3 ; dispensary assistant, 1.

Total property, \$— ; receipts, \$— ; expenditures, \$—.

Minnesota Homeopathic Medical College organized 1886 ; first class graduated 1887, and classes graduated in each subsequent year 1888 inclusive ; present title October, 1888.

83. COLLEGE OF MEDICINE AND SURGERY, Minnesota Univ., regular, coeducational, Minneapolis, pop. 164,738, Dean, Parks Ritchie, M.D., Univ. of Minnesota.

Session opens 26 S, '98 ; closes 26 My, '99 ; length, 7½ mos. ; matriculates, 1897-98, 225 ; graduates, 1897-98, 19 ; matriculates, 1898-99, 281.

Admission : diploma from approved college, high school, advanced course of state normal, or preparatory course of approved colleges, representing one year of Latin, or examination in English composition, algebra, geometry, physics, Latin, grammar and prose, three books of Cæsar, U. S. history, and physiology ; to advanced standing : complete college courses in histology, physiology, and chemistry admit to second year ; work of recognized schools for other years than senior.

Graduation : age 21 ; good moral character ; four years' study, the last at this school ; examinations.

Course : four years for all graduating after —.

Fees : course, \$100 per annum ; microscope, \$2 per semester.

Subjects : histology, embryology, anatomy, physiology, chemistry, materia medica, pathology, bacteriology, clinical microscopy, practice of surgery, practice of medicine, obstetrics, physical diagnosis, therapeutics, nervous and mental diseases, gynecology, ophthalmology, otology, diseases of children, of the skin, nose, throat, genito-urinary diseases, orthopedia, jurisprudence, hygiene, dietetics, history of medicine, case-taking and life insurance.

Faculty : professors, 27 ; clinical, 7 ; demonstrators, 5 ; clinical instructors, 6 ; instructors, 3 ; assistants, 12 ; student assistants, 14.

Total property, \$131,200 ; receipts, \$38,709 ; expenditures, \$45,819 (1898).

St. Paul Medical College organized 1878 ; first class graduated — ; classes graduated in each subsequent year except — inclusive ; reorganized as Minnesota Hospital College 1880 ; St. Paul again organized in 1885 ; present title 1888 ; Minnesota Hospital College organized 1881 ;

first class graduated —, and classes graduated in each subsequent year except — inclusive; present title 1888; Medical Dep't, Univ. Minnesota organized 1883, examination only; reorganized 1888, under medical law and absorbing St. Paul and Minnesota Hospital College.

84. MEDICAL DEP'T, HAMLINE UNIV., Minneapolis College of Physicians and Surgeons, regular, coeducational, Minneapolis, pop. 164,738, Dean, Leo M. Crafts, M.D., B.L., 606 Masonic Temple.

Session opens 3 O, '98; closes 8 Je, '99; length, 7½ mos.; matriculates, 1897-98 (undergraduate), 97; (post-graduate), 1; graduates, 1897-98, 10; matriculates, 1898-99, 125.

Admission: diploma from approved college, school, or preparatory dep't, representing one year of Latin, or examination in English composition, algebra, physics, Latin, U. S. history, physiology; to advanced standing: work of recognized schools for other years than senior; to second year: college course equivalent to first year's work; graduates of pharmacy, dental, and veterinary schools.

Graduation: age 21; good moral standing; four years' study; attendance on four lecture courses of six months each, the last at this school; examinations.

Course: four years for all graduating after 1897 (?).

Fees: matriculation, \$5; course, \$65; last course, to students who have attended three full courses, \$35; graduates of other medical schools, \$50; use of school microscopes, \$3 each term.

Subjects: anatomy, histology, embryology, physiology, chemistry, materia medica, pathology, bacteriology, therapeutics, theory and practice of medicine, diseases of the chest, of the nose and throat, dermatology, neurology, psychologic medicine, clinical, operative, and orthopedic surgery, ophthalmology, otology, obstetrics, gynecology, physical diagnosis, clinics, dental pathology and therapeutics, rectal, venereal, genito-urinary diseases, preventive and legal medicine, medical insurance, and pediatrics.

Faculty: professors, 23; associate, 4; clinics, 5; assistant, 3; lecturers, 2; instructors, 4; demonstrator, 1; assistant, 1.

Total property, \$40,000; receipts, \$5,940.63; expenditures, \$4,520.81 (1898).

Minneapolis College of Physicians and Surgeons organized 1883; first class graduated 1884, and classes graduated in each subsequent year; the oldest chartered institution for medical education in the state; present title 1895.

MISSISSIPPI.

There are no medical schools in Mississippi.

MISSOURI.

Schools: regular, 12; homeopathic, 2; eclectic, 1; total, 15.

Session opens about middle Sept. ; closes about middle Apr.

Matriculates, 1897-98, — ; graduates, 1897-98, — ; matriculates, 1898-99, —.

Admission and graduation : no state requirements.

Fees : average matriculation, \$5 ; course, \$59.33 ; additional, \$35.66.

Faculty : professors, 312 ; lecturers, 48 ; others, 196 ; total, 556.

Total property, \$— ; receipts, \$— ; expenditures, \$—.

85. AMERICAN MEDICAL COLLEGE, eclectic, coeducational, St. Louis, pop. 451,770, Dean, Edwin Younkin, M.D., 3035 Lucas Ave.

Session opens 19 S, '98 ; closes 9 My, '99 ; length, 7½ mos. ; matriculates, 1897-98, 59 ; graduates, 1897-98, 20 ; matriculates, 1898-99, 65.

Admission : good moral character, certified by two physicians ; matriculation in college ; certificate from college, high school, state superintendent, first- and second-grade with Latin, covering English grammar, arithmetic, physics, U. S. history, geography, Latin ; to advanced standing : work of recognized schools for other than senior year ; work of schools not fully recognized on examination ; to second class : college graduates completing one year's work each in chemistry, biology, or comparative anatomy, histology, embryology, experimental physics, physiologic botany, laboratory physiology or experimental psychology, zoology materia medica or pharmacognosy ; graduates of pharmacy, dental, and veterinary schools requiring two years' course admitted to second year of four-year course on examination and laboratory work of first year.

Graduation : age 21 ; good moral character ; four years' study ; attendance on three annual lecture courses, the last at this school ; examinations.

Course : four years for all graduating after 1900.

Fees : course, \$75 ; anatomic laboratory, \$5 ; graduation, \$25.

Subjects : anatomy, materia medica, physics, chemistry, physiology, principles of medicine, pathology, pathologic anatomy, therapeutics, embryology, orthopedics, practice of medicine, hygiene, diseases of women and children, bacteriology, dermatology, electro-therapeutics, venereal, nervous, genito-urinary diseases, ophthalmology, otology, diseases of chest, of throat, of mind, of nervous system, jurisprudence.

Faculty : professors, 17 ; demonstrators, 2 ; instructors, 12.

Total property, \$28,000 ; receipts, \$2,543 ; expenditures, \$1,875.38 (1898).

Organized 1873 ; first class graduated 1874, and classes graduated in subsequent years except — inclusive.

86. BARNES MEDICAL COLLEGE, regular, St. Louis, pop. 451,770, Pres., C. H. Hughes, M.D., 3857 Olive St.

Session opens 12 S, '98 ; closes 12 Ap, '99 ; length, 6½ mos. ; matriculates, 1897-98, 574 ; graduates, 1897-98, 177 ; matriculates, 1898-99, 622.

Admission: good moral character; diploma from college, academy, normal, or high school; certificate from such schools or state superintendent covering English grammar, physics, arithmetic, U. S. history, geography, Latin; matriculates and graduates of other recognized schools are exempt; to advanced standing: work of recognized schools for other years than senior.

Graduation: age 21; good moral character; four years' study; attendance on four annual lecture courses, the last at this school; three sessions of practical anatomy, and other laboratories; three courses of clinics, the last at this school; examinations; attendance on commencement.

Course: four years for all graduating after 1899 (?).

Fees: matriculation, \$5; full course, exclusive of laboratory expenses, \$50; to sons and brothers of physicians and sons of clergy, \$35; to graduates in pharmacy or dentistry, \$30; final examination, \$25.

Subjects: anatomy, chemistry, histology, physiology, materia medica, pharmacy, hygiene, bacteriology, toxicology, therapeutics, pathology, practice of medicine, dentistry, operative, clinical, genito-urinary and orthopedic surgery, ophthalmology, otology, neurology, gynecology, pediatrics, obstetrics, jurisprudence, surgical anatomy, laryngology, rhinology, physical diagnosis, osteology, syndesmology, Latin, diseases of rectum, surgical technique.

Faculty: professors, 23; lecturers, 6; assistants, 14.

Total property, \$140,000; receipts, \$—; expenditures, \$— (1898).

Organized 1892; first class graduated 1893 (?), and classes graduated each subsequent year except 1899. Named "in honor of Robert A. Barnes, who gave \$1,000,000 to alleviate humanity."

87. BEAUMONT HOSPITAL MEDICAL COLLEGE, regular, St. Louis, pop. 451,770, Dean, Frank J. Lutz, M.D., A.M., 1805 S. Broadway.

Session opens 20 S, '98; closes 20 Ap, '99; length, 6½ mos.; matriculates, 1897-98, 76; graduates, 1897-98, 28; matriculates, 1898-99, 95.

Admission: good moral character; college or high school graduation or examination; to advanced standing: work of recognized schools for other years than senior.

Graduation: age 21; good moral character; attendance on three lecture courses, the last at this school; three courses of dissection; examinations.

Course: three years and optional fourth year for all graduating after 1893 (?).

Fees: matriculation, \$5; junior year, \$65; intermediate, \$70; senior, \$80; fourth, \$80; laboratory, \$10 per annum.

Subjects: anatomy, histology, embryology, chemistry, physiology, materia medica, histology, bacteriology, therapeutics, principles and practice of medicine, of surgery, diseases of children, ophthalmology, otology, gynecology, hygiene, pathology, jurisprudence, anatomy, obstetrics.

Faculty: professors, 26; demonstrators, 6; lecturers, 4; instructors, 3; assistants, 10.

Total property, \$50,000; receipts, \$5,000; expenditures, \$3,500 (1898).

Organized 1886; first class graduated 1887 (?), and classes graduated each subsequent year.

88. CENTRAL MEDICAL COLLEGE, regular,¹ St. Joseph, pop. 52,324, Dean, —, address —.

Admission: good moral character; matriculation in other recognized schools; to advanced standing: work of recognized schools for other years than senior.

Graduation: age, 21; good moral character; four years' study; attendance on three annual lecture courses, the last at this school; three years of dissection and clinics; examinations.

Course: three years for all graduating after —.

Fees: matriculation, \$5 per annum; course, \$40; hospital, \$5; laboratory, \$5; dissecting, \$5; sons of ministers and sons and brothers of physicians, \$25; graduation, \$25.

Subjects: anatomy, biology, physiology, chemistry, bacteriology, histology, materia medica, hygiene, surgery, practice of medicine, gynecology, pediatrics, obstetrics, therapeutics, diseases of children, nose, and throat, nervous system, jurisprudence, ophthalmology, otology, toxicology.

Faculty: professors, 14; associate, 1; adjunct, 1; demonstrator, 1.

Organized 1893.

89. ENSWORTH MEDICAL COLLEGE, regular, coeducational, St. Joseph, pop. 52,324, Dean, Hiram Christopher, M.D., 6th and Edmond.

Session opens 19 S, '98; closes 15 Mr, '99; length, 5½ mos.; matriculates, 1897-98, 46; graduates, 1897-98, 12; matriculates, 1898-99, 70.

Admission: requirements A. A. M. C.; to advanced standing: requirements A. A. M. C.

Graduation: age 21; good moral character; four lecture courses, the last at this school; one course in practical anatomy with dissection, chemistry, and laboratory courses in histology and pathology.

Course: four years for all graduating after 1900.

Fees: course, \$50 per annum; laboratory, \$5; examination, \$25.

Subjects: anatomy, materia medica, physiology, chemistry, bacteriology, histology, pathology, jurisprudence, dermatology, theory and practice, surgery, obstetrics, gynecology, genito-urinary diseases, pediatrics, therapeutics, ophthalmology, otology.

Faculty: professors, 15; lecturers, 3; demonstrator, 1; assistants, 2.

Total property, \$60,000; receipts, \$8,500; expenditures, \$8,500 (1898).

St. Joseph Hospital Medical College organized 1876; united with College of Physicians and Surgeons as St. Joseph Medical College 1882; first class graduated 1883, and classes graduated in each subsequent year; present title assumed 1888.

¹ 24 Ap '99, no reply received.

90. THE HOMOEOPATHIC MEDICAL COLLEGE of Missouri, coeducational, St. Louis, pop. 750,000 (?), Dean, Wm. C. Richardson, 411 Olive St.

Session opens 1 O, '98; closes 10 Ap, '99; length, 6 mos. including vacations; matriculates, 1897-98, 72; graduates, 1897-98, 21; matriculates, 1898-99, 76.

Admission: preliminary requirements; literary diploma or equivalent; to advanced standing: college diplomas showing equal proficiency; to second class: (a) college graduates from approved colleges; (b) graduates of pharmacy, dental, etc., schools, one year.

Graduation: age 21; attendance on four lecture courses of six months each.

Course: four years for all graduating after 1897.

Fees: scholarship, \$150; annual term, \$50.

Subjects: all subjects taught in medical colleges.

Faculty: professors, 25; instructors, 5.

Total property, \$15,000; receipts, \$2,500; expenditures, \$2,300 (1898).

Organized 1857; first class graduated 1859, and classes graduated in each subsequent year except 1860-64 inclusive. Reorganized 1882, when St. Louis College Homeopathic Physicians and Surgeons and Hering Medical College consolidated under present title.

91. KANSAS CITY HOMOEOPATHIC MEDICAL COLLEGE, coeducational, Kansas City, pop. 132,716, Dean, A. E. Neumeister, M.D., 1214 Main St.

Session opens 14 S, '98; closes 23 Mr, '99; length, 6 mos.; matriculates, 1897-98, 23; graduates, 1897-98, 14; matriculates 1898-99, 54.

Admission: good moral character; college or high school diploma, or examination; to advanced standing: work of recognized schools for other years than senior; degree of college whose course covers first year work admits to second year.

Graduation: age 21; good moral character; four years' study; attendance on four lecture courses of six months each, the last at this school; examinations.

Course: four years for all graduating after 1898.

Fees: matriculation, \$5; course, \$50 per annum; full course, including matriculation, \$125; practical chemistry, \$5; histology, \$5; bacteriology, \$5; practical anatomy, \$10; examination, \$25; partial course, \$10.

Subjects: organic chemistry, toxicology, normal histology, bacteriology, dermatology, anatomy, physiology, pathology, materia medica, pharmacy, principles and practice of medicine, chest, mental, nervous, genito-urinary, venereal diseases, surgery, obstetrics, pedology, diseases of women, ophthalmology, otology, laryngology, clinical medicine, jurisprudence, hygiene, sanitary science.

Faculty: professors, 15; assistants, 17.

Total property, \$12,000; receipts, \$4,000; expenditures, \$2,000 (1898).

Organized 1888; first class graduated 1889, and classes graduated in each subsequent year.

92. KANSAS CITY MEDICAL COLLEGE,¹ regular, Kansas City, pop. 132,716, Dean, Jefferson D. Griffith, M.D., Rialto Building.

Session opens 13 S, '98; closes 24 Mr, '99; length, 6 mos.; matriculates, 1897-98 (undergraduate), 125; (post-graduate), 2; graduates, 1897-98, 41; matriculates, 1898-99, —.

Admission: good moral character; high school diplomas, their equivalent or examination; to advanced standing: work of recognized schools for other years than senior.

Graduation: age 21; good moral character; four years' study; attendance on three lecture courses, the last at this school; two years at clinics and hospital instruction; dissection of body; examinations.

Course: four years for all graduating after —.

Fees: matriculation, \$5; course, \$50 per annum; anatomy, \$20; chemistry, histology, \$20; bacteriology, \$5; graduation, \$20; post-graduate course, matriculation, \$5; five weeks' course, \$20; anatomy, \$10.

Subjects: anatomy, physiology, chemistry, hygiene, materia medica, therapeutics, medicine, surgery, obstetrics, gynecology, diseases of the nervous system, of children, jurisprudence, histology, pathology, bacteriology, ophthalmology, otology, laryngology, dermatology, and pharmacy.

Faculty: professors, 19; clinical, 1; lecturers, 3; instructor, 1; adjuncts, 4; demonstrators, 2; prosector, 1.

College of Physicians and Surgeons of Kansas City organized 1869; first class graduated 1870; present title 1880.

93. MARION SIMS COLLEGE OF MEDICINE, regular, St. Louis, pop. 451,770, Dean, Young H. Bond, M.D., A.M., Grand and Page Aves.

Session opens 4 O, '98; closes 20 Ap, '99; length, 6 mos.; matriculates, 1897-98 (undergraduate), 231; (post-graduate), 3; graduates, 1897-98, 72; matriculates, 1898-99, —.

Admission: good moral character, certified by two physicians; certificate of admission to state university or college, or student's certificate from college, state sup't or high school, covering English, physics, arithmetic, U. S. history, geography, Latin; to advanced standing: work of recognized schools for other years than senior; to second year: graduation from college with one year's work in chemistry, biology, or comparative anatomy, histology, embryology, experimental physics, physiologic botany, laboratory physiology or experimental psychology and zoology, making up deficiencies in first year; graduates of pharmacy, dental, and veterinary schools with two years' course on examination and laboratory work of first year.

Graduation: age 21; good moral character; one year's study under preceptor; attendance on three annual lecture courses of six months each, the last at this school; two terms of dissection; satisfactory standing; examinations.

¹ 24 Ap '99, no reply received.

Course: four years for all graduating after 1899 (?).

Fees: matriculation, \$5; course, \$50 per annum; final examination, \$25; dissection, \$10; laboratory, \$10; single professor's ticket, \$10; course for sons and brothers of physicians and sons of clergy, \$25; four courses for same, \$200; three courses, \$150.

Subjects: anatomy, chemistry, histology, osteology, physiology, pathology, materia medica, principles and practice of medicine, of surgery, pathologic anatomy, therapeutics, obstetrics, diseases of the chest, of children, of women, nose, throat, eye, ear, mind, nerves, bacteriology, hygiene, surgical dressings, jurisprudence, dermatology, syphilology, genito-urinary diseases.

Faculty: professors, 18; lecturers, 4; instructors, 5; assistants, 17; tutor, 1.

94. MEDICAL DEP'T, WASHINGTON UNIVERSITY, regular, St. Louis, pop. 451,770, Dean, Henry H. Mudd, M.D., 2604 Locust St.

Session opens 22 S, '98; closes 27 Ap, '99; length, 7 mos.; matriculates, 1897-98, 94; graduates, 1897-98, 28; matriculates, 1898-99, 97.

Admission: good moral character; graduation from college, academy, or high school; matriculation in college; certificate or examination, covering English, arithmetic, algebra, physics, U. S. history, geography, Latin; to advanced standing: work of recognized schools for other years than senior; to second year: graduation from recognized schools of biology.

Graduation: age 21; good moral character; attendance on four annual lecture courses, the last at this school; examinations.

Course: four years for all graduating after 1899.

Fees: matriculation, \$5; course, \$100 per annum.

Subjects: chemistry, anatomy, osteology, histology, materia medica, physiology, pharmacy, pathology, histology, therapeutics, bacteriology, medicine, surgery, obstetrics, genito-urinary, mental and nervous diseases, diseases of children, of the eye, ear, nose, throat, chest and skin, ophthalmology, gynecology, genito-urinary surgery, hygiene, jurisprudence.

Faculty: professors, 20; instructors, 9; lecturers, 5.

Total property, \$150,000; receipts, \$19,127; expenditures, \$18,391 (1898).

Medical Dep't, St. Louis University organized 1841; first class graduated 1843, and classes graduated in each subsequent year; chartered St. Louis Medical College 1855; present title 1891.

95. MEDICO-CHIRURGICAL COLLEGE,¹ regular, Kansas City, pop. 132,716, Dean, Geo. O. Coffin, M.D., 415-416 New Ridge Building.

Session opens 14 S, '98; closes 16 Ap, '99; length, 6½ mos.; matriculates, 1897-98, 32; graduates, 1897-98, 1; matriculates, 1898-99, —.

Admission: Good moral character, certified by two physicians; examination in arithmetic, algebra, physics, U. S. history, geography, Latin;

¹ 24 Ap, '99, no reply received.

exempt: college matriculates, graduates of recognized schools, colleges, academies, high school; to advanced standing: preparatory scientific courses, graduation from pharmacy, dental, veterinary schools on examination.

Graduation: age 21; good moral character; attendance on three annual lecture courses following one year's study with physician; dissection of body; two years of clinics; examinations.

Course: three years for all graduating after —.

Fees: matriculation, \$5; course for first two years, \$50; last year, \$40; laboratory, \$25; examination, \$30; graduates of reputable colleges, \$25 for third year.

Subjects: anatomy, pathology, physiology, chemistry, materia medica, histology, medicine, surgery, obstetrics, diseases of women and children, genito-urinary, skin, rectum, gynecology, ophthalmology, neurology, hygiene, jurisprudence.

Faculty: professors, 22; lecturers, 4; clinical assistant, 1.

Organized 1897.

96. MISSOURI MEDICAL COLLEGE, regular, St. Louis, pop. 451,770, Dean, P. Gervais Robinson, M.D., LL.D., 2710 Washington Ave.

Session opens 20S, '98; closes 18 Ap, '99; length, 6½ mos.; matriculates, 1897-98, 232; graduates, 1897-98, 85; matriculates, 1898-99, 165.

Admission: good moral character, certified by two physicians; examination in arithmetic, physics, U. S. history, geography, Latin, English; graduation from colleges, academies, high schools; matriculation in college; to advanced standing: preparatory scientific courses and graduation from pharmacy, dental, or veterinary schools.

Graduation: age 21; good moral character; attendance on three lecture courses, the last at this school; two courses of dissection; three years of clinics; examinations.

Course: four years for all graduating after 1899.

Fees: matriculation, \$5; course, \$100 per annum.

Subjects: anatomy, bacteriology, chemistry, diseases of the chest, of children, of the ear, eye, skin, and mind, syphilis, gynecology, histology, hygiene, laryngology, materia medica, therapeutics, jurisprudence, neurology, obstetrics, orthopedic surgery, pathology, physics, physiology, practice of medicine, surgery, venereal diseases.

Faculty: professors, 20; clinical, 3; assistants, 4; lecturers, 10; demonstrators, 2; chiefs of clinics, 11; assistants, 3; instructors, 2; clinical assistants, 21; resident physician, 1.

Total property, \$150,000; receipts, \$24,424; expenditures, \$20,366 (1898).

Medical Dep't, Kemper College organized 1840; first class graduated 1841, and classes graduated in each subsequent year except 1861-65 inclusive; oldest seat of medical learning west of the Mississippi; became Medical Dep't, Univ. State of Missouri, 1845; present title 1855; sometimes called from its founder The McDowell Medical College; absorbed

St. Louis Post-Graduate School of Medicine, 1894; contract with Univ. of the State of Missouri, 1886; present title, Missouri Medical College; steps have been taken toward merging this school and St. Louis Medical College into Medical Department of Washington University, St. Louis.

97. **ST. LOUIS COLLEGE OF PHYSICIANS AND SURGEONS**, regular, St. Louis, pop. 451,770, Dean, Waldo Briggs, M.D., 1405 Olive St.

Session opens 27 S, '98; closes 26 Ap, '99; length, 6½ mos.; matriculates, 1897-98, 291; graduates, 1897-98, 108; matriculates, 1898-99, 225.

Admission: good moral character, certified by two physicians; high school graduation; college matriculation; certificate from college, high school or state superintendent covering English, arithmetic, physics, Latin, U. S. history, geography; to advanced standing: B.Sc. or A.M. degree from literary college.

Graduation: age 21; good moral character; four years' study; attendance on four lecture courses, the last at this school; two years of clinics; two courses each in anatomy, chemistry, and experimental physiology; one course each in physiology and histology, pathology, bacteriology, pathologic anatomy, materia medica, therapeutics, auscultation and percussion, obstetric manipulations, operative surgery, use of laryngoscope, ophthalmoscope and otoscope, including refraction and fitting spectacles; examinations.

Course: four years for all graduating after 1899.

Fees: matriculation, \$5; entire course, \$50; entire course for sons and brothers of physicians and sons of the clergy, \$25; entire course for graduates of reputable medical colleges, \$25; laboratory, \$5; single professor's ticket, \$10; final examinations, \$25.

Subjects: anatomy, physiology, histology, embryology, chemistry, materia medica, pharmacy, pathologic anatomy, therapeutics, principles of medicine, of surgery, bacteriology, hygiene, obstetrics, mental and nervous diseases, diseases of children, of rectum, jurisprudence, obstetrics, gynecology, genito-urinary surgery, venereal diseases, otology, rhinology, laryngology, ophthalmology, dermatology.

Faculty: professors, 19; demonstrators, 2; lecturers, 3; assistants, 9; chief of clinic, 1; curator, 1.

Total property, \$65,000; receipts, \$18,000; expenditures, \$6,000 (1898). Organized 1869; first class graduated 1870.

98. **UNIVERSITY MEDICAL COLLEGE OF KANSAS CITY**, regular, Kansas City, pop. 132,716, Dean, Samuel G. Gant, M.D., 406 Rialto Building.

Session opens 12 S, '98; closes 20 Mr, '99; length, 5½ mos.; matriculates, 1897-98, 316; graduates, 1897-98, 66; matriculates, 1898-99, 300.

Admission: requirements of other state boards of health (see p. 26) and medical college association (see p. 8); to advanced standing: work of recognized schools for other years than senior on examination or certificate; graduates in pharmacy and dentistry admitted to second year.

Graduation: age 21; five years' study; attendance on three lecture

courses, the last at this school ; two terms of clinics ; dissection of body ; examinations.

Course : four years for all graduating after 1902.

Fees : matriculation, \$5 ; course, first two years, \$60 each ; last year, \$50 ; practical anatomy, \$5 ; practical chemistry, \$8 ; examination for graduation, \$20 ; last year to students who have already paid full fees for first and second years, \$30 ; and \$50 to students of other colleges who have attended two courses of lectures.

Subjects : anatomy, histology, bacteriology, physiology, chemistry, toxicology, materia medica, pharmacy, physics, Latin, pathology, therapeutics, principles and practice of medicine, of surgery, obstetrics, diseases of women and children, of the eye, ear, skin, genito-urinary organs, of the rectum, of the mind and nervous system, of the throat and chest, surgery, jurisprudence, hygiene.

Faculty : emeritus professors, 3 ; professors, 27 ; demonstrators, 10 ; assistants, 4 ; clinical, 5 ; assistant professor, 1 ; lecturer, 1.

Total property, \$40,000 ; receipts, \$12,000 ; expenditures, \$10,000 (1898).

Organized 1881 ; first class graduated 1882.

99. WOMAN'S MEDICAL COLLEGE, regular, Kansas City, pop. 132,716, Dean, Dora Greene Wilson, M.D., 309 Commerce Building.

Session opens 27 S, '98 ; closes 6 Ap, '99 ; length, 6 mos. ; matriculates, 1897-98, 27 ; graduates, 1897-98, 7 ; matriculates, 1898-99, 31.

Admission : age 17 ; good moral character ; college, high school, or equivalent certificate ; examination in usual subjects including Latin, algebra, physics ; to advanced standing : work of recognized schools for other years than senior.

Graduation : age 21 ; good moral character ; four years' study ; attendance on three lecture courses, the last at this school ; dissection of body ; examinations.

Course : four years for all graduating after 1899.

Fees : matriculation, \$5 ; course, \$50 per annum ; practical anatomy, \$5 ; practical chemistry, \$5 ; final examination, \$25.

Subjects : anatomy, physiology, histology, microscopy, materia medica, chemistry, pharmacy, bacteriology, pathology, therapeutics, principles and practice of medicine and surgery, nervous diseases, obstetrics, diseases of women, of children, of the mind, nervous system, eye, ear, skin, nose, throat, of the genito-urinary organs, jurisprudence, hygiene.

Faculty : professors, 28 ; assistant, 1 ; lecturers, 5.

Total property, \$2,000 ; receipts, \$1,000 ; expenditures, \$1,800 (1898).

Organized 1895 ; first class graduated 1896, and classes graduated in each subsequent year.

MONTANA.

There are no medical schools in Montana.

NEBRASKA.

Schools : regular, 2 ; homeopathic, 0 : eclectic, 1 ; total, 3.

Session opens about last Sept. ; closes about middle Apr.

Matriculates, 1897-98, 221 ; graduates, 1897-98, 47 ; matriculates, 1898-99, —.

Admission and graduation : no state requirements.

Fees : average matriculation, \$5 ; course, \$62.08 ; additional, \$30.25.

Faculty : professors, 77 ; lecturers, 7 ; others, 13 ; total, 97.

Total property, \$— ; receipts, \$15,000 ; expenditures, \$14,-500.

100. LINCOLN MEDICAL COLLEGE, MEDICAL DEP'T, CORNER UNIVERSITY, eclectic, coeducational, Lincoln, pop. 55,154, Dean, William S. Latta, M.D., 1116 L St.

Session opens 16 S, '98 ; closes 16 Mr, '99 ; length, 5½ mos. ; matriculates, 1897-98, 52 ; graduates, 1897-98, 11 ; matriculates, 1898-99, —.

Admission : good moral character ; college matriculation, or graduation from college or high school, or second-grade teacher's certificate, or examination in English, mathematics, physics, and Latin ; to advanced standing : work of recognized schools for other years than senior ; to second year : graduates of pharmacy, dental and veterinary schools.

Graduation : age 21 ; attendance on four annual lecture courses of six months each, the last at this school ; three courses in practical anatomy ; dissection of body and examinations.

Course : four years for all graduating after 1899.

Fees : matriculation, \$5 ; course, \$50 ; hospital, \$3 ; demonstrator (one course), 10 ; chemistry and toxicology, \$5 ; bacteriology and histology, \$5 ; examination, \$25.

Subjects : anatomy, physiology, chemistry, materia medica, physics, biology, embryology, histology, pathology, laboratory work, therapeutics, hygiene, medicine, surgery, obstetrics, gynecology, venereal diseases, diseases of children, mind, nervous system, heart, venous, respiratory, circulatory digestive system, ophthalmology, otology, laryngology, dermatology, bacteriology, jurisprudence.

Faculty : professors, 20, lecturers, 3 ; demonstrators, 3.

Lincoln Medical College organized 1890.

101. MEDICAL DEPARTMENT, CREIGHTON UNIVERSITY, regular, coeducational, Omaha, pop. 140,452, Dean, D. C. Bryant, M.D., A.M., McCague Building.

Session opens 4 O, '98 ; closes 4 My, '99 ; length, 6½ mos. ; matriculates, 1897-98, 81 ; graduates, 1897-98, 9 ; matriculates, 1898-99, 54.

Admission : A. A. M. C. requirements ; to advanced standing : work of rec-

ognized schools for other than senior year or on examination in subjects of lower classes.

Graduation: age 21; good moral character; four years' study; attendance on four lecture courses of seven months each, the last at this school; examinations.

Course: four years for all graduating after 1896.

Fees: matriculation, \$5; course, first year, \$65; second year, \$70; third year, \$75; fourth year, \$75.

Subjects: anatomy, physiology, histology, chemistry, materia medica, hygiene, therapeutics, bacteriology, pathology, surgery, medicine, obstetrics, gynecology, diseases of children, of mind and nervous system, ophthalmology, otology, laryngology, rhinology, dermatology, genito-urinary diseases, jurisprudence.

Faculty: professors, 33; lecturers, 4; instructor, 1; assistant, 1; demonstrators, 2.

Total property, \$100,000; receipts, \$7,500; expenditures, \$7,500 (1898).

John A. Creighton Medical College organized 1892; first class graduated 1895, and classes graduated in subsequent years.

102. MEDICAL DEPARTMENT, OMAHA UNIVERSITY, regular, coeducational, Omaha, pop. 140,452, Dean, August F. Jonas, M.D., 17-18 Continental Block.

Session opens 27 S, '98; closes 21 Ap, '99; length, 6½ mos.; matriculates, 1897-98, 88; graduates, 1897-98, 27; matriculates, 1898-99, 85.

Admission: good moral character, certified by two physicians; diploma or matriculation certificate from college, normal or high school; or examinations in English, arithmetic, algebra, physics and Latin; to advanced standing: work of recognized schools for other years than senior; to second year: college graduates having completed courses in biology and chemistry; graduates of pharmacy or dental schools.

Graduation: age 21; good moral character; four years' study; attendance on four annual lecture courses, the last at this school; two years of clinics; two years of dissection; course in practical chemistry, histology, and pathology; commencement attendance; examinations.

Course: four years for all graduating after 1898.

Fees: course, \$65; examination, \$5 each for first two years, \$10 each for last two years.

Subjects: anatomy, chemistry, physics, materia medica, physiology, biology, embryology, histology, therapeutics, pathology, hygiene, medicine, surgery, obstetrics, jurisprudence, bacteriology, nervous diseases, diseases of children, insanity, dermatology, gynecology, otology, ophthalmology, laryngology, rhinology.

Faculty: professors, 24; clinical assistant, 1; instructor 1; demonstrators, 4.

Total property, \$25,000; receipts, \$5,500; expenditures, \$5,000 (1898).

Nebraska School of Medicine, a preparatory school, established 1880;

became Omaha Medical College 1881; first class graduated 1883 (?), and classes graduated in each subsequent year.

NEVADA.

There are no medical schools in Nevada.

NEW HAMPSHIRE.

Schools: regular, 1; homeopathic, 0; eclectic, 0; total, 1.

Session opens about middle of July; closes about last Feb.

Matriculates, 1897-98, 120; graduates, 1897-98, —; matriculates, 1898-99, 131.

Admission and graduation: no state requirements.

Fees: average matriculation, \$5; course, \$107.50; additional, \$36.

Faculty: professors, 15; lecturers, 0; others, 8; total, 23.

Total property, \$—; receipts, \$—; expenditures, \$—.

103. DARTMOUTH MEDICAL COLLEGE,¹ regular, Hanover, pop. 1,817, Dean, William T. Smith, M.D., LL.D.

Session opens 13 J1, '98; closes 28 F, '99; length, 7 mos.; matriculates, 1897-98, 120; graduates, 1897-98, —; matriculates, 1898-99, 131.

Admission: graduation from college, academy or high school or equivalent education, or examinations in English, algebra, geometry, Latin, chemistry, physics, two histories, zoology or botany; to advanced standing: work of recognized schools for first year, for second and third years on examination.

Graduation: age 21; good moral character; four years' study of nine months each; attendance on four annual courses of six months each; dissection of cadaver; written examinations in anatomy, physiology, chemistry, histology, bacteriology, pathology, therapeutics, surgery, obstetrics, materia medica, gynecology and practice; final oral examinations.

Course: four years for all graduating after —.

Fees: matriculation, \$5; first course, \$100; other three courses, \$110 each; examination, \$25; chemicals and material, \$11.

Subjects: chemistry, physics, biology, anatomy, physiology, bacteriology, histology, pathology, materia medica, obstetrics, surgery, therapeutics, practice, gynecology, mental diseases, jurisprudence, hygiene, ophthalmology, otology, laryngology.

Faculty: professors, 15; instructor, 1; demonstrators, 3; delegates from medical societies, 4.

Total property, \$—; receipts, \$—; expenditures, \$— (1898).

New Hampshire Medical Institute organized 1797; first class graduated 1798.

¹ 24 Ap '99, no reply received.

NEW JERSEY.

There are no medical schools in New Jersey.

NEW MEXICO.

There are no medical schools in New Mexico.

NEW YORK.

Schools: regular, 8; homeopathic, 2; eclectic, 1; total, 11. Session opens about first Oct.; closes about middle May.

Matriculates, 1897-98, 2729; graduates, 1897-98, 656; matriculates, 1898-99, 2280.

Admission and graduation: State requirements.

Course: three years for all matriculates before 1898 who graduate before 1902; four years for all others.

Fees: average matriculation, \$5; course, \$130; additional, \$100.

Faculty: professors, 207; lecturers, 61; others, 317; total, 585.

Total property, \$5,380,242; receipts, \$403,669; expenditures, \$417,912.

REGISTRATION OF MEDICAL SCHOOLS OUT OF NEW YORK STATE.

By law of 1896, ch. 111, which took effect March 21, 1896, the regents of the University of the State of New York can hereafter register no medical school out of the state whose minimum graduation standard is less than that fixed by statute for New York medical schools. Hereafter no student can be admitted to examinations for license to practise medicine in New York state who does not possess the following qualifications:

1. Is more than 21 years of age;
2. Is of good moral character;
3. Has the New York state medical student certificate or its equivalent as specified in New York laws of 1896, ch. 111:

From Laws of 1896, ch. 111.

The degree of bachelor or doctor of medicine shall not be conferred in this state before the candidate has filed with the institution conferring it the certificate of the regents that before beginning the first annual medical course counted toward the degree unless matriculated conditionally

as hereinafter specified, he had either graduated from a registered college or satisfactorily completed a full course in a registered academy or high school; or had a preliminary education considered and accepted by the regents as fully equivalent; or held a regents' medical student certificate, granted before this act took effect; or had passed regents' examinations as hereinafter provided. A medical school may matriculate conditionally a student deficient in not more than one year's academic work or 12 counts of the preliminary education requirement, provided the name and deficiency of each student so matriculated be filed at the regents' office within three months after matriculation, and that the deficiency be made up before the student begins the second annual medical course counted toward the degree. Students who had matriculated in a New York medical school before June 5, 1890, and students who had matriculated in a New York medical school before May 13, 1895, as having entered before June 5, 1890, on the prescribed three years' study of medicine, shall be exempt from this preliminary education requirement.

A medical student certificate may be earned without notice to the regents of the conditional matriculation either before the student begins the second annual medical course counted toward the degree or two years before the date of the degree for matriculants in any registered medical school, in the four cases following:

1. For matriculants prior to May 9, 1893, for any 20 counts, allowing 10 for the preliminaries, not including reading and writing;

2. For matriculants prior to May 13, 1895, for arithmetic, elementary English, geography, spelling, United States history, English composition and physics; or any 50 counts, allowing 14 for the preliminaries;

3. For matriculants prior to January 1, 1896, for any 12 academic counts;

4. For matriculants prior to January 1, 1897, for any 24 academic counts.

But all matriculants, after January 1, 1897, must secure 48 academic counts, or their full equivalent, before beginning the first annual medical course counted toward the degree, unless admitted conditionally, as hereinbefore specified, when the deficiency must be made up before the student begins the second annual medical course counted toward the degree.

This act shall take effect immediately, except that the increase in the required course of medical study from three to four years shall take effect January 1, 1898, and shall not apply to students who matriculated before that date and who received the degree of doctor of medicine before January 1, 1902.

4. Has studied medicine not less than four full years of at least nine months each, including four satisfactory courses of at least six months each in four different calendar years in a med-

ical school registered as maintaining at the time a satisfactory standard.

The increase in the required course of medical study from three to four years does not take effect till January 1, 1898, and does not apply to students matriculated before that date who received the degree M.D. before January 1, 1902.

5. Has either received the degree of bachelor or doctor of medicine from some registered medical school, or a diploma or license conferring full right to practise medicine in some foreign country.

The regents may in their discretion accept as an equivalent for any part of the third and fourth requirement evidence of five or more years' reputable practice, provided that such substitution be specified in the license.

The regents are now revising their list of registered medical schools and cannot hereafter place any school on this list till convinced that the minimum graduation standard is not less than that fixed by statute for New York medical schools.

Schools applying for registration will kindly fill out and return at their earliest convenience the accompanying certificate duly signed by the dean or secretary of the school with the seal attached.

Eight years' experience proves the necessity for this stringent new law, as the only way to prevent discrimination against the medical schools of New York. A certain class of students were ready to leave their native state, to which they intended to return as physicians, and take their medical course in some institution outside which was willing to admit and graduate on lower standards than were required from the schools under our direct supervision. Notice is now widely given that a man who wishes to practise in this state must either take the full course of instruction offered by our own schools or must graduate from a school maintaining equal standards. The fact that an individual may meet all the conditions in himself will not be sufficient to admit him to the examinations if he brings only the diploma of a school which graduates others on lower standards.

New York is proud of her advanced position in medicine, but not in a spirit of emulation. She will be exceedingly glad to

have every other state in the Union make its own medical requirements as stringent. Our own experience ought to encourage many schools to take this step, for the result of increasing the standards is not as a rule any loss in students. The poorer students are shut out and go to weaker institutions, but from those very institutions are drawn their best candidates, who are anxious to take their medical course where they will not be handicapped by classmates of inferior preparation and capacity. We believe that schools now hesitating about raising their standards for fear it will reduce their income unduly, will be agreeably surprised by the results of taking the advanced position.

APPLICATION FOR REGISTRATION OF MEDICAL SCHOOLS.

This certifies that (name of school) applies for registration with the regents of the University of the State of New York as meeting the minimum graduation standard fixed by statute for New York medical schools as follows:

Candidates for graduation must

1. Be at least 21 years of age ;
2. Be of good moral character ;
3. Hold the New York state medical student certificate or its equivalent as specified in New York laws ;
4. Have studied medicine at least four full years of nine months each, including four satisfactory courses of at least six months each in four different calendar years in accredited medical schools, unless matriculated before January 1, 1898, and graduated before January 1, 1902, in which case the increase in medical study from three to four years does not apply.

No allowance whatever is made in the period of study (three years for matriculants prior to January 1, 1898, who graduate with the degree of M.D., before January 1, 1902 ; four years after January 1, 1898) for work not done in an accredited medical school. Graduates in dentistry, veterinary medicine and pharmacy and from other professional and technical schools under no circumstances receive M.D. degrees in less time.

IN WITNESS WHEREOF, I hereunto set my hand and the seal of (name of school) this _____ day of _____.

[SEAL]

(Signature)

All undergraduate New York schools are registered as meeting the statutory requirements.

For matriculation a high school course of four full years.

For graduation four satisfactory courses of medical lectures.

All were recognized by the Illinois State Board of Health, 1 Ja, '98; Cornell organized since that date.

The following meet the requirements of the Association of American Medical Colleges: College Physicians and Surgeons, New York Homeopathic, New York Medical College and Hospital for Women, Woman's Medical College of the New York Infirmary for Women and Children.

104. ALBANY MEDICAL COLLEGE, DEP'T UNION UNIV., regular, Albany, pop. 97,120, Dean, Albert VanderVeer, M.D., Ph.D., 28 Eagle St.

Session opens 27 S, '98; closes 19 Ap, '99; length, 6 mos.; matriculates, 1897-98, 195; graduates, 1897-98, 57; matriculates, 1898-99, 153.

Admission: state requirement (see p. 80); to advanced standing: the work of recognized schools for other years than the senior.

Graduation: age 21; certificate of study after age of 18, with recognized physician for four years of nine months each and attendance on four lecture courses, the last in this school; good moral character; satisfactory standing; and final examinations.

Course: four years for all graduating after 1899.

Fees: matriculation, \$5; course, \$100; four courses, \$300; dissection, \$10; three special courses, \$10 each; one special, \$5; graduation, \$25.

Subjects: anatomy, chemistry, diseases of nervous system, embryology, gynecology, histology, history, practice and jurisprudence of medicine, hygiene, insanity, materia medica, obstetrics, pathology, pediatrics, pharmacy, physics, physiology, surgery, therapeutics.

Faculty: professors, 14; adjunct, 5; clinical, 3; lecturers, 6; instructors, 18; assistants, 6; total, 52.

Total property, \$86,670; receipts, \$19,768; expenditures, \$18,393 (1898).

Organized as a private school 1821; application for incorporation 1833; denied on the grounds that the two existing schools in the state were sufficient; incorporated and graduated its first class 1839; united with Union University 1873 under present title.

105. COLLEGE OF PHYSICIANS AND SURGEONS, Medical Dep't, Columbia Univ., regular, New York, pop. 1,801,739,¹ Dean, James W. McLane, M.D., 51 W. 38th St.

Session opens 3 O, '98; closes 7 Je, '99; length, 8 mos.; matriculates, 1897-98, 763; graduates, 1897-98, 145; matriculates, 1898-99, 732.

Admission: state requirement (see p. 80); to advanced standing: work of other recognized schools admits to second or third year but not to fourth without special consent of faculty.

¹ Previous to consolidation.

Graduation : age 21 ; good moral character ; satisfactory standing ; four years of study.

Course : four years for all graduating after 1896.

Fees : matriculation, \$5 ; course, \$200 ; anatomic material, \$1 each part ; six special courses, \$20 each ; other special courses, \$25 ; laboratory course, \$25 ; dissection, \$10 ; operative surgery on cadaver, \$20 per course ; examination, \$25.

Subjects : physics, chemistry, anatomy, histology, physiology, bacteriology, materia medica and therapeutics, obstetrics and gynecology, pathology, practice of medicine, venereal and genito-urinary diseases, diseases of the eye, of the ear, of the mind and of children, of the skin, of the throat and nose, nervous system, the principles and practice of surgery.

Faculty : professors, 16 ; clinical, 10 ; adjunct, 3 ; lecturer, 1 ; clinical lecturers, 7 ; demonstrators, 2 ; instructors, 14 ; tutors, 3 ; assistants, 17.

Total property, \$2,235,000 ; receipts, \$118,689 ; expenditures, \$117,330 (1898).

Medical School, Kings College established 1767 ; suspended during Revolution ; college title changes to Columbia, 1784 ; medical school discontinued 1813 ; College Physicians and Surgeons, first medical college of the state, organized 1807 by the University ; first class graduated 1811 ; connected with Columbia for a short period in 1814 ; permanently in 1860 with added title Medical Dep't, Columbia College, Dep't Columbia Univ., 1891.

106. ECLECTIC MEDICAL COLLEGE OF THE CITY OF NEW YORK, coeducational, New York, pop. 1,801,739,¹ Dean, George W. Boskowitz, M.D., 40 East 41st St.

Session opens 27 S, '98 ; closes 1 My, '99 ; length, 6½ mos. ; matriculates, 1897-98, 82 ; graduates, 1897-98, 16 ; matriculates, 1898-99, 77.

Admission : state requirement (see p. 80) ; to advanced standing : the work of recognized schools for other years than the senior.

Graduation : age 21 ; good moral character ; certificate of study for four years under reputable physician and attendance on four terms of instruction in a recognized school, the last at this school.

Course : four years for all graduating after 1899.

Fees : matriculation, \$5 per annum ; one course, \$100 ; four or more courses, \$300 ; graduates of other schools, \$50 and matriculation fee ; dissection, \$10 ; two laboratory courses, \$10 each ; one laboratory, \$5 ; examinations, \$25 ; diploma, \$5.

Subjects : anatomy, histology, physics, chemistry, physiology, materia medica, medicine, pathology, pharmacy, therapeutics, electro-therapeutics, surgery, orificial surgery, obstetrics and gynecology, diseases of children, of the nervous system, of the ear, eye, skin, nose and throat, insanity, and medical jurisprudence.

Faculty : professors, 13 ; lecturers, 10 ; demonstrator, 1 ; assistants, 3.

Total property, \$59,422 ; receipts, \$11,026 ; expenditures, \$11,036 (1898).

Organized 1865 ; first class graduated 1866.

¹ Before consolidation.

107. LONG ISLAND COLLEGE HOSPITAL, regular, Brooklyn, pop, 957,163,¹ Dean, Jarvis S. Wight, M.D., LL.D., 30 Schermerhorn St.

Session opens 3 O, '98; closes 16 My, '99; length, 7 mos.; matriculates, 1897-98, 278; graduates, 1897-98, 72; matriculates, 1898-99, 210.

Admission: state requirement (see p.); to advanced standing: work in elementary branches, osteology, anatomy, inorganic, organic, and physiologic chemistry, urinary pathology, normal histology, physiology, of recognized schools.

Graduates: age 21; good moral character; dissection of an entire body; one laboratory course in urine analysis, normal and pathologic histology, pathologic anatomy, anatomy, physiology, hygiene, materia medica and therapeutics, gynecology, obstetrics, surgery, operative and clinical surgery, practice of medicine and in the special subjects.

Course: four years for all graduating after 1900.

Fees: matriculation, \$5 per annum; lecture course and clinics, \$150; each laboratory course, \$10.

Subjects: clinical medicine and surgery, practical obstetrics, gynecology, anatomy, chemistry and urine analysis, histology, diseases of the throat and nose, of the mind and nervous system, of the skin, of the eye and ear, medical jurisprudence.

Faculty: professors, 11; clinical, 7; lecturers, 3; instructors, 13; demonstrators, 9; assistants, 17; faculty of hospital, 44.

Total property, \$600,000; receipts, \$47,111; expenditures, \$39,826 (1898).

Incorporated 1858; first graduating class 1860.

108. MEDICAL DEP'T, UNIVERSITY OF BUFFALO, regular, coeducational, Buffalo, pop. 278,796, Dean, Matthew D. Mann, M.D., A.M., 37 Allen St.

Session opens 12 S, '98; closes 25 Ap, '99; length, 7 mos.; matriculates, 1897-98, 240 B, 66 N, total, 306; graduates, 1897-98, 63 B, 10 N, total, 73; matriculates, 1898-99, 231.

Admission: state requirement (see p. 80).

Graduation: age 21; certificate of study with regular practitioner for four years and attendance on four lecture courses the last at this school; dissection of entire lateral half of a subject; satisfactory standing and final examinations; good moral character.

Course: four years for all graduating after 1899, Niagara; four years for all graduating after —, Univ. of Buffalo.

Fees: matriculation, \$5 per annum; perpetual ticket good for six years, \$390; course, \$100; laboratory courses, \$10 each; examinations, \$10 per annum; dissection, \$10.

Subjects: anatomy, physiology, chemistry, embryology, histology, bacteriology, pathology, practice, therapeutics, surgery, obstetrics, materia medica, medical chemistry and toxicology, nervous diseases, gynecology, comparative pathology, genito-urinary, skin, children, orthopedics, otology, ophthalmology, laryngology, medical jurisprudence, insanity. (Union oc-

¹ Previous to consolidation

curred so late that the changes which will result in the curriculum could not be incorporated in the body of the '98-99 announcement.)

Faculty : professors, 23 ; adjunct, 15 ; clinical, 12 ; lecturers, 3 ; instructors, 8 ; assistants, 7.

Total property : Buffalo, \$199,168 ; Niagara, \$61,796 ; total, \$260,964 ; receipts : Buffalo, \$26,829 ; Niagara, \$6,560 ; total, \$33,389 ; expenditures : Buffalo, \$23,160 ; Niagara, 6,488 ; total, \$29,648 (1898).

Medical Dep't, Buffalo Univ. organized 1846 ; first class graduated 1847 ; Medical Dep't, Niagara Univ. organized 1883 ; first class graduated — ; consolidated under present title 1898.

109. MEDICAL DEP'T, CORNELL UNIV., regular, coeducational, New York, pop. 1,801,739,¹ Dean, William M. Polk, M.D., LL.D., 7 E. 36th St.

Session opens 4 O, '98 ; closes 15 My, '99 ; length, 7½ mos. ; matriculates, 1898-99, 258.

Admission : state requirement (see p. 80) ; to advanced standing : the work of recognized schools for other years than the last accepted upon examination or certificate.

Graduation : age 21 ; good moral character ; two courses of practical anatomy ; course at the lying-in hospital or its equivalent in practice ; pass satisfactory final examinations ; attendance on public commencement ; three years of study, the last at this school.

Course : four years for all graduating after 1899.

Fees : registration, \$5 per annum ; one lecture course, \$150 ; dissection tickets, \$10 each ; laboratory courses, \$10 each ; special course, \$20 ; operative surgery on cadaver, \$15 ; separate course tickets, \$15 ; graduation, \$30.

Subjects : anatomy, physiology, histology, bacteriology, chemistry, physics and toxicology, materia medica and therapeutics, pathology, medicine, surgery, obstetrics, gynecology, diseases of children, diseases of the nervous system and mental diseases, ophthalmology, otology, laryngology, insanity, orthopedics, dermatology, venereal and genito-urinary diseases.

Faculty : professors, 29 ; assistants, 4 ; instructors, 20 ; clinical assistants, 18 ; assistant demonstrators, 2 ; lecturers, 2.

Total property, \$1,000,000.

Organized 1898 ; men may take half the course in Ithaca and half in New York, or the four years in New York ; women must take first half in Ithaca, last half in New York ; temporary quarters in New York, Loomis Laboratory and College Building of Bellevue Hospital.

110. MEDICAL DEP'T, SYRACUSE UNIV., regular, coeducational, Syracuse, pop. 91,994, Dean, Henry D. Didama, M.D., LL.D., 424 S. Salina St.

Session opens 4 O, '98 ; closes 7 Je, '99 ; length, 8 mos. ; matriculates, 1897-98, 96 ; graduates, 1897-98, 12 ; matriculates, 1898-99, 88.

Admission : state requirement (see p. 80) ; to advanced standing : the work of recognized schools for other years than the last.

¹ Previous to consolidation

Graduation : age 21 ; good moral character ; four years of study, the last at this school ; pass all required examinations.

Course : four years for all graduating after 1899.

Fees : matriculation, \$5 per annum ; one course, \$125 ; four courses, \$450 ; students in college of liberal arts, Syracuse Univ., in senior year taking joint course ; regular university fee and \$75 in college of medicine for first year ; for four years, \$400 ; after the fourth year to the undergraduates, \$50 per annum ; course to graduates of other schools, \$75 ; single study, \$30 ; athletics, \$3.

Subjects : anatomy, histology, physiology, chemistry, embryology, materia medica, pathology and bacteriology, medicine, surgery, therapeutics, obstetrics, surgical anatomy, gynecology, pediatrics, mental diseases, ophthalmology, laryngology and otology, hygiene and public health and legal medicine.

Faculty : professors, 17 ; lecturers, 9 ; instructors and assistants, 17.

Total property, \$93,668 ; receipts, \$15,008 ; expenditures, \$13,621 (1898).

College of Physicians and Surgeons of the western district, Fairfield, chartered 1812 ; legislative grant, \$15,000, raised by lottery ; extinct 1839 for lack of a city hospital ; part of faculty in Geneva Medical College, second in the state, organized 1835 ; merged 1872 into College of Physicians and Surgeons Syracuse Univ. ; full three-year course and present title 1875.

III. NEW YORK HOMEOPATHIC MEDICAL COLLEGE,¹ New York, pop. 1,801,739,² Dean, William Tod Helmuth, M.D., LL.D., 504 Fifth Ave.

Session opens 4 O, '98 ; closes 4 My, '99 ; length, 6½ mos. ; matriculates, 1897-98, 135 ; graduates, 1897-98, 24 ; matriculates, 1898-99, —.

Admission : state requirement (see p. 80) ; to advanced standing : the work of recognized schools for other than senior year.

Graduation : age 21 ; satisfactory standing and final examinations ; good moral character ; attendance on four lecture courses.

Course : four years for all graduating after 1897.

Fees : matriculation, \$5 ; first course, \$100 ; courses 2, 3, and 4, \$125 each ; graduation, \$30.

Subjects: anatomy, physics, chemistry, physiology, histology, microscopy, surgery, pharmacy, pathology, obstetrics, hygiene, materia medica, medicine, diseases of the kidneys, otology, ophthalmology, nervous diseases, pediatry, rectal and orthopedic surgery, gynecology, genito-urinary diseases, bacteriology, mental diseases, nervous diseases, surgical gynecology, dermatology, jurisprudence, laryngology and rhinology, electro-therapeutics.

Faculty : professors, 26 ; associate, 2 ; assistants, 2 ; lecturers, 9 ; demonstrators, 4.

Total property, \$583,746 ; receipts, \$15,058 ; expenditures, \$12,788 (1898).

Homeopathic Medical College, State of New York incorporated 1860 ; first class graduated 1861 ; present title, 1869.

¹ 24 Ap '99, no reply received.

² Before consolidation.

112. NEW YORK MEDICAL COLLEGE AND HOSPITAL FOR WOMEN, homeopathic, New York, pop. 1,801,739,¹ Dean, M. Belle Brown, M.D., 135 W. 34th St.

Session opens 3 O, '98; closes 9 My, '99; length, 7 mos.; matriculates, 1897-98, 26; graduates, 1897-98, 3; matriculates, 1898-99, 26.

Admission: age 18; good moral character, certified by two physicians; state requirement (see p. 80); to advanced standing: the work of recognized schools for other years than the senior.

Graduation: age 22; attendance on four school years of graded instruction, the last at this school; pass satisfactory examinations.

Course: four years for all graduating after 1894.

Fees: matriculation, \$5; course, \$100; anatomic material, \$15; examination, \$30.

Subjects: anatomy, chemistry, physiology, histology, hygiene, pharmacology, obstetrics, materia medica, principles, practice and jurisprudence of medicine, gynecology, physical diagnosis, laryngology and rhinology, mental and nervous diseases, diseases of children, electro-therapeutics, dermatology, ophthalmology, otology.

Faculty: professors, 21; lecturers, 11; assistants, 5.

Total property, \$28,220; receipts, \$7,625; expenditures, \$36,146 (1898).

New York Medical College for Women, the oldest institution of its kind in the world, organized 1863; first class graduated 1864; name changed to New York Medical College for Women and Hospital for Women and Children 1864; in 1895 incorporated by the University under its present title.

113. THE UNIVERSITY AND BELLEVUE HOSPITAL MEDICAL COLLEGE, regular, (?), New York, pop. 1,801,739,¹ Dean, Edward G., Janeway, M.D., L.L.D., 36 W. 40th St.

Session opens 3 O, '98; closes 16 My, '99; length, 8 mos.; matriculates, 1897-98, 748 (undergraduate), 738, (post-graduate 10); graduates, 1897-98, 236; matriculates, 1898-99, 430.

Admission: state requirement (see p. 80); to advanced standing: the work of recognized schools for other years than the last on examination.

Graduation: age 21; good moral character; study of medicine for three years, the last at this school; certificate of attendance on six cases of labor; examinations.

Course: four years for all graduating after 1899.

Fees: matriculation, \$5 per annum; course, \$150; dissection, \$10; special course, \$10; laboratory courses, histology or materia medica, \$10; chemistry, normal histology or pathology, \$15; examination, \$30.

Subjects: anatomy, histology, physiology, chemistry and physics, bacteriology, materia medica, hygiene, pathology, autopsies, therapeutics, practice of medicine, surgery, obstetrics, gynecology, diseases of the nervous system, mental diseases and medical jurisprudence, pediatrics, ophthalmology, otology, laryngology and rhinology, dermatology, and syphilology.

¹ Previous to consolidation.

Faculty: professors, 27; clinical, 7; adjunct, 1; lecturers, 5; clinical lecturers, 4; instructors, 9; assistants, 38.

Total property, New York Univ., \$220,000.00; Bellevue Hosp., \$110,052.93; total, \$330,052.00; receipts, New York Univ., \$42,478.96; Bellevue Hosp., \$82,392.87; total, \$124,770.00; expenditures, New York Univ., \$42,984.72; Bellevue Hosp., \$75,339.94; total, \$118,324.00 (1898).

University of the City of New York, Dep't Medicine, organized 1841; first class graduated 1842; secured law legalizing dissection in New York state, 1853; title changed to New York University Medical College, 1896; united under present title 1898, with Bellevue Hospital Medical College of the City of New York; organized 1861; first class graduated 1862.

114. WOMAN'S MEDICAL COLLEGE OF THE NEW YORK INFIRMARY for Women and Children, regular, New York, pop. 1,801,739,¹ Dean, Emily Blackwell, M.D., 321 E. 15th St.

Session opens 15 S, '98; closes 25 My, '98; length, 8 mos.; matriculates, 1897-98, 100; graduates, 1897-98, 18; matriculates, 1898-99, 75.

Admission: state requirement (see p. 80); to advanced standing: the work of recognized schools for other than the junior and senior years on examination in subjects of lower classes.

Graduation: age 21; evidence of study for four years and attendance on four lecture courses, at least the last two at this college; good moral character; satisfactory standing; written report of one or more cases observed by student in clinics.

Course: four years for all graduating after 1896.

Fees: matriculation, \$5; four courses, \$130 each; anatomic material, \$10; special courses, \$20 each.

Subjects: anatomy, chemistry, clinical microscopy, dermatology, gynecology, histology and embryology, hygiene, laryngology and rhinology, materia medica, general medicine, nervous and mental diseases, obstetrics, ophthalmology and otology, orthopedic surgery, pathology, pediatrics, physics, physiology, practical pharmacy, surgery, and therapeutics.

Faculty: professors, 10; clinical, 7; lecturers, 2; demonstrators, 5; instructors and assistants, 15.

Total property, \$102,500; receipts, \$11,225; expenditures, \$20,800 (1898).

New York Infirmary for Women and Children incorporated 1854; college chartered 1864 with present title; first class graduated 1870.

NORTH CAROLINA.

Schools: regular, 3; homeopathic, 0; eclectic, 0; total, 3.

Session opens about first Sept.; closes about middle May.

Matriculates, 1897-98, —; graduates, 1897-98, —; matriculates, 1898-99, —.

Admission and graduation: no state requirements.

¹ Previous to consolidation.

Fees : average matriculation, \$5 ; course, \$78.33 ; additional, \$10.

Faculty : professors, 19 ; lecturers, 0 ; others, 2 ; total, 21.

Total property, \$— ; receipts, \$— ; expenditures, \$—.

115. MEDICAL DEP'T, SHAW UNIV.,¹ regular, coeducational, Raleigh, pop. 12,678, Dean, James McKee, M.D., address —.

Graduation : age 21 ; good moral character ; attendance on four years' course or on three years with examination in all branches ; dissection of cadaver ; thesis ; examinations.

Course : four years for all graduating after —.

Fees : matriculation, \$5 ; incidentals, \$10 ; course, \$60 ; graduation, \$10.

Subjects : anatomy, physiology, materia medica, chemistry, pathology, theory and practice of medicine and surgery, therapeutics, obstetrics, ophthalmology, otology, laryngology, dermatology, syphilis, diseases of nervous system, of women, of children, jurisprudence.

Faculty : professors, 8.

Leonard Medical School established 1882 ; established for the education of colored students of both sexes.

116. MEDICAL SCHOOL, UNIVERSITY OF NORTH CAROLINA, regular, Chapel Hill, pop. 1,500, Dean, R. H. Whitehead, Chapel Hill.

Session opens 5 S, '98 ; closes 25 My, '99 ; length, 9 mos. ; matriculates, 1897-98, 39 ; matriculates, 1898-99, 43.

Admission : A. A. M. C. requirements ; to advanced standing : work of recognized schools.

Graduation : diplomas not granted.

Course : two years.

Fees : \$100 per session.

Subjects : physics, chemistry, biology, histology, anatomy, embryology, physiology, materia medica, pathology, minor surgery.

Faculty : professors, 6.

Organized 1891.

117. NORTH CAROLINA MEDICAL COLLEGE,¹ regular, Davidson, pop. —, Dean, —.

Session opens 8 S, '98 ; closes 1 My, '99 ; length, 7 mos. ; matriculates, 1897-98 (undergraduate), 46 ; (post-graduate), 16 ; graduates, 1897-98, 3 ; matriculates, 1898-99, —.

Admission : good moral character ; matriculation in college ; graduation from high school or certificate from superintendent of instruction covering English, arithmetic, U. S. history, geography, Latin, or examinations in above subjects ; to advanced standing : —.

Graduation : attendance on three lecture courses ; laboratory courses ; dissection in two courses ; examinations.

¹ 24 Ap '99, no reply received.

Course : three years for all graduating after —.

Fees : matriculation, \$5 ; course, \$75 per annum ; laboratory, \$10.

Subjects : anatomy, physiology, histology, chemistry, physics, materia medica, pathology, principles and practice of medicine, surgery, obstetrics, therapeutics, diseases of children, nervous system, eye, hygiene, bacteriology, jurisprudence, gynecology.

Faculty : professors, 5 ; assistant, 1 ; instructor, 1.

NORTH DAKOTA.

There are no medical schools in North Dakota.

OHIO.

Schools : regular, 10 ; homeopathic, 2 ; eclectic, 2 ; total, 14.

Session opens about middle Sept. ; closes about first May.

Matriculates, 1897-98, 1526 ; graduates, 1897-99, 595 ; matriculates, 1898-99, —.

Admission and graduation : no state requirements.

Fees : average matriculation, \$5 ; course, \$76.16 ; additional, \$41.

Faculty : professors, 247 ; lecturers, 77 ; others, 133 ; total, 457.

Total property, \$— ; receipts, \$— ; expenditures, \$—.

118. AMERICAN ECLECTIC MEDICAL INSTITUTE, eclectic, coeducational, Cincinnati, pop. 286,903, Dean, L. M. Bickmore, address —.¹

119. CINCINNATI COLLEGE OF MEDICINE AND SURGERY, regular, coeducational, Cincinnati, pop. 296,908, Dean, W. E. Kiely, M.D., 420 Broadway.

Session opens 4 O, '98 ; closes 10 My, '99 ; length, 7 mos. ; matriculates, 1897-98, 94 ; graduates, 1897-98, 26 ; matriculates, 1898-99, 96.

Admission : examination in Latin, English, physics, mathematics ; graduates or matriculates of colleges, scientific or normal schools ; those holding certificate from high or equivalent schools or teacher's certificate are exempt from examination ; to advanced standing : college graduates completing course in chemistry and biology ; graduates and matriculates of homeopathic and eclectic schools, of dental schools of two courses, of pharmacy and veterinary schools may apply for advanced standing.

Graduation : age 21 ; four years' study ; attendance on four annual lecture courses of six months each ; two years of clinics ; dissection of lateral half ; laboratory courses ; final examinations.

Course : four years for all graduating after 1898.

Fees : course, \$75 ; hospital, \$5 ; special students, \$10 and matriculation, \$5 ; final examination, \$25.

Subjects : embryology, histology, anatomy, chemistry, physiology, physics, bacteriology, pathology, materia medica, therapeutics, practice of med-

¹ No additional information furnished in manuscript.—ED. BULLETIN.

icine, surgery, ophthalmology, pediatrics, gynecology, dermatology, laryngology, otology.

Faculty: professors, 16; demonstrators, 5; lecturers, 5; assistant, 12.

Total property, \$25,000; receipts, \$7,850; expenditures, \$5,810 (1898).

Organized 1849; first class graduated 1852, and classes graduated in subsequent years.

120. CLEVELAND HOMEOPATHIC MEDICAL COLLEGE,¹ Cleveland, pop. 261,353, Dean, William A. Phillips, M.D., 89 Euclid Ave.

Session opens 21 S, '98; closes 9 Ap, '99; length, 6 mos.; matriculates, 1897-98, 198; graduates, 1897-98, 61; matriculates, 1898-99, —.

Admission; good moral character, certified by two physicians; college matriculation; high school graduation; certificate from college or state superintendent covering U. S. history, geography, English, arithmetic, physics and Latin; to advanced standing: work of recognized schools for other years than senior; to second year: college graduates on examination; graduates of pharmacy, dental and veterinary schools.

Graduation: age 21; good moral character; four years' study; attendance on four annual lecture courses of six months each, the last at this school; dissection of lateral half; examinations.

Course: four years for all graduating after —.

Fees: matriculation, \$5; course, \$100 per annum; final examination, \$25.

Subjects: anatomy, osteology, biology, chemistry, histology, history of medicine, therapeutics, Latin, sanitary science, hygiene, botany, physiology, embryology, pharmacy, organon, urinary analysis, bacteriology, gynecology, pathology, materia medica, theory and practice, surgery, principles and practice, obstetrics, rhinology, pediatry, jurisprudence, neurology, ophthalmology, otology, dermatology, dietetics, ethics, genito-urinary diseases, diseases of chest, rectum.

Faculty: professors, 27; lecturers, 15; demonstrators, 3; instructor, 1.

Cleveland University of Medicine and Surgery organized in 1849; Cleveland Medical College organized 1890; merged into the Cleveland Homeopathic Medical College 1897.

121. ECLECTIC MEDICAL INSTITUTE, Cincinnati, pop. 296,908, Dean, F. J. Locke, M.D., 724 Monmouth St., Newport, Ky.

Session opens 19 S, '98; closes 9 My, '99; length, 7½ mos.; matriculates, 1897-98, 166; graduates, 1897-98, 45; matriculates, 1898-99, 159.

Admission: good moral character; graduation from college or high school; N. Y. regents' certificate, first-grade teacher's certificate, or examination in English, arithmetic, physics, history, geography, Latin; to advanced standing: work of recognized schools for other years than senior; to the third and fourth years; on examination; to second year: college graduates, and graduates of three-year courses in pharmacy and dental schools.

Graduation: age 21; four years' study; attendance on four annual lecture

¹24 Ap '99, no reply received

courses of 27 weeks, the last at this school; chemic, histologic and pathologic laboratory courses; two sessions of college and hospital clinics; dissection of half of cadaver, practical course in obstetrics and surgery; thesis; examinations.

Course: four years for all graduating after 1899.

Fees: course, \$75; graduation, \$25; hospital, \$5; course to graduates of recognized medical schools including graduation, \$75; same without graduation, \$50.

Subjects: anatomy, physiology, chemistry, pharmacy, materia medica, therapeutics, principles and practice of medicine, surgery, pathology, hygiene, obstetrics, gynecology, pediatrics, Latin, physics, zoology, diseases of eye, ear, nose, throat, jurisprudence, mental and nervous diseases.

Faculty: professors, 14; demonstrators, 2; instructor, 1; secretary, 1; curator, 1; clinical instructors, 5.

Total property, \$40,000; receipts, \$10,000; expenditures, exceed \$10,000 (1898).

Worthington Medical College organized 1832; first class graduated 1833, and classes graduated in subsequent years except 1839-43 inclusive; present title 1845; first class graduated 1845; American Medical College organized 1839; first class graduated 1840; merged 1853; Eclectic College of Medicine and Surgery organized 1856; first class graduated 1857, and classes graduated in subsequent years except 1858-59 inclusive, and merged 1859 into Eclectic Medical Institute.

122. LAURA MEMORIAL WOMAN'S MEDICAL COLLEGE, regular, Cincinnati, pop. 296,908, Dean, John M. Withrow, M.D., A.M., 526 W. 7th St.

Session opens 27 S, '98; closes 27 Ap, '99; length, 6½ mos.; matriculates, 1897-98, 21; graduates, 1897-98, 7; matriculates, 1898-99, 27.

Admission: graduation from college or high school; teacher's certificate; examination in English branches; to advanced standing: work of recognized schools for other years than senior, on examination; to work of second year: college graduates having had a course in biology, anatomy, botany, chemistry, physics, histology, physiology, and embryology; pharmacy graduates; dental graduates on examination in materia medica and pharmacy of first year.

Graduation: age 21; good moral character; four years' study; attendance on four winter lecture courses, the last at this school; two courses of dissection; two courses of hospital, college and dispensary clinical instruction; two courses with clinical lecturers at Cincinnati Hospital.

Course: four years for all graduating after 1898.

Fees: matriculation, \$5; course, \$50 per annum; laboratories, \$25 per annum; practical anatomy, histology, pathology, chemistry, physiology, and bacteriology, \$10 each; hospital, \$5; graduation, \$25.

Subjects: anatomy, histology, physiology, embryology, chemistry, materia medica, pharmacy, therapeutics, bacteriology, pathology, hygiene, practice of medicine, surgery, gynecology, obstetrics, ophthalmology, dis-

eases of children, dermatology, neurology, laryngology, jurisprudence.

Faculty: emeritus professor, 1; professors, 20; adjunct, 1; demonstrators, 5; director, 1; curator, 1.

Total property, \$28,000; receipts, \$1,200; expenditures, \$2,000 (1898).

Women's Medical College of Cincinnati founded 1887; Presbyterian Hospital Woman's Medical College established 1890; these two united under present title 1895.

123. MEDICAL DEP'T, CINCINNATI UNIV.,¹ regular, Cincinnati, pop. 296-, 908, Dean, William Wallace Seely, M.D., A.M., 4th St. and Broadway.

Session opens 4 O, '98; closes —, '99; length, — mos.; matriculates, 1897-98, 213; graduates, 1897-98, 28; matriculates, 1898-99, —.

Admission: good moral character, certified by two physicians; college matriculation; high school graduation; certificate from college, state superintendent, or high school, covering English, arithmetic, physics, U. S. history, geography, Latin, or examination in these subjects; to advanced standing: work of recognized schools; to second year: graduates of college scientific courses; graduates in pharmacy with three years' course and of dental schools with two years' course.

Graduation: age 21; good moral character; four years' study; attendance on four annual lecture courses of six months each; dissection of body; two years hospital clinics; one case of labor; examinations.

Course: four years for all graduating after 1897 (?).

Fees: matriculation, \$5; course, \$100 per annum; hospital clinics, \$5; graduation, \$25.

Subjects: anatomy, physiology, chemistry, materia medica, principles of surgery, medicine, obstetrics, therapeutics, gynecology, diseases of children, hygiene, bacteriology, ophthalmology, otology, laryngology, neurology, orthopedics, skin and genito-urinary diseases, jurisprudence.

Faculty: professors, 17; lecturers, 10; demonstrators, 4; assistants, 11; clinician, 1.

Medical College of Ohio organized 1819; first class graduated 1821 (?); Miami Medical College merged 1858; reestablished 1865; present title 1887.

124. MEDICAL DEP'T, NATIONAL NORMAL UNIV. COLLEGE OF MEDICINE, regular, coeducational, Lebanon, pop. 3,050, Dean, Selden S. Scoville, M.D., A.M., Lebanon.

Session opens 6 S, '98; closes 19 Mr, '99; length, 6½ mos.; matriculates, 1897-98, 33; graduates, 1897-98, none; matriculates, 1898-99, 27.

Admission: good moral character; college, academy, scientific, normal or high school, or first- or second-grade teacher's certificate, or examination in English, arithmetic, algebra, physics, and Latin; to advanced standing: to second year: matriculates of recognized schools; college graduates having completed courses in chemistry and biology, graduates of pharmacy, dental, and veterinary schools.

¹ 24 Ap '99, no reply received.

Graduation : degree not conferred.

Course : two years after 1898.

Fees : matriculation, \$5 ; course, \$40 ; dissecting, \$10 ; hospital, \$3 ; laboratory, \$5.

Subjects : anatomy, embryology, physiology, chemistry, histology, microscopy, materia medica, therapeutics, bacteriology, principles of medicine, surgery, obstetrics.

Faculty : professors, 8 ; assistant, 1 ; teacher, 1.

Total property, \$— ; receipts, \$— ; expenditures, \$— (1898).

Organized 1889 ; first class graduated 1891, and classes graduated in each subsequent year except 1897-99 inclusive.

125. MEDICAL DEP'T, OHIO WESLEYAN UNIVERSITY, regular, coeducational, Cleveland, pop. 261,353, Dean, C. B. Parker, M.D., 425 Euclid Ave.

Session opens 21 S, '98 ; closes 5 My, '99 ; length, 7½ mos. ; matriculates, 1897-98, 95 ; graduates, 1897-98, 43 ; matriculates, 1898-99, 96.

Admission : requirements A. A. M. C. (see p. 8) ; to advanced standing : requirements A. A. M. C. (see p. 9).

Graduation : age 21 ; good moral character ; attendance on four annual lecture courses, the last at this school ; dissection of body ; examinations.

Course : four years for all graduating after 1898.

Fees : course, \$100 ; full course, \$300 ; matriculation and examination, \$10 per annum ; laboratory, \$20.

Subjects : biology, anatomy, embryology, histology, physiology, materia medica, pharmacognosy, chemistry, bacteriology, pathology, anthropometry, hygiene, therapeutics, obstetrics, medicine, surgery, pharmacology, laryngology, rhinology, otology, gynecology, neurology, pediatrics, orthopedics, ophthalmology, jurisprudence, dermatology, genito-urinary diseases, state medicine.

Faculty : professors, 25 ; lecturers, 8 ; assistants, 4 ; instructor, 1.

Total property, \$88,000 ; receipts, \$10,000 ; expenditures, \$7,000 (1898).

Cleveland College of Physicians and Surgeons organized 1863 ; first class graduated 1865, and classes graduated in each subsequent year ; present title Univ. of Wooster ; Medical Dep't organized 1863 as Charity Hospital Medical College ; transferred to Univ. of Wooster 1870 ; first class graduated 1865 ; changed name to Cleveland College Physicians and Surgeons and became Medical Department, Ohio Wesleyan Univ. 1896.

126. MEDICAL DEP'T, WESTERN RESERVE UNIV., regular, Cleveland, pop. 261,353, Dean, Hunter H. Powell, M.D., A.M., 467 Prospect St.

Session opens 5 O, '98 ; closes 16 Je, '99 ; length, 8 mos. ; matriculates, 1897-98, 127 ; graduates, 1897-98, 36 ; matriculates, 1898-99, 110.

Admission :¹ examination in English, Latin, arithmetic, algebra, and two optional from geometry, physics, Greek, French, German ; certificates from recognized schools covering above subjects ; to advanced standing : work of recognized schools with equivalent courses for other years than senior.

¹ Beginning with 1901-2 the preparation required for admission will be that of a three years' college course.

Graduation : age 21 ; good moral standing ; four years' study, the last at this school ; final examinations.

Course : four years for all graduating after 1899.

Fees : course, \$125 ; breakage, \$10.

Subjects : chemistry, anatomy, histology, bacteriology, materia medica, pharmacy, physics, biology, physiology, therapeutics, hygiene, surgery, pharmacology, pathologic anatomy, obstetrics, medicine, gynecology, neurology dermatology, diseases of children, of the nose, ear, and throat, genito-urinary diseases.

Faculty : professors, 21 ; lecturers, 3 ; demonstrators, 3 ; assistants, 10 ; curator and prosector, 1.

Total property, \$400,000 ; receipts, \$21,000 ; expenditures, \$21,000 (1898).

Cleveland Medical College, Medical Dep't Western Reserve College, organized 1843 ; first class graduated 1845, and classes graduated in each subsequent year except 1862-63 inclusive ; reorganized with present title 1881.

127. MIAMI MEDICAL COLLEGE, regular, Cincinnati, pop. 296,908, Dean, N. P. Dandridge, M.D., A.M., 422 Broadway.

Session opens 4 O, '98 ; closes 2 My, '99 ; length, 6½ mos. ; matriculates, 1897-98, 80 ; graduates, 1897-98, 12 ; matriculates, 1898-99, 98.

Admission : college or high school diploma, teachers' certificate or other satisfactory evidence of sufficient education ; to advanced standing : work of recognized schools for other years than senior ; to second year : college graduates having completed courses in biology, chemistry and physics, and graduates of pharmacy, dental, and veterinary schools.

Graduation : age 21 ; good moral character ; four years' study ; attendance on four lecture courses, the last at this school and maybe service of resident hospital physician ; courses in practical anatomy, chemistry, and laboratory courses in histology, pathology, and bacteriology ; two years' hospital clinics ; examinations.

Course : four years for all graduating after 1898.

Fees : matriculation, \$5 ; course, \$100 per annum ; graduation, \$25 ; hospital, \$5.

Subjects : anatomy, chemistry, materia medica, physiology, hygiene, principles and practice of medicine, surgery, therapeutics, obstetrics, ophthalmology, gynecology, bacteriology, laryngology, neurology, venereal diseases, pathology, diseases of children, ear, throat, nose, otology, dermatology, histology.

Faculty : professors, 12 ; clinical, 4 ; demonstrators, 7 ; lecturers, 5 ; instructors, 3.

Total property, \$20,000 ; receipts, \$98,000 ; expenditures, \$98,000 (1898).

Organized 1852 ; first class graduated 1853, and classes graduated in each subsequent year except — inclusive ; merged into Medical College of Ohio 1858 ; reestablished 1865 ; present title — ; first class graduated 1866, and classes graduated in each subsequent year except — inclusive.

128. OHIO MEDICAL UNIVERSITY,¹ regular, coeducational, Columbus, pop. 88,150, Dean, George M. Waters, M.D., A.M., 1396 Neil Ave.

Session opens 14 S, '98; closes 18 Ap, '99; length, 6½ mos.; matriculates, 1897-98, 223; graduates, 1897-98, 95; matriculates, 1898-99, —.

Admission: graduation from or matriculation in colleges, normal and scientific schools; high or equivalent school certificates, or examination in English, arithmetic, algebra, physics, Latin; to advanced standing: work of recognized schools; college graduates having completed prescribed science courses, and graduates of pharmacy, homeopathic, eclectic, veterinary schools and of dental schools with two lecture courses.

Graduation: age 21; good moral character; attendance on four annual courses of six months each; satisfactory standing; final examinations.

Course: four years for all graduating after —.

Fees: matriculation, \$5; course, \$50; three laboratory, \$10 each; anatomy, \$150; embryology, \$3; pathology, \$8; graduation, \$10.

Subjects: anatomy, bacteriology, chemistry, histology, Latin, pharmacy, physiology, embryology, materia medica, surgery, pathology, electro-therapeutics, hygiene, sanitary science, obstetrics, principles of medicine, surgery, therapeutics, dermatology, gynecology, laryngology, rhinology, jurisprudence, mental, nervous and rectal diseases, ophthalmology, otology, pediatrics.

Faculty: professors, 33; adjunct, 5; instructors, 3; assistant demonstrators, 2; assistants, 3.

Organized 1892.

129. PULTÉ MEDICAL COLLEGE, homeopathic, coeducational, Cincinnati, pop. 296,908, Dean, J. D. Buck, M.D., 116 West 7th St.

Session opens 28 S, '98; closes 6 Ap, '99; length, 6 mos.; matriculates, 1897-98, 28; graduates, 1897-98, 5; matriculates, 1898-99, 49.

Admission: diplomas from academies, scientific and high schools; a teacher's or civil service certificate; college matriculation, or examination in English branches, U. S. history, physics, Latin; to advanced standing: work of recognized schools; to second year: graduates of pharmacy, dental, or veterinary schools.

Graduation: age 21; good moral character; attendance on four annual lecture courses of six months, the last at this school; two sessions of practical anatomy; two courses each of dispensary, college and hospital clinics; one of clinical obstetrics; laboratory courses and examinations.

Course: four years for all graduating after 1898.

Fees: matriculation, \$5; course, \$75 per annum; examination, \$25.

Subjects: anatomy, physiology, chemistry, histology, Latin, obstetrics, hygiene, materia medica, pharmacology, pathology, urinalogy, organon, principles and practice of medicine, surgery, pediatrics, diseases of rectum, bacteriology, dermatology, laryngology, rhinology, therapeutics, orthopedics, gynecology, nervous and mental diseases, ophthalmology, otology, jurisprudence, physical diagnosis.

¹24 Ap '99, no reply received.

Faculty : professors, 21 ; lecturers, 4 ; demonstrators, 4 ; instructor, 1 ; assistants, 7.

Total property, \$25,000 ; receipts, \$— ; expenditures, \$— (1898).

Organized 1872 ; first class graduated 1873, and classes graduated in each subsequent year.

130. STARLING MEDICAL COLLEGE, regular, Columbus, pop. 88,150, Dean, Starling Loving, M.D., LL.D., 229 E. State St.

Session opens 14 S, '98 ; closes 15 Ap, '99 ; length, 6½ mos. ; matriculates, 1897-98, 182 ; graduates, 1897-98, 97 ; matriculates, 1898-99, 120.

Admission : examination in English, arithmetic, algebra, physics, Latin ; or certificate from approved schools covering above subjects ; to advanced standing : work of recognized schools for other years than senior on examination.

Graduation : age 21 ; four years' study ; attendance on four annual lecture courses, the last at this school ; examinations.

Course : four years for all graduating after 1899.

Fees : matriculation, \$5 per annum ; course, \$50 per annum ; dissection, \$14 ; laboratory, \$25 ; graduation, \$25.

Subjects : anatomy, physiology, chemistry, materia medica, biology, histology, embryology, therapeutics, pathology, bacteriology, medicine, surgery, principles of surgery, obstetrics, hygiene, dermatology, laryngology, neurology, gynecology, ophthalmology, otology, pediatrics, jurisprudence, genito-urinary diseases.

Faculty : professors, 15 ; lecturers, 12 ; assistant, 2 ; demonstrators, 2.

Total property, \$100,000 ; receipts, \$12,000 ; expenditures, \$5,000 (1898).

Medical Dep't Willoughby Univ. organized 1834 ; first class graduated 1844 (?), and classes graduated in each subsequent year except — inclusive ; merged with Starling 1847 ; first class graduated 1848, and classes graduated in each subsequent year ; Columbus Medical College organized 1875 ; first class graduated 1876, and classes graduated in each subsequent year ; merged with Starling 1892.

131. TOLEDO MEDICAL COLLEGE, regular, coeducational, Toledo, pop. 81,434, Dean, Daniel E. Haag, M.D., F.R.M.S., 1121 Washington St.

Session opens 29 S, '98 ; closes 27 Ap, '99 ; length, 6½ mos. ; matriculates, 1897-98, 66 ; graduates, 1897-98, 26 ; matriculates, 1898-99, 50.

Admission : good moral character ; graduation from college or high school ; teacher's certificate or its equivalent ; to advanced standing : work of recognized schools for other years than senior ; college graduates having completed courses in biology and chemistry ; graduates of pharmacy, homeopathic, eclectic, and veterinary schools, and of dental schools with two-year courses on examination.

Graduation : age 21 ; good moral character ; attendance on four lecture courses, the last at this school ; two courses of dissection ; one course of practical chemistry and urinalysis ; one laboratory course in histology, pathology, physiology, and bacteriology ; examinations.

Course : four years for all graduating after 1898 (?).

Fees : matriculation, \$5 ; course, \$50 ; anatomy, \$10 each ; laboratory, \$20 ; hospital, \$5 ; graduation, \$25.

Subjects : osteology, syndesmology, anatomy, embryology, chemistry, hygiene, materia medica, therapeutics, physiology, histology, bacteriology, pathology, practice of medicine, surgery, obstetrics, gynecology, diseases of children, nose, throat, lungs, dentistry, nervous and genito-urinary diseases.

Faculty : professors, 17 ; lecturers, 15 ; demonstrators, 4.

Total property, \$35,000 ; receipts, \$6,500 ; expenditures, \$6,500 (1898).

Organized 1883 ; first class graduated 1883, and classes graduated in each subsequent year.

OKLAHOMA.

There are no medical schools in Oklahoma.

OREGON.

Schools : regular, 2 ; homeopathic, 0 ; eclectic, 0 ; total, 2.

Session opens about first Oct. ; closes about first April.

Matriculates, 1897-98, 70 ; graduates, 1897-98, 10 ; matriculates, 1898-99, —.

Admission and graduation : — state requirements.

Course : — years for all matriculates before 189— who graduate before 190— ; four years for all others.

Fees : average matriculation, \$5 ; course, \$ — ; additional, \$ —.

Faculty : professors, 33 ; lecturers, 8 ; others, 2 ; total, 43.

Total property, \$ — ; receipts, \$ — ; expenditures, \$ —.

132. MEDICAL DEP'T, OREGON UNIV. regular, coeducational, Portland, pop. 46,385, Dean, S. E. Josephi, M.D., 610 DeKum Building.

Session opens 3 O, '98 ; closes 3 Ap, '99 ; length, 5½ mos. ; matriculates, 1897-98, 47 ; graduates, 1897-98, none ; matriculates, 1898-99, 62.

Admission : requirements A. A. M. C. (see p. 8) ; to advanced standing : requirements A. A. M. C. (see p. 9).

Graduation : age 21 ; good moral character ; four years' study ; attendance on four annual lecture courses, the last at this school ; dissection of body ; two courses of dissections and clinics ; examinations.

Course : four years for all graduating after 1897.

Fees : matriculation, \$5 per annum ; course, \$130 ; third year, \$100 ; fourth year, free ; examination, \$30 ; matriculates of other schools according to year entered.

Subjects : anatomy, histology, chemistry, materia medica, pharmacy, physiology, therapeutics, hygiene, obstetrics, theory and practice of med-

icine, principles and practice of surgery, pathology, pediatrics, dermatology, gynecology, ophthalmology, otology, bacteriology, jurisprudence, rhinology, laryngology, genito-urinary diseases, insanity, diseases of nervous system, microscopy.

Faculty : professors, 16 ; lecturers, 8 ; demonstrator, 1.

Organized 1887 ; first class graduated 1888 (?), and classes graduated in each subsequent year except 1898 inclusive.

133. MEDICAL DEP'T, WILLAMETTE UNIV., regular, coeducational, Salem, pop. 10,422, Dean, W. H. Byrd, M.D., address——.

Session opens 3 O, '98 ; closes 4 Ap, '99 ; length, 5½ mos. ; matriculates, 1897-98, 23 ; graduates, 1897-98, 10 ; matriculates, 1898-99, ——.

Admission : requirements A. A. M. C. (see p. 8) ; to advanced standing : work of recognized schools for other years than senior.

Graduation : age 21 ; good moral character ; attendance on four annual lecture courses of six months each, the last at this school ; two courses of clinics and practical anatomy ; evidence of attendance on three lecture courses as prescribed (?) ; examinations.

Course : four years for all graduating after——.

Fees : matriculation, \$5 ; course, first two years, \$100 ; third, \$75 ; fourth, \$20 ; demonstrators, \$5 ; breakage, \$3 (returnable) ; examination, \$30.

Subjects : anatomy, physiology, chemistry, toxicology, materia medica, therapeutics, principles and practice of surgery, theory and practice of medicine, obstetrics, gynecology, diseases of eye, ear, nose and throat, mental, nervous, and genito-urinary diseases, pediatrics, laryngology, rhinology, jurisprudence, syphilology, histology.

Faculty : professors, 17 ; demonstrator, 1.

Organized 1864 ; first class graduated 1867, and classes graduated in each subsequent year except 1896 ; removed to Portland 1878 ; returned to Salem 1895.

PENNSYLVANIA.

Schools : regular, 5 ; homeopathic, 1 ; eclectic, 0 ; total, 6.

Session opens about first Oct. ; closes about middle May.

Matriculates, 1897-98, 2447 ; graduates, 1897-98, —— ; matriculates, 1898-99, ——.

Admission and graduation : State requirements.

Fees : average matriculation, \$ —— ; course, \$ —— ; additional, \$ ——.

Faculty : professors, 78 ; lecturers, 28 ; others, 262 ; total, 368.

Total property, \$ —— ; receipts, \$ —— ; expenditures, \$ ——.

134. HAHNEMANN MEDICAL COLLEGE AND HOSPITAL, homeopathic, Philadelphia, pop. 1,046,964, Dean, Pemberton Dudley, M.D., 1405 N. 16th St.

Session opens 1 O, '98; closes 10 My, '99; length, 7 mos.; matriculates, 1897-98 (undergraduate), 275; (post-graduate), 3; graduates, 1897-98, 68; matriculates, 1898-99, 272.

Admission: age 17; good moral character; examination in English, arithmetic, geography, history, Latin; or college, academy, normal or high school, examining board, or teacher's certificate covering above subjects; to advanced standing: work of recognized schools for other years than senior on examination or certificate; college graduates having completed courses in biology, botany, zoology, physics, chemistry, anatomy, and physiology, or medical preparatory course may apply for advanced standing; to second year: graduates of approved pharmacy, dental, or veterinary schools.

Graduation: age 21; good moral character; four years' study; attendance on four annual lecture courses of six months each, the last at this school; examinations.

Course: four years for all graduating after 1895 (?).

Fees: matriculation, \$5; course, first year, \$100; last three years, \$125 each; graduation, \$30.

Subjects: history of medicine, medical terminology, biology, botany, zoology, physics, chemistry, pharmaceuticals, histology, anatomy, physiology, institutes of medicine and surgery, materia medica, pathology, practice of medicine, obstetrics, gynecology, pediatrics, ophthalmology, otology, laryngology, rhinology, dermatology, neurology, insanity, hygiene, jurisprudence.

Faculty: professors, 16; lecturers, 14; instructors, 2; demonstrators, 3; assistant, 1.

Total property, \$723,764; receipts, \$125,388; expenditures, \$92,778 (1898).

Homeopathic Medical College of Pennsylvania organized 1848; first class graduated 1849, and classes graduated in each subsequent year except 1869; Hahnemann Medical College of Philadelphia organized 1866; first class graduated 1867, and classes graduated in 1868 and 1869; the two colleges united in 1869 under the name of the Hahnemann Medical College of Philadelphia, the corporate title of which was changed in 1885 to the Hahnemann Medical College and Hospital of Philadelphia.

135. JEFFERSON MEDICAL COLLEGE, regular, Philadelphia, pop. 1,046,964, Dean, James W. Holland, M.D., 2006 Chestnut St.

Session opens 19 S, '98; closes 15 My, '99; length, 7½ mos.; matriculates, 1897-98, 453; graduates, 1897-98, 98; matriculates, 1898-99, 525.

Admission: graduates or matriculates of colleges, normal or high schools without examination; or examination in English, arithmetic, algebra, physics, Latin; college, academy, normal, high school or state examining board certificate accepted in place of any part of this examination; to advanced standing: examination; work of recognized schools for

other years than senior ; to second year : college graduates having completed approved courses in biology, anatomy, chemistry, physics, histology, physiology, zoology, embryology without examination, but with conditions in materia medica, anatomy, and physiology, of first year ; graduates of dentistry and pharmacy on examination.

Graduation : age 21 ; good moral character ; attendance on four lecture courses, the last at this school ; examinations.

Course : four years for all graduating after 1897.

Fees : matriculation, \$5 ; course, \$150 per annum ; dissections and surgery material, \$3.

Subjects : anatomy, histology, bacteriology, physiology, chemistry, materia medica, pharmacy, pathology, hygiene, therapeutics, obstetrics, surgery, jurisprudence, practice of medicine, ophthalmology, gynecology, electro-therapeutics, laryngology, otology, orthopedics, pediatrics, dermatology, neurology, genito-urinary diseases.

Faculty : professors, 15 ; clinical, 12 ; adjunct, 1 ; associate, 1 ; lecturer, 1 ; demonstrators, 12 ; prosector, 1 ; instructors, 9 ; assistant demonstrators, 24 ; assistants, 3.

Total property, \$700,000 ; receipts, \$—, expenditures, \$— (1898).

Medical Dep't, Jefferson College, Cannonsburg, Pa., organized 1825 ; first class graduated 1826, and classes graduated in each subsequent year ; under present title of Jefferson Medical College of Philadelphia it was given an independent organization with full university powers by charter conferred in 1838.

136. MEDICAL DEPARTMENT PENNSYLVANIA UNIV.,¹ regular, Philadelphia, pop. 1,046,964, Dean, John Marshall, M.D., 1718 Pine St.

Session opens 1 O, '98 ; closes 14 Je, '99 ; length, 6½ mos. ; matriculates, 1897-98, 883 ; graduates, 1897-98, — ; matriculates, 1898-99, —.

Admission : matriculation in college, academy, normal or high school ; or examination in English, U. S. history, geography, arithmetic, algebra, geometry, physics, Latin and French, German or solid geometry ; to advanced standing : work of recognized schools not homeopathic or eclectic for other years than senior on examination in certain subjects ; to second year : college graduates having completed courses in biology, anatomy, botany, chemistry, physics, histology, physiology, zoology, embryology on conditions.

Graduation : age 21 ; good moral character ; examinations, last year at this school ; one case of obstetrics ; attendance on commencement.

Course : four years for all graduating after—.

Fees : matriculation, \$5 ; course, \$200 per annum ; dissecting material, \$1 ; per part for first and second year, practical obstetrics, \$1 ; surgery material, \$1 per part.

Subjects : anatomy, histology, materia medica, pharmacy, chemistry, physiology, pathology, therapeutics, surgery, obstetrics, bacteriology,

¹ 24 Ap '99, no reply received.

theory and practice of medicine, gynecology, skin, genito-urinary and nervous diseases, otology, laryngology, rhinology, hygiene, pediatrics, ophthalmology, autopsies, orthopedic surgery, electro-therapeutics.

Faculty: professors, 16; clinical, 7; assistant, 2; lecturers, 5; demonstrators, 8; assistant, 21; instructors, 27; assistant, 4; prosector, 1.

Dep't Medicine, College of Philadelphia, organized 1765; first class graduated 1768, and classes graduated in each subsequent year except — inclusive; present title 1782; first medical diploma issued in America granted to Dr. John Archer, 1768.

137. MEDICO-CHIRURGICAL COLLEGE,¹ regular, Philadelphia, pop. 1,046,964, Dean, Seneca Egbert, M.D., A.M., Cherry St., bet. 17th and 18th Sts.

Session opens 3 O, '98; closes 20 My, '99; length, 7 mos.; matriculates, 1897-98, 428; graduates, 1897-98, 112; matriculates, 1898-99, —.

Admission: examination in English, physics, arithmetic, algebra, U. S. history, Latin; certificate of graduation or of study of above subjects from recognized colleges or schools; teacher's certificate; matriculates in other recognized schools; to advanced standing: work of recognized schools for other years than senior.

Graduation: age 21; good moral character; attendance on three annual lecture courses of six months each, the last at this school; examinations.

Course: four years for all graduating after —.

Fees: course, \$140; third year, \$130; fourth, \$100.

Subjects: principles of surgery, therapeutics, dermatology, gynecology, ophthalmology, obstetrics, diseases of children, nervous system, genito-urinary diseases, laryngology, otology, orthopedics, physiology, pathology, anatomy, histology, chemistry, hygiene, materia medica, pharmacy.

Faculty: lecturers, 5; demonstrators, 11; assistants, 5; instructors, 16; prosector, 1.

Organized 1881; first class graduated 1882, and classes graduated in each subsequent year.

138. WESTERN PENNSYLVANIA MEDICAL COLLEGE, regular, Pittsburg, pop. 238,617, Dean, J. C. Lange, M.D., 29 Ninth St.

Session opens 4 O, '98; closes 18 My, '99; length, 6½ mos.; matriculates, 1897-98 (undergraduate), 242; (post-graduate), 4; graduates, 1897-98, 8; matriculates, 1898-99, 276.

Admission: examination in arithmetic, grammar, geography, orthography, American history, English composition or college matriculation or college, academy, seminary, normal or high school or teacher's permanent certificate; to advanced standing: work of recognized schools for other years than senior; to second year: graduates and matriculates of homeopathic, eclectic, pharmacy, and dental schools requiring two years' course; college graduates having completed prescribed courses in chemistry and biology, or required number of hours in biology, anatomy, chemistry, botany, physics, histology, physiology, zoology and embryology.

¹ 24 Ap '99, no reply received.

Graduation : age 21 ; good moral character ; four years' study ; attendance on four lecture courses, the last at this school ; examinations.

Course : four years for all graduating after 1897.

Fees : course, \$100 ; matriculation, \$5 ; anatomy, \$10 ; breakage, \$15 ; special, \$25 each ; graduates and undergraduates of other schools, \$75.

Subjects : materia medica, pharmacy, chemistry, biology, histology, anatomy, physiology, dietetics, hygiene, pathology, principles and practice of medicine, surgery, obstetrics, therapeutics, diseases of genito-urinary organs, eye, ear, nose, throat, women and children, mental and nervous diseases, orthopedic, surgery, bacteriology.

Faculty : professors, 20 ; demonstrators, 4 ; assistants, 23 ; prosector, 1 ; assistant demonstrators, 10.

Total property, \$150,000 ; receipts, \$30,000 ; expenditures, \$30,000 (1898).

Organized 1886 ; first class graduated 1886, and classes graduated in each subsequent year.

139. WOMAN'S MEDICAL COLLEGE OF PENNSYLVANIA, regular, Philadelphia, pop. 1,046,964, Dean, Clara Marshall, M.D., 1712 Locust St.

Session opens 28 S, '98 ; closes 17 My, '99 ; length, 7 mos. ; matriculates, 1897-98 (undergraduate), 158 ; (post-graduate), 1 ; graduates, 1897-98, 35 ; matriculates, 1898-99, 148.

Admission : age 18 ; examination in English, arithmetic, algebra, physics, Latin ; or college, N. Y. regents', Canadian medical act, school, or teacher's certificate covering above subjects ; to advanced standing : work of recognized schools for other years than senior ; college graduates having pursued scientific or preparatory courses admitted on examination to advanced standing in subjects pursued.

Graduation : age 21 ; mental and moral fitness, attendance on four annual lecture courses, the last at this school ; three courses in anatomy ; dissection of cadaver ; laboratory courses in chemistry, pharmacy, histology, embryology, physiology, pathology, hygiene, and bacteriology ; required courses in physical diagnosis, surgery, obstetrics, gynecology, clinical work and lectures ; report of post-mortem examination ; two clinical cases in medicine and surgery, and eight cases of obstetrics.

Course : four years for all graduating after 1897.

Fees : matriculation, \$5 ; course, \$130 ; second and third years, \$135 each ; fourth, \$100 ; dissecting material, \$9 ; reading-room, \$2 ; special course, \$20 ; four laboratories, \$5 each, one, \$10, one, \$25 ; dissection, \$10 ; material, \$2 each part.

Subjects : chemistry, anatomy, physiology, materia medica, histology, pharmacy, pathology, surgery, embryology, bacteriology, therapeutics, practice of medicine, obstetrics, gynecology, jurisprudence, laryngology, rhinology, orthopedics, ophthalmology, dermatology, diseases of nervous system, otology, pediatrics, hygiene.

Faculty : professors, 10 ; clinical, 11 ; lecturers, 3 ; directors of laboratories, 2 ; demonstrators, 5 ; assistant, 12 ; instructors, 3 ; assistant, 1 ; clinical instructors, 28.

Organized 1850; first class graduated 30 D, 1851, and classes graduated in each subsequent year except 1861-62 inclusive.

PHILIPPINES.

No reply received from the statement, April 24, 1899.

PORTO RICO.

No reply received from the statement, April 24, 1899.

RHODE ISLAND.

There are no medical schools in Rhode Island.

SOUTH CAROLINA.

Schools: regular, 1, homeopathic, 0; eclectic, 0; total, 1.

Session opens about first Oct.; closes about last March.

Matriculates, 1897-98, 85; graduates, 1897-98, 14; matriculates, 1898-99, 97.

Admission and graduation: — state requirements.

Course: — years for all matriculates before 189— who graduate before 190—; four years for all others.

Fees: average matriculation, \$5; course, \$93.33; additional, \$5.

Faculty: professors, 8; lecturers, 0; others, 14; total, 22.

Total property, \$—; receipts, \$—; expenditures, \$—.

140. MEDICAL COLLEGE OF THE STATE OF SOUTH CAROLINA, regular, Charleston, pop. 54,955, Dean, Francis L. Parker, M.D., 70 Hasell St.

Session opens 1 O, '98; closes 31 Mr, '99; length, 5½ mos.; matriculates, 1897-98, 85; graduates, 1897-98, 14; matriculates, 1898-99, 97.

Admission: certificate of good moral character, and fitness as pupil of recognized physician; certificate from college, school, state or county superintendent, covering requirements of second-grade teacher's certificate; to advanced standing: work of recognized schools for other years than senior.

Graduation: age 21; good moral character; attendance on three annual lecture courses, the last at this school; two sessions of dissection; examinations.

Course: three years for all graduating after —.

Fees: matriculation, \$5; laboratory, \$5 per annum; course, \$100 first two years; last year, \$80.

Subjects: anatomy, physiology, chemistry materia medica, therapeutics, pathology, obstetrics, jurisprudence, diseases of women, eye, ear, nose, throat, nervous system, medicine, surgery, gynecology, bacteriology, toxicology, hygiene, histology, urinalogy.

Faculty : professors, 8 ; assistants, 9 ; instructors, 3 ; demonstrators, 2.

Medical College of South Carolina organized 1823 ; first class graduated 1825 ; merged 1839 into Medical College State of South Carolina ; organized 1832 ; first class graduated 1833, and classes graduated in each subsequent year except 1861-65 inclusive.

SOUTH DAKOTA.

There are no medical schools in South Dakota.

TENNESSEE.

Schools : regular, 9 ; homeopathic, 0 ; eclectic, 0 ; total, 9.

Session opens about first Oct. ; closes about first Apr.

Matriculates, 1897-98, — ; graduates, 1897-98, 238 ; matriculates, 1898-99, 1776.

Admission and graduation : no state requirements.

Fees : average matriculation, \$5 ; course, \$62.618 ; additional, \$43.33.

Faculty : professors, 86 ; lecturers, 23 ; others, 70 ; total, 179.

Total property, \$— ; receipts, \$— ; expenditures, \$—.

141. MEDICAL DEPT' GRANT UNIV., regular, Chattanooga, pop. 29,100, Dean, E. A. Cobleigh, M.D., Market and E. 9th Sts.

Session opens 14 S, '98 ; closes, 20 Mr, '99 ; length 6 mos. ; matriculates, 1897-98, 153 ; graduates, 1897-98, 31 ; matriculates, 1898-99, 168.

Admission : certificate of good moral character and fitness from a recognized physician as preceptor ; college or school diploma, or certificate from state or county superintendent meeting requirements of teacher's certificate, or matriculation with conditions to be made up first year ; to advanced standing : work of recognized schools for other years than senior ; college graduates completing elementary courses including chemistry and biology ; graduates of pharmacy, dental and veterinary schools ; and graduates and matriculates of homeopathic and eclectic schools on examination in subjects of lower classes.

Graduation : age 21 ; attendance on four annual lecture courses of six months each, the last at this school ; two courses of clinics ; two terms dissection ; two laboratory courses, each in histology, bacteriology, chemistry, operative surgery, obstetrics ; examinations.

Course : four years for all graduating after 1901.

Fees : matriculation \$5 per annum ; course, \$50 per annum ; hospital, \$10 per annum ; laboratories, \$5 each ; demonstrators, \$10.

Subjects : anatomy, physiology, chemistry, materia medica, pharmacy, histology, microscopy, hygiene, sanitary science, therapeutics, principles of medicine, surgery, obstetrics, gynecology, embryology, urinalysis, bacteriology, diseases of brain, nervous system, nose, throat, chest, mind, in-

fancy and childhood, venereal and genito-urinary diseases, jurisprudence, dermatology, ophthalmology, otology, pathology.

Faculty: professors, 14; demonstrators, 2; assistant, 2; assistants, 5; lecturers, 4.

Total property belongs to university; receipts refused; expenditures refused (1898).

Organized 1889; first class graduated 1890, and classes graduated in each subsequent year; present title Chattanooga Medical College.

142. MEDICAL DEP'T, KNOXVILLE COLLEGE,¹ regular, coeducational, Knoxville, pop. 22,535, Dean, E. L. Randall, M.D., address—.²

143. MEDICAL DEP'T, NASHVILLE UNIV., regular, coeducational, Nashville, pop. 76,168, Dean, William G. Ewing, Ph.G., M.D., 324 N. High St. Session opens 3 O, '98; closes 6 Ap, '99; length, 6 mos.; matriculates, 1897-98, 230; graduates, 1897-98, 57; matriculates, 1898-99, 308.

Admission: certificate of good moral character and fitness as pupil of recognized physician; graduation from college or high school, or certificate equivalent to first-grade teacher's certificate from high school, state or county superintendent of education; to advanced standing: work of recognized schools for other years than senior; to second year: graduates in dentistry and pharmacy on examination.

Graduation: age 21; good moral character; attendance on three annual lecture courses of six months each, the last at this school; two courses of dissection; one laboratory course each in histology, bacteriology, chemistry, operative surgery; attendance on commencement; examinations.

Course: four years for all graduating after 1903.

Fees: course, first two years, \$75; last year, \$100.

Subjects: anatomy, materia medica, therapeutics, physiology, chemistry, histology, pharmacy, pathology, obstetrics, diseases of women, nervous system, eye, ear, nose, throat, surgery, practice, bacteriology, dermatology, genito-urinary surgery, jurisprudence.

Faculty: professors, 13; emeritus, 1; director of laboratories, 1; demonstrators, 2; assistants, 6; lecturer, 1; assistants, 3.

Total property, \$45,000; receipts, \$—; expenditures, \$— (1898).

Organized 1850; first class graduated 1852, and classes graduated in each subsequent year; in union with Vanderbilt Univ. 1874; union dissolved 1895.

144. MEDICAL DEP'T, TENNESSEE UNIV. regular, Nashville, pop. 76,168, Dean, Paul F. Eve, M.D., 614 Broad St.

Session opens 3 O, '98; closes 28 Mr, '99; length, 6 mos.; matriculates, 1897-98, 200; graduated, 1897-98, 32; matriculates, 1898-99, 225.

Admission: requirements S. M. C. A.; to advanced standing: work of recognized schools for other years than senior.

Graduation: age 21; good moral character; attendance on three annual

¹ 24 Ap '99, no reply received.

² No additional information furnished in manuscript.—ED. BULLETIN.

lecture courses of six months each, the last at this school; two courses of dissection, and clinical or hospital instruction; one laboratory course each in chemistry, histology, bacteriology, pathology and operative surgery; examinations.

Course: four years for all graduating after 1899.

Fees: matriculation, \$5 per annum; course, \$75 per annum; dissecting, \$20; surgery, \$10; laboratory, \$20; graduation, \$25.

Subjects: anatomy, chemistry, materia medica, physiology, histology, hygiene, theory and practice of medicine, surgery, obstetrics, gynecology, diseases of nose, throat, eye, ear, genito-urinary, venereal and nervous diseases, bacteriology, pathology, therapeutics, ophthalmology, otology, orthopedy, oral and dental surgery, dermatology, jurisprudence.

Faculty: professors, 14; assistants, 3; lecturers, 2; demonstrators, 4; assistants, 2.

Total property, \$38,000; receipts, \$12,500; expenditures, \$9,000 (1898).

Nashville Medical College organized 1876; first class graduated 1877, and classes graduated in each subsequent year except — inclusive; present title 1880.

145. MEDICAL DEP'T, UNIVERSITY OF THE SOUTH, regular, Sewanee, pop. 1,200, Dean, John S. Cain, M.D., Sewanee.

Session opens 18 Je, '98; closes 19 Ja, '99; length, 7 mos.; matriculates, 1897-98, —; graduated, 1897-98, 28; matriculates, 1898-99, 120.

Admission: certificate of fitness and good moral character from preceptor and one other physician; college or high school diploma, or examination and evidence of a good English education including mathematics, English composition, physics.

Graduation: age 21; good moral character; three years' study; attendance on three annual lecture courses of six months each, the last at this school; two courses each of dissection and hospital clinics; one laboratory course each in operative surgery, practical chemistry, bacteriology, microscopy, pharmacy; examinations.

Course: four years for all graduating after 1901.

Fees: matriculation, \$5; anatomic, \$10; course, \$50; graduation, \$25.

Subjects: anatomy, chemistry, materia medica, histology, physiology, practice of medicine, surgery, obstetrics, gynecology, diseases of eye, ear, nose, throat, and of children, electro-therapeutics, hygiene, dermatology, physical diagnosis, jurisprudence, pharmacy, genito-urinary diseases.

Faculty: professors, 13; lecturers, 9; demonstrators, 2.

Total property, common with univ.; receipts refused; expenditures refused (1898).

Sewanee Medical College organized 1892; first class graduated 1893 (?), and classes graduated in each subsequent year 1899 inclusive; present title Sewanee Medical College, Univ. of South.

146. **MEDICAL DEP'T, VANDERBILT UNIV.**, regular, Nashville, pop. 76,168, Dean, William L. Dudley, M.D., B.S., 37 Wesley Hall Campus.

Session opens 3 O, '98; closes 6 Ap, '99; length, 5½ mos.; matriculates; 1897-98 (undergraduate), 238; (post-graduate), 9; graduates, 1897-98, 66; matriculates, 1898-99, 249.

Admission: age 18; good moral character; S. M. C. A. requirements to advanced standing: work of recognized schools for other years than senior.

Graduation: age 21; good moral character; attendance on four annual lecture courses, the last at this school; examinations.

Course: four years for all graduating after 1901.

Fees: course, \$100 per annum; breakage, \$5; graduation, \$25; post-graduate, one branch, \$20; two branches, \$30; three branches, \$40.

Subjects: chemistry, gynecology, diseases of eye, ear, nose, throat, genito-urinary, skin and venereal diseases, ophthalmology, principles and practice of medicine, surgery, obstetrics, materia medica, therapeutics, physiology, anatomy, pathology, electro-therapeutics, jurisprudence, hygiene, embryology, pharmacy, physics, histology, osteology, sanitary science, pediatrics, bacteriology.

Faculty: professors, 11; clinical, 1; lecturers, assistants, and demonstrators, 23.

Total property, \$90,000; receipts, \$24,000; expenditures, \$12,000 (1898).

Medical Dep't, Univ. Nashville organized 1850; first class graduated 1852; united 1874 with Medical Dep't, Vanderbilt Univ.; organized 1874; first class graduated 1875; dissolution of contract 1895; present title 1896.

147. **MEHARRY MEDICAL DEP'T OF CENTRAL TENNESSEE COLLEGE**, regular, coeducational, Nashville, pop. 76,168, Dean, G. W. Hubbard, M.D., 112 Maple St.

Session opens 12 S, '98; closes 1 F, '99, length, 5 mos.; matriculates, 1897-98, 151; graduated, 1897-88, 31; matriculates, 1898-99, 165.

Admission: age 18; good moral character; college or normal graduation or examination in arithmetic, geography, grammar, reading, writing, spelling, physics and Latin.

Graduation: age 21; attendance¹ on four lecture courses of 20 weeks each, the last at this school; examinations and thesis.

Course: four years for all graduating after 1896.

Fees: course, \$30 per annum; entire course, \$120; hospital, \$5; graduation, \$10; anatomic material, \$2 per annum; chemicals, \$3.

Subjects: anatomy, chemistry, physiology, materia medica, therapeutics, prescription writing, urinalysis, toxicology, botany, theory and practice of medicine, surgery, pharmacy, pathology, histology, bacteriology, hygiene, obstetrics, jurisprudence, dermatology, gynecology,

¹ With 1899-1900 admission requirements will be those of A. A. M. C., and four sessions of 6 months each will be required for graduation.

electro-therapeutics, ophthalmology, otology, laryngology, genito-urinary, mental diseases.

Faculty: professors, 11; instructors, 2; demonstrator, 1.

Total property, \$30,000; receipts, \$6,780; expenditures, \$6,780 (1898).

Organized 1876; first class graduated 1877, and classes graduated in each subsequent year except —- inclusive.

More than one-half of the educated colored physicians of the southern states are graduates of this institution.

148. MEMPHIS HOSPITAL MEDICAL COLLEGE, regular, Memphis, pop. 64,495, Dean, W. B. Rogers, M.D., Continental Bank Building.

Session opens 1 N, '98; closes 1 My, '99; length, 6 mos.; matriculates, 1897-98, 372; graduates, 1897-98, 93; matriculates, 1898-99, 541.

Admission: requirements S. M. C. A.; to advanced standing: college graduates completing elementary course including chemistry and biology; on examination in subjects of lower classes.

Graduation: age 21; good moral character; attendance on three annual lecture courses, the last at this school; two sessions of dissection; examinations; attendance on commencement.

Course: three years for all graduating after —-.

Fees: matriculation, \$5 per annum; course, \$50 per annum; anatomy, \$20; laboratory, \$20; surgery, \$10; diploma, \$25.

Subjects: anatomy, chemistry, physics, physiology, materia medica, therapeutics, pathology, practice of medicine, surgery, obstetrics, gynecology, ophthalmology, otology, laryngology, physical diagnosis, hygiene, diseases of nervous system, eye, ear, throat, children and rectal diseases.

Faculty: professors, 10; assistants, 9; clinical instructor, 1; demonstrators, 3; assistant, 2; clinical assistant, 1; assistant instructor, 1.

Total property, \$60,000; receipts, \$30,000; expenditures, \$15,000 (1898).

Organized 1878; first class graduated 1881, and classes graduated in each subsequent year.

149. TENNESSEE MEDICAL COLLEGE,¹ regular, coeducational (?), Knoxville, pop. 22,535, Dean, J. C. Cawood, address —-.²

TEXAS.

Schools: regular, 2; homeopathic, 0; eclectic, 0; total, 2.

Session opens about first Oct.; closes about first May.

Matriculates, 1897-98, 363; graduates, 1897-98, 58; matriculates, 1898-99, —-.

Fees: average matriculation, \$15; course, \$37.50; additional, \$15.

Faculty: professors, 27; lecturers, 8; others, 11; total, 46.

Total property, \$ —-; receipts, \$ —-; expenditures, \$ —-.

¹ 24 Ap '99, no reply received.

² No additional information furnished in manuscript.—ED. BULLETIN.

150. MEDICAL DEP'T, FORT WORTH UNIV.,¹ regular, Fort Worth, pop. 23,076, Dean, Bacon Saunders, M.D., 426 Henderson St.

Session opens 27 S, '98; closes 6 Ap, '99; length, 6 mos.; matriculates, 1897-98, 169; graduates, 1897-98, 20; matriculates, 1898-99, —.

Admission: good moral character; graduation from college, high school or academy; first-grade teacher's certificate or examination in English, geography, history, arithmetic, physics; to advanced standing: work of recognized schools for other years than senior.

Graduation: age 21; good moral character; three years' course, the last at this school.

Course: three years for all graduating after —.

Fees: course, \$75; graduation, \$25.

Subjects: anatomy, physics, chemistry, physiology, materia medica, histology, bacteriology, hygiene, state medicine, practice of medicine, surgery, gynecology, obstetrics, diseases of children, eye, ear, nose, throat, mind and nervous system, genito-urinary and rectal diseases, dermatology, jurisprudence.

Faculty: professors, 16; demonstrator, 1; lecturers, 3; assistant, 1.

Organized 1894; first class graduated 1895, and classes graduated in each subsequent year except — inclusive.

151. MEDICAL DEP'T, TEXAS UNIV., regular, coeducational, Galveston, pop. 29,084, Dean, Henry P. Cooke, M.D., address —.

Session opens 1 O, '98; closes 13 My, '99; length, 7½ mos.; matriculates, 1897-98, 194; graduates, 1897-98, 38; matriculates, 1898-99, 148.

Admission: age 17; moral character and fitness certified by two responsible persons; examination in English, arithmetic, algebra, geometry, general history; college matriculates and graduates, graduates of approved high schools, academies, and normal schools and those holding first-grade teacher's certificates are exempt; to advanced standing: work of recognized schools for other years than senior on examination.

Graduation: age 21; good moral character; examinations in practice of medicine, materia medica and therapeutics, surgery, obstetrics, gynecology, hygiene, pathology.

Course: four years for all graduating after 1899.

Fees: matriculation, \$30; laboratory, first year, \$20; second year, \$20; third year, \$10; fourth year, \$10; special, \$5.

Subjects: anatomy, physiology, hygiene, chemistry, toxicology, materia medica, therapeutics, pathology, practice of medicine, surgery, obstetrics, gynecology, dermatology, diseases of eye, ear, nose, throat, mental and nervous system, children, skin, jurisprudence, pediatrics, pharmacy, biology, botany, physics, etiology (including helminthology and bacteriology), histology, embryology, climatology, dietetics.

Faculty: professors, 11; lecturers, 5; demonstrators, 8; assistant, 1.

Total property, \$300,000; receipts, \$43,600; expenditures, \$43,600 (1898).

¹24 Ap '99, no reply received.

Medical Dep't, Univ. Texas organized 1891; first class graduated —, and classes graduated in subsequent years except — inclusive.

UTAH.

There are no medical schools in Utah.

VERMONT.

Schools: regular, 1; homeopathic, 0; eclectic, 0; total, 1.

Session opens about —; closes about —.

Matriculates, 1897-98, —; graduates, 1897-98, —; matriculates, 1898-99, —.

Admission and graduation: no state requirements.

Fees: average matriculation, \$5; course, \$100; additional, \$25.

Faculty: professors, 17; lecturers, 0; others, 7; total, 24.

Total property, \$—; receipts, \$—; expenditures, \$—.

152. MEDICAL DEP'T, VERMONT UNIV.,¹ regular, Burlington, pop. 14,590, Dean, Henry Crain Tinkham, M.D., 4 N. Winooski St.

Session opens —, '98; closes —, '99; length, — mos.; matriculates, 1897-98, —; graduates, 1897-98, —; matriculates, 1898-99, —.

Admission: examination in arithmetic, grammar, geography, orthography, American history, English composition and physics; college graduates and matriculates, graduates of academy, normal or high school with three years' course, matriculates in other recognized schools or those holding N. Y. regents' certificate for students or one covering any ten subjects; to advanced standing: work of recognized schools for other years than senior.

Graduation: age 21; good moral character; attendance on four lecture courses, the last at this school; one laboratory course in urinary analysis, histology, pathology, bacteriology; one course in physical diagnosis, practical surgery, obstetrics; examinations.

Course: four years for all graduating after —.

Fees: matriculation, \$5 each term; course, \$100 per annum; partial, \$20; graduation, \$25.

Subjects: anatomy, physiology, chemistry, materia medica, therapeutics, practice, obstetrics, surgery, diseases of children, mind, ophthalmology, otology, pathology, bacteriology, neurology, hygiene, jurisprudence, venereal diseases, dermatology, laryngology, gynecology, histology, surgery, obstetrics, urinary analysis.

Faculty: professors, 17; instructors, 7.

Chartered 1823.

¹ 24 Ap '99, no reply received.

VIRGINIA.

Schools: regular, 3; homeopathic, 0; eclectic, 0; total, 3.

Session opens about last Sept.; closes about middle May.

Matriculates 1897-98, 601; graduates 1897-98, 111; matriculates 1898-99, 618.

Admission and graduation: no state requirements.

Fees: average matriculates, \$0; course, \$105; additional, \$20.

Faculty: professors, 39; lecturers, 9; others, 60; total, 108.

Total property, \$—; receipts, \$—; expenditures, \$—.

153. MEDICAL COLLEGE OF VIRGINIA, regular, Richmond, pop. 81,388, Dean, Christopher Tompkins, M.D., Marshall and College Sts.

Session opens 20 S, '98; closes 4 My, '99; length, 7 mos.; matriculates, 1897-98, 189; graduates, 1897-98, 39; matriculates, 1898-99, 180.

Admission: graduation from college, high, or equivalent school; first-grade teacher's certificate or examination in spelling, writing, arithmetic, grammar, geography, U. S. history; to advanced standing: work of recognized schools for other years than senior; to second year on examination.

Graduation: attendance on four lecture courses, the last at this school; two sessions of dissection; examinations.

Course: four years for all graduating after 1898.

Fees: course, \$65; examination, \$30; graduates of other colleges, matriculation, \$5.

Subjects: anatomy, physiology, chemistry, materia medica, histology, principles and practice of surgery, practice of medicine, therapeutics, obstetrics, diseases of women, children, eye, ear, throat, skin, nervous system, bacteriology, hygiene, genito-urinary and venereal diseases, orthopedics, pathology, jurisprudence.

Faculty: professors, 15; demonstrators, 5; instructors, 10; lecturers, 2.

Total property, \$80,000; receipts, \$39,880.99; expenditures, \$36,426.38 (1898).

Medical Dep't, Hampden Sidney College organized 1838; first class graduated 1839, and classes graduated in each subsequent year; new charter on present title 1854.

154. MEDICAL DEP'T, VIRGINIA UNIV., regular, Charlottesville, pop. 5,591, Chairman of faculty, John W. Mallet, M.D., F. R. S., Univ. of Va., Charlottesville.

Session opens 15 S, '98; closes 11 Je, '99; length, 8½ mos.; matriculates, 1897-98, 142; graduates, 1897-98, 23; matriculates, 1898-99, 186.

Admission: general fitness for professional study determined by faculty; to advanced standing: work of recognized schools for other years than senior, on examination in preceding subjects.

Graduation: attendance on four lecture courses, the last at this school; examinations.

Course: four years for all graduating after 1903.

Fees: course, first year, \$150; succeeding years are somewhat less.

Subjects: chemistry, biology, comparative and regional anatomy, histology, embryology, physiology, bacteriology, pathology, materia medica, obstetrics, gynecology, surgery, special pathology, therapeutics, practice of medicine, hygiene, jurisprudence, ophthalmic surgery, dermatology, clinical diagnosis.

Faculty: professors, 7; instructors, 8; demonstrators, 3; assistants, 7; clinical assistants, 3; licentiate in medicine, 1.

Total property, \$—; receipts, \$—; expenditures, \$— (1898).

Organized 1825; first class graduated 1828, and classes graduated in each subsequent year except during civil war.

155. UNIVERSITY COLLEGE OF MEDICINE, regular, Richmond, pop. 81,388, Proctor, J. Allison Hodges, M.D., Richmond.

Session opens 10, '98; closes 11 My, '99; length, 7½ mos.; matriculates, 1897-98, 270; graduates, 1897-98, 49; matriculates, 1898-99, 252.

Admission: a preparatory course, teacher's certificate or its equivalent; to advanced standing: work of recognized schools for other years than senior on certificate or examination; college graduates having completed chemico-biologic and physics courses; advanced standing in chemistry and physiologic physics.

Graduation: age 21; good moral character; attendance on four annual lecture courses, the last at this school; examinations; attendance on commencement.

Course: four years for all graduating after 1898.

Fees: course, \$100; three courses, \$255; diploma, \$30.

Subjects: histology, anatomy, chemistry, physics, materia medica, therapeutics, jurisprudence, obstetrics, bacteriology, physiology, principles and practice of medicine, of surgery, pathology, diseases of eye, ear, nose, throat, women and children, mental, nervous and genito-urinary diseases, urinalogy, toxicology, dermatology.

Faculty: professors, 17; emeritus, 1; lecturers, 7; demonstrators, 2; assistant, 9; instructors, 9; clinical assistant, 1; chief of clinic, 1.

Total property, \$70,000; receipts, \$26,400; expenditures, \$16,000 (1898).

Organized 1893; first class graduated 1894, and classes graduated in each subsequent year.

WASHINGTON.

There are no medical schools in Washington.

WEST VIRGINIA.

There are no medical schools in West Virginia.

WISCONSIN.

Schools : regular, 2 ; homeopathic, 0 ; eclectic, 0 ; total, 2.

Session opens about first Oct. ; closes about middle April.

Matriculates, 1897-98, 177 ; graduates, 1897-98. 52 ; matriculates, 1898-99, 198.

Admission and graduation : no state requirements.

Fees : average matriculation, \$5 ; course, \$100 ; additional, \$1.50.

Faculty : professors, 51 ; lecturers, 10 ; others, 19 ; total, 80.

Total property \$— ; receipts, \$— ; expenditures, \$—.

156. MEDICAL DEPARTMENT, MILWAUKEE MEDICAL COLLEGE, regular, Milwaukee, pop. 204,468, Dean, William Henry Earles, M.D., B.Sc., Matthews Building.

Session opens 28 S, '98 ; closes 3 Ap, '99 ; length, 6 mos. ; matriculates, 1897-98, 128 ; graduates, 1897-98, 31 ; matriculates, 1898-99, 153.

Admission : good moral character, certified by two physicians ; matriculation in college ; graduation from high or equivalent school with three years' course, or examination in English grammar, arithmetic, physics, U. S. history, geography, Latin ; to advanced standing : work of recognized schools for other years than senior ; to second year : graduates of pharmacy, dental and veterinary schools with two years' course on examination ; college graduates having done one year's work in chemistry, biology, or comparative anatomy, histology, embryology, experimental physics, physiologic botany, laboratory physiology or experimental psychology, zoology, materia medica or pharmacognosy, and deficiencies in first year on examination.

Graduation : age 21 ; good moral character ; attendance on four annual lecture courses, the last at this school ; examinations.

Course : four years for all graduating after 1898.

Fees : matriculation, \$5 ; course, \$100 ; laboratory, \$3 ; special, \$20 ; matriculation, \$5 ; spring course, matriculation, \$5 ; course, \$25.

Subjects : osteology, physiology, chemistry, pharmacology, histology, bacteriology, syndesmology, myology, prescription writing, anatomy, materia medica, pathology, hygiene, therapeutics, principles and practice of medicine, surgery, gynecology, pediatrics, dermatology, ophthalmology, otology, laryngology, rhinology, mental, nervous and venereal diseases.

Faculty : professors, 24 ; adjunct, 3 ; lecturers, 6 ; instructors, 9 ; demonstrators, 4.

Total property, \$151,000 ; receipts, \$— ; expenditures, \$— (1898).

Organized 1894 ; first class graduated 1895, and classes graduated in each subsequent year.

157. WISCONSIN COLLEGE OF PHYSICIANS AND SURGEONS, regular, Milwaukee, pop. 204,468, Sec'y, W. H. Washburn, M.D., 726 Grand Ave. Session opens 4 O, '98; closes 27 Ap, '99; length, 6½ mos.; matriculates, 1897-98, 49; graduates, 1897-98, 21; matriculates, 1898-99, 45.

Admission: good moral character, certified by two physicians; graduation from high school; matriculation in college; student's certificate from college, high school or superintendent of instruction covering English, arithmetic, physics, U. S. history, geography, algebra, Latin; to advanced standing: work of recognized schools for other years than senior; work of schools not fully recognized by Illinois board on examination and laboratory work of lower classes; to second year: college graduates having done one year's work in chemistry, biology or comparative anatomy, histology and embryology, experimental physics, physiologic botany, laboratory physiology, experimental psychology and zoology, and first-year deficiencies on examination.

Graduation: age 21; good moral character; attendance on four annual lecture courses, the last at this school; examinations.

Course: four years for all graduating after 1898.

Fees: matriculation, \$5; course, \$100.

Subjects: anatomy, chemistry, histology, physiology, pharmacology, bacteriology, embryology, materia medica, hygiene climatology, medicine, surgery, orthopedics, therapeutics, pathology, dermatology, pathologic histology, pediatrics, ophthalmology, otology, gynecology, jurisprudence, rhinology, laryngology, mental, nervous, and genito-urinary diseases.

Faculty: professors, 21; lecturers, 4; adjuncts, 3; demonstrators, 4; instructors, 2.

Total property, \$70,000; receipts, \$5,675.50; expenditures, \$5,452.96 (1898).

Organized 1893; first class graduated 1894, and classes graduated in each subsequent year.

WYOMING.

There are no medical schools in Wyoming.

ASSOCIATION OF AMERICAN MEDICAL COLLEGES.

COLUMBUS MEETING.

OFFICERS :

President—Prof. Henry O. Walker, Detroit, Mich.

First Vice-president—Prof. H. Bert Ellis, Los Angeles, Cal.

Second Vice-president—Prof. Sam'l C. Woody, Louisville, Ky.

Secretary and Treasurer—Prof. Bayard Holmes, 104 E. 40th St., Chicago, Ill.

The next annual meeting of the Association of American Medical Colleges will be held in the Senate Chamber, Columbus, O., Monday, June 5th, 1899. There will be two sessions: a morning session, devoted to discussion of educational matters and an afternoon session, devoted to the business of the association.

The morning session will be called to order at ten o'clock. The secretary will, however, be in attendance an hour earlier to register members and transact routine business. The judicial council will be in session at the same time. The program of the morning session will be as follows :

PROGRAM 10.00 A.M.

1. The Elective Course in Medical Schools. Prof. J. M. Dodson, junior dean, Rush Medical College, Chicago, Ill.
2. The Condition of Medical Education in the South. Prof. G. C. Savage, University of Nashville, Nashville, Tenn.

3.00 P.M.

The business session will follow the regular order of business prescribed by the by-laws.

1. Reading the minutes of the previous meeting.
2. Roll-call of membership.
3. Annual address by the president.
4. Reports of committees.

(a) Report of the Committee on the Condition of Medical Colleges in the United States, Prof. E. Fletcher Ingals, Chairman.

This committee was appointed under the following resolutions: "Resolved, That a committee of three be appointed to ascertain the amount of work being done by the various colleges, members of this association, and to offer such amendments to the constitution as may seem to them fit for consideration and action at the next annual meeting."

The members of this committee are the Chairman, Prof. E. Fletcher Ingals, Prof. John C. Oliver, of Cincinnati, and Prof. Thos. H. Hawkins, of Denver.

(b) Reports of special committees.

5. Secretary and treasurer's report.

6. Report of judicial council.

7. New business.

Under "new business" will come up the consideration of proposed amendments to the constitution.

8. Adjournment.

PROPOSED AMENDMENTS TO THE CONSTITUTION.

I. Submitted by the dean of the Medical College of Ohio.

Every penalty for violation of an article of the constitution (such violation having been reported to the association by the judicial council after due examination made by said judicial council) shall be determined by vote of the association at the annual meeting at which the violation has been reported,—a three-fourths' affirmation vote of the colleges represented being required for expulsion.

II. To Article III, Section 5. Proposed by Committee on Condition of Medical Education in U. S.

The course of lectures in schools, members of this association, shall require not less than nine hours of the student's time each day, five days in the week for six months, not including vacations or holidays.

RULES OF THE JUDICIAL COUNCIL.

Approved June 9th, 1894, at San Francisco, Cal.; and amended at Baltimore, May 8th, 1895.

I. 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.

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

III. 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.

IV. 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.

V. 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.

VI. 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 the decision, file a certified copy with the secretary, and notify all the parties interested.

VII. 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.

ABSTRACT OF THE DECISIONS OF THE JUDICIAL
COUNCIL OF THE ASSOCIATION OF AMERI-
CAN MEDICAL COLLEGES.

I.

The Kentucky School of Medicine was charged with having graduated, on the 21st of June, 1893, Sanford Bailey, Theodore Green, Albert E. Hitt, Richard L. Milton, J. Harry McKay, Charles T. Phillips, and Samuel H. Ridgeway, all of whom matriculated for the first time in January, 1892, each of them having attended the Hospital College of Medicine from January 1st, 1892, to the end of June, 1892, as Freshmen. The only studies pursued by them were, anatomy, physiology, materia medica, and chemistry, together with the histologic and bacteriologic laboratories. Mr. Ridgeway alone passed his intermediate examination, and received tickets entitling him to enter the junior class of 1893. The other students received notice that, having attended the exercises of the Freshman year, they would, on passing the intermediate examination, be able to enter the junior class.

The following members of the council found all the charges and specifications sustained, and declared that the Kentucky School of Medicine had forfeited its membership: Victor C. Vaughan, William H. Pancoast, Aaron Friedenwald, James H. Etheridge, and Julian J. Chisolm. The chairman expressed no opinion and cast no vote in this affair.

At the Palace Hotel, San Francisco, Cal., June 9th, 1894, the report of the judicial council was unanimously adopted.

At Baltimore, May 5th, 1895, the association having voted to suspend the disabilities under which the Kentucky School of Medicine labors, in order to permit it to reapply for membership, and the matter being referred to the judicial council, the application for renewal of membership was approved.

II.

In answer to interrogatories of the Fort Wayne College of Medicine, July 12th, 1894, the council held that matriculation is but a form of enrollment of a student for entrance into the

classes, and if the matriculant fails to enter and attend in person, his enrollment entitles him to no consideration. The date of matriculation, unsupported by evidence of subsequent attendance upon the exercises of the regular session next ensuing, cannot be respected.

It was decided that the method of the College of Physicians and Surgeons, of St. Louis, of soliciting students, is in bad taste, irregular, and not in accordance with the usages of the members of the college association.

III.

The decision of the Judicial Council is asked upon the following propositions :

First. Is there any rule to prevent colleges, members of the association, from admitting students in September, 1895, and allowing them to graduate, after taking three full courses of lectures, ending in 1898 ?

Second. If such rule exists and is enforced, what will be done to those colleges, members of the association, who violate the rules ? Shall recognition be refused to diplomas issued to students in 1898 because they began the study of medicine in 1895 ?

Third. Students A and B matriculate in 1895 ; A graduates in 1898 ; B in 1899. Are the two on equal footing to the rules of the association ?

Decision.

I. It is the judgment of the council that there is no rule of the college association preventing any of the members matriculating students in September, 1895, and allowing them to graduate after taking three full courses of lectures of six months each, in three separate years, ending in 1898.

II. The council is not now prepared to decide what should be done with colleges which violate any of the rules of the association.

III. It is the judgment of the council that A and B must be recognized as of equal respectability. Because the progressive advancement in methods of teaching, *pari passu* with the increasing demands for more lengthened collegiate instruction, must have a definitely stated date of beginning, and cannot be made retroactive. If this rule could be made *ex-post facto*, all the

elder members of the profession might be rated as of inferior standing to those gentlemen who now graduate under our graded system of instruction, and are required to have attended more terms, and for a longer period of time than was formerly exacted.

IV.

In obedience to a request of the secretary, the council submits the following answer to the letter of Prof. Dibrell of the Arkansas Industrial University, dated August 10th, 1895.

First. In the exemption clause of Sec. 6, Art. III of the constitution, which was finally adopted at Detroit, in June 1892, it was understood that the whole requirements of the constitution were to take effect from, and after the adoption of it, and the exemption as to students who might have in good faith matriculated prior to July 1st, 1892, was intended to apply to the next ensuing session, and cannot be construed to apply to students who neglected to avail themselves of the opportunity to pursue a continuous collegiate course of study. Persons, therefore, who may have attended a course of lectures prior to July 1st, 1892, cannot now be admitted to final examination without having attended at least two other courses of graded instruction.

In answer to the interrogatory of the Fort Wayne College of Medicine, of July 7th, 1894, the council decided that matriculation is but a formal enrollment of a student for entrance into the classes, and if he fails to enter and attend in person, his enrollment entitles him to no consideration; he must actually attend in person the course of graded instruction for which the matriculation was made; and, as each course of instruction as defined in Art. III, Sec. 5, of the constitution, is complete within itself for all students in their respective grades, enrollment for each annual session must be formally complied with.

The unconditional matriculation of a student, and the acceptance of his money bind the college for the term for which matriculation is entered, and not for any subsequent period.

All students applying for graduation prior to 1899 must have attended three full courses of graded instruction of not less than six months each, in three separate years. In 1899 and thereafter, all candidates for graduation must have completed four courses

of graded instruction of not less than six months each, in four separate years.

There is nothing known to the council of any action of the association requiring that "all new matriculants prior to September 1st, 1895 (or at any other time), may be admitted to final examination" under any circumstances different from those stated in the constitution.

The association does not recognize matriculation as any sort of contract which colleges are obliged to fulfil. The published announcements of colleges of what each one proposes to teach, and the conditions upon which students are admitted into each of the several institutions, constitute the only basis of obligation.

It is not stated in the constitution how students shall regard the rules of the association, but the colleges holding membership must exact the prescribed preliminary qualifications of all students.

V.

ANSWER TO INTERROGATIONS OF THE OHIO MEDICAL UNIVERSITY, OF DEC. 22, 1895.

I. No student, present or prospective, can have any legitimate interest sufficient to require any college to violate the provisions of Sec. 5, Art. III, of the constitution. The meaning of the word "sessions" as used in the 2nd line of the 2nd paragraph of the letter to which this is an answer, is ambiguous. If they "run from the middle of September until the latter part of May" the object of dividing it into "fall, winter, and supplementary terms" is not apparent to the council. Such subdivisions of annual courses must be regarded as irregular.

II. No other instruction, excepting that given during the regular annual courses, can be accepted as any part of the graded instruction provided for in Sec. 5, Art. 3, of the constitution.

It is assumed that a student of medicine continuously pursues the study from the beginning to the conclusion of his collegiate career. The work of any supplementary term can be regarded as additional facilities offered by the college conducting it, and it might be construed in the light of increased advantage to its students.

There is no rule of the association which recognizes "grading from daily recitations." Intermediate examinations are provided for at the end of any regular session. Entrance examinations for advanced standing must be conducted at the beginning of the regular sessions. Intermediate studies cannot be recognized as fulfilling the requirements of any portion of the annual courses provided for in the constitution, as at first adopted, nor as amended to take effect in 1899 and thereafter.

A certain degree of discretion must be exercised by the deans of colleges, but it cannot be allowed that any college may, with impunity, disregard any of the provisions of the constitution of the association.

III. The time-requirements of the association are fundamental, and no amount of sickness can be accepted as an excuse for absence from college duties. It is the student's misfortune if ill-health interrupts his studies; and, if he may be excused from two months of the six required for one annual course, he may be excused from an equal period in each of the succeeding years. The purpose of the time-requirement, in connection with the graded system, is to secure a certain standard of scholarship, which would be impossible for those physically unable to pursue the course of study.

IV. The requirements of Sec. 5, Art. III, of the constitution would be violated by permitting a student to receive credit for a second annual course of instruction beginning at any time of the same year in which his first course had begun. A student, therefore, beginning his collegiate training in an institution whose annual sessions begin in January cannot be permitted to enter, the following September, an institution whose annual session begins at that time, or prior to the month of January. Colleges whose annual sessions begin in September cannot receive a student in January, and give him credit for a full course of instruction terminating at any time prior to the end of the next ensuing session after the January admission.

V. The student referred to as having attended "the regular session last year," and, as having "been in the office of one of the busiest practitioners" cannot be admitted to final examination for the degree until he has completed three courses of six months each, in three separate years, prior to 1899.

At the regular meeting of the Association of American Medical Colleges, at San Francisco, California, 1894, the following was adopted :

“ *Resolved*, That students graduating in 1899, or subsequent classes, be required to pursue the study of medicine four years, and to have attended four annual courses of lectures of not less than six months' duration each.”

The part of the constitution which this resolution amends is Sec. 5, of Art. III. It reads as follows :

“ Candidates for the degree of doctor of medicine shall have attended three courses of graded instruction of not less than six months each, in three separate years.”

The council decides that Sec. 5, of Art. III, of the constitution, is still in full force and effect ; and, that the resolution of amendment adopted 1894 does not take effect until 1899.

The council holds that its decisions cannot be annulled or modified by the secretary ; and, by these presents, it warns the Ohio Medical University that no person can be admitted to final examination for the degree of doctor of medicine, who has not “ attended three courses of graded instruction of not less than six months each, in three separate years,” prior to 1899.

The council maintains that no reputable college in the United States admits any student to a second course of instruction in less than twelve months from the date of the beginning of the first course.

The duties, authority, and power of the judicial council are defined in Secs. 2 and 4, of Art. IV, of the constitution as published in the “ Bulletin of the Association of American Medical Colleges, 1892,” and the rules governing the mode of proceedings of the council as amended at Baltimore, 1895.

For answer to interrogatories of the Ohio Medical University, of September 4, 1896, the judicial council of the Association of American Medical Colleges submits the following :

Opinion.

First. Graduates of recognized colleges and universities in which a prescribed course in chemistry and biology have been

completed; graduates of homeopathic colleges; graduates of eclectic colleges; and graduates of such dental colleges as have a uniform curriculum of two or more courses in separate years; graduates of pharmacy, and graduates of veterinary medicine may be admitted to advanced standing upon compliance with the entrance examination prescribed in Sections 1 and 2, of Article III of the constitution, as amended June 7th, 1894; and, upon individual examination in each of the branches of the regular curriculum of the college, below the class which the candidate seeks to enter, provided, the whole period of time devoted to college work by the student shall not amount to less than four collegiate courses in four separate years, in 1899 and thereafter; nor less than three collegiate courses of at least six months each, in three separate years, prior to 1899.

Second. You cannot admit a man to the senior class who has attended but one course of college instruction, no matter how long since that course may have been taken. If he can establish the fact that he did attend one regular collegiate course in an accredited college, you may graduate him after two full courses in addition to that one which he has already taken, provided you do it before 1899. After that time he would be required to take three additional courses.

The college association does not recognize any period of time devoted to practice as equivalent to any part of the prescribed course of study, and cannot grant advanced standing to any person upon any ground, other than previous collegiate work performed in regular and systematic order.

Decision of the Judicial Council, May 31st, 1897.

After due examination of all the evidence before us, and the statement of Professor James G. Hyndman, secretary of the faculty accused, we find as follows: that the John E. Yarling specified in the charges, was actually graduated at the said Medical College of Ohio, as a doctor of medicine on the 9th day of April, 1897; and that the said Yarling matriculated for the first time in the Illinois Medical College in April, 1895.—*Reported to the Association, June 1, 1897, and referred back to the council to fix penalty.*

Judgment against the Medical College of Ohio resubmitted to the council to fix penalty.

WHEREAS, By the unanimous decision of the judicial council of the Association of American Medical Colleges, it was heretofore adjudged on the 31st day of May, 1897, that, "After due examination of all the evidence before us, and the statement of Professor James G. Hyndman, secretary of the faculty accused, we find as follows: that the John E. Yarling specified in the charges was actually graduated at the said Medical College of Ohio as a doctor of medicine on the 9th day of April, 1897; and that the said Yarling matriculated for the first time in the Illinois Medical College in April, 1895, all of which is in violation of Section V of Article III of the constitution of the Association of American Medical Colleges."

Now, therefore, as it appears from the action of the Association of American Medical Colleges held at Philadelphia on the 1st day of June, 1897, that the judicial council must fix penalties in the determination of all such matters as involve a violation of the constitutional requirements of the college association, the judicial council decrees that: the provisions of Section 5 of Article III of the constitution embody fundamental principles which must be held sacred and inviolate, and that, the said Medical College of Ohio has forfeited its membership in the Association of American Medical Colleges.

The language of the constitution is mandatory; Section 5 of Article III, reads as follows: "Candidates for the degree of doctor of medicine shall have attended three courses of graded instruction of not less than six months each, in three separate years," prior to 1899. The council has heretofore held that "no student can be admitted to a second course of instruction within twelve months from the date of the beginning of the first course," by any college holding membership in this association, and that, "no amount of previous study can be accepted in lieu of any part of any one of the three courses of graded instruction provided for in Section 5 of Article III of the constitution."

DENVER, COLO., June 6, 1898.

Vacation of Judgment of Expulsion.

The council now asks permission to declare that the judgment heretofore rendered against the Medical College of Ohio, declaring its membership forfeited, is now vacated and set aside, and the said Medical College of Ohio is invited to renew its membership in the Association of American Medical Colleges. —*The permission requested by the chairman of the council was, on motion, granted by unanimous vote.*

VI.

TOLEDO MEDICAL COLLEGE.

Are we to understand that every student must have a knowledge of Latin (of at least one year's study), whether or not he has a diploma from a literary college, academy, high school or normal school? For example: A student has a high school diploma, but has never studied Latin; now, will such a student be required to pass an examination in Latin before he is graduated from the medical school?

The council held that when the constitution was amended at the meeting in Philadelphia, last June, the subject of Latin, as a preliminary requirement, was fully discussed. There can be no question that the association insists that every graduate shall possess an amount of knowledge of the Latin language equal to one year's study as required by high schools.

VII.

August 20, 1897.

To the Ohio Medical University, Columbus, O., G. M. Waters, M.D., Dean :

For answer to your communication of August 7th, 1897, addressed to Bayard Holmes, M.D., secretary of the Association of American Medical Colleges, your attention is invited to the following decision of the judicial council in answer to your communication of Dec. 22, 1895: "III, The time-requirements of the association are fundamental," etc. Again, in answer to interrogatories of the Ohio Medical University, of Sept. 4, 1896, the council decided that, "the whole period of time devoted to

college work by the student shall not amount to less than four collegiate courses in four separate years in 1899, and thereafter, nor less than three collegiate courses of not less than six months each in three separate years, prior to 1899.

"Second, you cannot admit a man to the senior class who has attended but one course of college instruction, no matter how long since that course may have been taken. If he can establish the fact that he did attend one regular collegiate course in an accredited college, you may graduate him after two full courses in addition to that one which he has already taken, provided you do it before 1899. After that time he would be required to take three additional courses. The college association does not recognize any period of time devoted to practice as equivalent to any part of the prescribed course of study, and cannot grant advanced standing to any person upon any ground, other than previous collegiate work performed in regular and systematic order."

You say three-course graduates are eligible to registration in Ohio, until July 1st, 1899. If this is true, the Ohio State Board lowers its standard beneath that of the college association. No college in good standing can graduate a student in 1899, who has not attended four courses of graded instruction in four separate years, subject alone to the exemptions of Sec. 6, Art. III of the constitution as amended at Philadelphia, May 31st, 1897.

The Mr. Browning, of Charleston, W. Va., a copy of whose letter accompanies yours of Aug. 7th, 1897, cannot now avail himself of the provisions of Sec. 5, Art. III of the original constitution of the Association of American Medical Colleges, and you cannot admit him for graduation on less than three courses of graded instruction in three separate years, prior to 1899, after which date you cannot admit him to the degree of doctor of medicine until after he shall have attended four courses of graded instruction of not less than six months each, in four separate years, subject to the exemptions herein cited. It is the judgment of the council that the date set for the observance of the four years' requirement in 1899, and subsequent classes, begins January 1st, 1899.

The study of anatomy cannot be completed in less than two

separate annual courses. Final examinations in no part of the curriculum are permitted prior to the conclusion of the second annual course.

No reputable college can admit the said Browning, or any other student, upon terms different from those specified in the constitution of the Association of American Medical Colleges as heretofore interpreted by the judicial council of the said college association.

If the Ohio State Board of Examiners establishes a standard below the minimum of the Association of American Medical Colleges, the council can simply deplore the fact, but it cannot permit your college, or any other institution holding membership in the Association of American Medical Colleges to violate the fundamental principles set forth in the time-requirements of Art. III of the constitution of the Association of American Medical Colleges.

VIII.

The University of Colorado having been, by recent decision of the courts, obliged to remove its medical department from Denver to Boulder, the question of retaining membership was presented to the council. The council answered : " If you keep your dues paid up, and send annually, a representative to the meetings of the association, your membership is continued until somebody shall prefer, in due form, written charges of violation of some part of the organic law of the college association, supported by convincing evidence. Make no attempt however, to confer degrees until you are thoroughly equipped for the completion of the required courses of instruction." This advice was accepted, and by amending the constitution, the institution is still in every way eligible to membership.

IX.

Barnes Medical College of St. Louis, makes the following inquiries :

1. Is a medical college that begins its session on January 1, and terminates the same in the following June, strictly speaking, a summer school of medicine, especially when it issues to students who leave the institution on May 10, certificates of having attended a full course of lectures ?

2. If the Barnes Medical College accepted into its regular session a student from such a college, in what way would it be a violation of the rules of the American Association of Medical Colleges?

3. Is there such a rule in force in the Association of American Medical Colleges that requires a lapse of six months' time between the termination of one session, at which a student attended, and the beginning of another which he desires to attend?

4. Is it not a fact that there is rule only which requires that no two sessions shall be within the same year?

It was the view of our faculty that a summer school of medicine was one beginning its session in the spring months and terminating its session in the fall; that a school that began its session, 60 or 90 days later in the winter and terminated its session only six or eight weeks later in the spring months, was nothing more than a regular winter session of college work. This being our view with reference to question 1, it naturally follows that we can see no impropriety in accepting a student from such an institution, as having completed a regular course during the year prior to the time which he enters and terminates his session with us; hence this expresses our views with respect to the second question.

The asking of the third question seems to be an absurdity, when we reflect that such a rule would interfere with every college of first class standing in the United States. For instance, the length of session of all high-graded schools is from six and one-half to nine months. The Barnes Medical College began its present session September 13, and will close the same April 12. Rush Medical College has eight months' session, and the medical departments of our state universities, almost invariably nine months' attendance.

In regard to question 4, we suggest that the rule requiring that no two sessions shall be in one and the same year is not violated by accepting students from a college that graduates its students from the middle to the 25th of June, while other colleges graduate their students between the second week of April and the middle of May.

Barnes Medical College has always taken pride in enforcing the rules of the American Medical College Association, and it is the purpose of her faculty to abide by the decision of your committees, or the officers of the association—we, therefore, submit this question to you, desiring a speedy reply.

For answer to your letter of November 15: A medical college which begins its session on January 1 and terminates in the following June, cannot be held to comply with the rules of the Association of American Medical Colleges, if it issues tickets

for a full course of lectures on the 10th of May. The time-requirements have been repeatedly held to be fundamental, and it cannot be maintained that a student who begins January 1, can possibly have attended one full course by the following 10th of May.

Second, if the Barnes Medical College accepted into its regular session a student with no other qualifications than those above stated, such student could not be credited with having attended one full course, and would therefore be obliged to enter the same grade over again.

The terms of Art. III, Sec. 5, of the constitution, as it existed prior to June 1, 1897, and of the amended constitution, as it now exists, demand that all candidates for the degree of doctor of medicine must have attended three courses of graded instruction of not less than six months each, in three separate years, prior to 1899. After the first of January, 1899, all candidates for the degree of doctor of medicine must have attended four courses of graded instruction of at least six months' duration, no two of which shall have been in the same calendar year.

The council has several times heretofore decided that "No student can be admitted to a second course of instruction within less than twelve months from the date of the beginning of the first course," and so on through all the succeeding annual courses required of candidates for the degree.

It has also been held that the Ohio Medical University could not receive a student for the second course of instruction in September, 1895, who had completed a first course of graded instruction beginning January 1, 1895, and ending with the month of June, 1895, notwithstanding the fact that the session of the Ohio Medical University beginning in September, 1895, would not terminate until May, 1896. No member of the Association of American Medical Colleges can be permitted to evade the time-requirements with impunity.

X.

RESOLUTIONS ADOPTED BY THE FACULTY OF THE MILWAUKEE MEDICAL COLLEGE AT A REGULAR MEETING HELD JANUARY 29, 1898.

- (1) *Resolved*, that beginning with April 5, 1898, the course of

study of the Milwaukee Medical College shall consist of four years of six months each.

(2) *Resolved*, that in addition to the winter course, there shall be a spring course of six weeks, said course to be optional.

(3) *Resolved*, that henceforth the Milwaukee Medical College conform to the standard of requirements and rules of the Association of American Medical Colleges and to those of the Illinois Board of Health.

(4) *Resolved*, that the dean of this school be and is hereby instructed to make formal application for admittance to the Association of American Medical Colleges, with the view of having the school admitted at the next meeting of said association.

All the above resolutions were unanimously adopted.

B. A. BROWN, M.D., *Secretary*.

Upon the basis of these resolutions the application for membership was approved.

The application of the Illinois Medical College, made through its president, Prof. Randolph N. Hall, M.D., of Chicago, was approved, with the understanding that the institution will observe all the requirements of the association.

XI.

On the 15th of April, 1898, Prof. P. S. Conner, of Cincinnati, charged the St. Louis College of Physicians and Surgeons with violation of Art. III, Sec. 7, of the constitution, specifying that, in March, 1897, the institution conferred the degree of doctor of medicine upon Oscar B. Ormsby, of Murphysboro, Ill., and M. A. Finley, of Mortimer, Kansas, both of whom, it was charged, matriculated as first-course students at the Illinois Medical College, of Chicago, for the session beginning March 15, 1895, in support of which the statement of Prof. H. H. Brown, M.D., secretary of the Illinois Medical College, was filed. A correct copy of the charges and specifications, and the evidence supporting them, being furnished the defendant, it was shown that the Finley named in the charges had attended one full course of instruction at the Kansas City Medical College, Kansas City, Mo., one course at the Illinois Medical College in a separate year, and two terms in two separate years in the St. Louis

College of Physicians and Surgeons; and that the Ormsby mentioned in the specifications, being a graduated pharmacist, and having taken a regular collegiate course of instruction, was conceded one-half term of advancement in his standing. The institution having acted in apparent good faith, and doubts of the sufficiency of the evidence to support the charges in the face of the testimony for the defense, the council decided that the charges should be dismissed, and they are declared, not sustained.

On the 15th day of April, 1898, Prof. P. S. Conner, of Cincinnati, preferred charges and specifications against the Hospital College of Medicine, of Louisville, and the Kentucky School of Medicine, Louisville, Ky., charging both of these institutions with graduating at the close of their annual sessions, on the 30th of June, and the first of July, 1897, respectively, students who had taken the first course of instruction at the Illinois Medical College, Chicago, during the session of 1895, in violation of Art. III, Sec. 7, of the constitution. To these charges, both institutions plead not guilty. To the specifications they plead guilty, and set forth the facts that students attending a full course of instruction in a regular medical college, in the year 1895, and a second course in the accused institution in the separate year of 1896, and a third course in the separate year of 1897, thus fulfilled all the requirements of Art. III, Sec. 7, of the constitution, inasmuch as the Illinois College holds its sessions in the spring and summer only, and the two defendants begin their sessions with the month of January, and conclude with the month of June, holding no other official terms. In view of this testimony, and these facts, the charges are not sustained, and have been dismissed. In the determination of these matters against the Kentucky School of Medicine, and the Hospital College of Medicine, the chairman of the council expressed no opinion, and cast no vote.

XII.

DECISION OF THE JUDICIAL COUNCIL DENYING THE RIGHT OF THE MEDICO-CHIRURGICAL COLLEGE OF PHILADEL- PHIA TO RESIGN ITS MEMBERSHIP.

The council decides that the Medico-Chirurgical College, of Philadelphia, is now and has been continuously since 1891, a

member of the Association of American Medical Colleges, in full fellowship. It signed the constitution and by-laws, and participated in each annual meeting, including that of June 6, 1898, thereby assuming the obligation of honor to maintain and observe all the provisions of the constitution.

Article III, Section 5, of the constitution, which the said Medico-Chirurgical College voluntarily pledged to observe, says: "Candidates for the degree of doctor of medicine in the year 1899, and thereafter, shall have attended at least four courses of medical instruction, each course of at least six months' duration, no two courses of which shall have been in the same calendar year."

Article III, Section 6, prescribes the conditions on which credits for one year of time, in the four courses, may be extended to certain persons whose claims for exemption are clearly defined.

Article III, Section 7, states that "Members of this association may confer the degree of doctor of medicine during the year 1898 upon students who have attended three courses of six months' duration each; each course shall have been in a separate calendar year."

The judicial council of the Association of American Medical Colleges has repeatedly decided that the constitutional requirement of four courses in 1899 and thereafter, must be construed to begin January 1, 1899, and these decisions have been unanimously adopted by the aid of the votes of said Medico-Chirurgical College participating in the general sessions of the association.

It is impossible that the said Medico-Chirurgical College, an institution of high character, could have promised any student to descend from the scale of honor, and to hold down the standard below the requirements it solemnly pledged to observe, in 1899 and thereafter.

The American Medical Association, at Detroit, June, 1892, unanimously demanded of all the colleges in the United States the adoption and observance of a standard of requirement for the degree of doctor of medicine, which should in no manner fall below the minimum standards of the Association of American Medical Colleges. At Denver, on the 9th of June, 1898, the

American Medical Association unanimously resolved to hereafter deny the right of membership to any professor, or other teacher in any medical college which confers the degree of doctor of medicine on conditions below the published standards of the Association of American Medical Colleges after January 1, 1899. Those receiving the degree on such conditions are likewise barred. It is clear, therefore, that the college association must maintain its own published requirements, as these are conditions which shall hereafter determine the qualifications of membership in the American Medical Association.

The Association of American Medical Colleges cannot concede to any one of its members the privilege of resigning to fulfil a pledge made as a breach of faith.

It is the judgment of the council that the resignation of the college cannot be accepted; and, that the presence of Professor Laplace as the authorized delegate, and Professor Shoemaker as an associate, and their participation in the general sessions of the association on the 6th of June, 1898, directly contradicts the statements of Dean Egbert, in his letter of resignation of June 11, 1898.

CONSTITUTION OF THE ASSOCIATION OF AMERICAN MEDICAL COLLEGES.

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.—Any medical college desiring membership in this association shall make *application* to the secretary and pay the annual dues of five dollars. This application shall be accompanied by evidence that the college applying is conforming to the requirements of this association. The application and all evidence and information in relation to the college applying shall then be put in the hands of the judicial council, to be reported to the association favorably or unfavorably, at the annual meeting, at which time the college shall be elected to membership if it receives the favorable recommendation of the judicial council and the favorable ballot of a majority of the colleges represented in the meeting. The neglect of the judicial council to report on the application of a college shall not be a bar to election.

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 are five dollars a year, payable in advance.

ARTICLE III.

SEC. 1.—Each college holding membership in this association shall require of each student, *before admission* to its course of study, an examination, the minimum of which shall be as follows :

1.—In *English*, a composition on some subject of general interest. This composition must be written by the student at the time of the examination, and should contain at least 200 words. It should be criticised in relation to thought, construction, punctuation, spelling, and handwriting.

2.—In *Arithmetic*, such questions as will show a thorough knowledge of common and decimal fractions, compound numbers, and ratio and proportion.

3.—In *Algebra*, such questions as will bring out the student's knowledge of the fundamental operations, factoring, and simple quadratic equations.

4.—In *Physics*, such questions as will discover the student's under-

standing of the elements of mechanics, hydrostatics, hydraulics, optics, and acoustics.

5.—In *Latin*, an examination upon such elementary work as the student may offer showing a familiarity usually attained by one year of study; for example, the reading of the first fifteen chapters of Cæsar's Commentaries, and the translation into Latin of easy English sentences involving the same vocabulary.

SEC. 2.—In place of this examination, or any part of it, colleges, members of this association, are at liberty to recognize the official *certificates of reputable* literary and scientific colleges, academies, high schools, and normal schools, and also the medical student's certificate issued by any state examining board covering the work of the foregoing entrance examination.

SEC. 3.—Colleges, members of this association, may allow students *who fail in one or more branches* in this entrance examination the privilege of entering the first-year course, but such students shall not be allowed to begin the second course until the entrance requirements are satisfied.

SEC. 4.—Colleges, members of this association, are free to honor official *credentials issued by medical colleges of equal requirements*, except in the branches of study embraced in the last year of their own curriculum.

SEC. 5.—Candidates for the degree of doctor of medicine in the year 1899 and thereafter shall have attended at least *four courses* of medical instruction, each course of at least six months' duration, no two courses of which shall have been in the same calendar year.

SEC. 6.—Colleges, members of this association, are free to give to students who have met the entrance requirements of the association additional *credit for time* on the four years' course as follows: (a) To students having the A.B., B.S., or equivalent *degree* from reputable literary colleges, one year of time. (b) To graduates and students of colleges, of *homeopathic* or *eclectic* medicine, as many years as they attended those colleges, provided they have met the previous requirements of the association and that they pass an examination in *materia medica* and therapeutics. (c) To graduates of reputable colleges of *dentistry*, *pharmacy*, and *veterinary* medicine, one year of time.

SEC. 7.—A college not giving the whole four courses of the medical curriculum, and not graduating students, but otherwise eligible, may be admitted to membership.

ARTICLE IV.

SEC. 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 post-graduate medical schools and members of state boards of medical examiners. Distin-

guished 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 V.

SEC. 1.—The *Officers* of this association shall be a president, senior and junior 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 the 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 VI.

SEC. 1.—The stated *meetings* of this association shall occur annually on the Monday preceding the Tuesday on which the American Medical Association convenes.

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

ARTICLE VII.

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. Reports of committees.
4. Secretary and treasurer's report.
5. Report of judicial council.
6. Papers and essays. *unprinted business*
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.

EXAMINING BOARDS.

ILLINOIS.

While one would not suggest the new Illinois Medical Practice Act as a model law, it is in some respects an improvement upon the act it replaces. It is an improvement to have the necessity for a state examination for licensure recognized at all. One could have wished that the legislators could have been bold enough or magnanimous enough to have placed the same requirements upon the graduates of her own schools as upon others. If any distinction was to be made, let a standard be defined for the Illinois colleges, and deny the permission to come up for examination to the graduate of any school of an inferior standing.

The other point of superiority is that it no longer permits those who have not graduated in medicine to be licensed to practise. From one point of view it seems that a state examination should take cognizance of only the examination paper. But when one thinks how imperfectly, even the best examinations test, it is a protection to the people to insist upon a certain standard of preparation before coming up for an examination, and that should be a completed course at a medical school.

The weak parts of the law are the compromises permitting partial practice or a mystic practice. It is illogical to insist upon a certain preparation for a physician and then to permit another to practise without that preparation, no matter how restricted the methods permitted. That part of the law designed to permit the practice of osteopathy need not be so weak as may appear from a superficial reading. A diagnosis is necessary before a treatment can be instituted, and if the board insist upon sufficient knowledge to fit the applicant to make a proper diagnosis, the harm he may do need not be from insufficient training. As to the thaumatergic practisers—the world needs fool-killers, and they may as well have legislative recognition as not; not every legislator demonstrates his right to live, at least by his official acts.

There was one error in the movement leading to this law,—the same error that is shown in a circular issued by the dean of the

Harvey Medical College, of Chicago, seeking to influence the governor. Laws regulating the practice of medicine are for the protection of the people, and not directly in the interest of the doctor. When the doctor tries to make use of them for self, he not only weakens the effect of the law upon the people, but may "get left."

MEDICAL COLLEGES.

A CORRECTION.

On page 761 of the last number of the Bulletin, it is stated that the "Medical *Schools* of the Northwestern University will, hereafter, have four semesters," etc. This statement is true only of the Woman's Medical College connected with the university, and not to the Chicago Medical College or, as it is now called, The Northwestern University Medical School. The error was made in this office, although it would not have been made if the catalogues and announcements of the Chicago Medical School had been regularly and promptly sent to the Bulletin. In this omission, the Northwestern University does not stand alone, one regrets to say.

CHARLOTTESVILLE, VA.

MEDICAL DEPARTMENT, UNIVERSITY OF VIRGINIA.

Entrance Requirements—None specified.

Length of Course—Four years of nine months each.

Fees.

University fee.....	\$ 40
Tuition 1st year	110
" 2nd "	100
" 3rd "	80
" 4th "	60
Living expenses.....	\$135 to \$270

Graduated in 1898—23

Matriculated in 1898-99—183, of whom 21 had an A.B. degree and six a B.S. degree.

FACULTY.

John W. Mallet, M.D. Ph.D., F.R.S.	Augustus H. Buckmaster, M.D.
<i>Chemistry.</i>	<i>Gynecology, Obstetrics and Practice.</i>
Albert H. Tuttle, M.S.	John Staige Davis, A.M., M.D.
<i>Biology.</i>	<i>Pathology.</i>
William G. Christian, M.D.	Francis P. Dunnington, B.S.
<i>Anatomy and Surgery.</i>	<i>Practical Chemistry.</i>
Paul B. Barringer, M.D.	
<i>Physiology and Materia Medica.</i>	

—Catalogue 1898-99.

LITERARY AND SCIENTIFIC INSTITUTIONS.

CALIFORNIA.

STANFORD UNIVERSITY.

The Leland Stanford Junior University, has the A.B. for its first degree, requiring four years pursuit of elective studies. All other degrees follow the A.B. and are conferred only upon examination after completing a required amount of work.

Students.

In graduate standing.....	94
Undergraduates	909
Special students.....	150
	<hr/>
	1153

Estimated Expenses.—The tuition is free in all departments. There is a registration fee of from \$10 to \$15 for each semester, and laboratory expenses.

“The expenses of the student, exclusive of clothing and railway fares, need not exceed \$225 to \$300 per year.”

Degrees.—“Candidates may present themselves for graduation in January, May, and September.” The statistics are for May and September 1898, and January, 1899.

A.B.....	176
A.M.....	10
Engineer.....	1

President—David Starr Jordan, M.D., Ph.D., LL.D.

—Register 1898-99.

MAINE.

WATERVILLE.

Colby College—Coeducational—Two courses leading to the A.B. and Ph.B. degrees.

Students.

	Men.	Women.	Total.
Seniors (1899).....	25	16	41
Juniors (1900).....	23	17	40
Sophomores (1901).....	34	11	45
Freshmen (1902).....	39	21	60
Special students.....	6	3	9
	<hr/>	<hr/>	<hr/>
	127	68	195

Estimated Expenses.—Per term : tuition, \$20 ; term expenses, \$10 ; rent of half a room, \$5 to \$8. In addition there are charges for fuel, reading-room subscription, laboratory material, etc. There are three terms each year.

Board may be obtained at from \$2.75 to \$3.50 a week.

Degrees.

CONFERRED IN 1898.

A.B.....	52
A.M.....	7

HONORARY.

LL.D.....	2
D.D.....	3
A.M.....	1

President—Rev. Nathaniel Butler, D.D.

—*Catalogue 1898-99.*

MASSACHUSETTS.

AMHERST.

Massachusetts Agricultural College.—One course leading to the B.S. degree.

Students.

For the degree of M.S.....	12
Seniors (1899).....	17
Juniors (1900).....	29
Sophomores (1901).....	40
Freshmen (1902).....	34
Winter course.....	8
Resident graduates.....	12
Special students.....	2
	<hr/>

Estimated Expenses.

Tuition.....	\$80.00	\$80.00
Room-rent.....	24.00	48.00
Board	95.00	190.00
Fuel.....	5.00	15.00
Washing.....	11.40	22.80
Military suit.....	15.75	15.75
	<u>\$231.15</u>	<u>\$371.55</u>

Degrees.

CONFERRED IN 1898.

M.S.....	I
B.S	II

President—Henry H. Goodell, LL.D.—*Thirty-sixth Annual Report, Jan., 1899.*

BOSTON.

Massachusetts Institute of Technology.—One general and 12 courses of applied science leading to the degree of B.S.

Students.

Graduate students	68
4th year " (1899)	181
3d " " (1900)	189
2d " " (1901)	204
1st " " (1902)	282
Special students	308
	<u>1232</u>
Deduct names counted twice.....	61
	<u>1171</u>

Estimated Expenses.

Tuition fee	\$200
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There are also the customary laboratory deposits for breakage, etc. No estimate is made of other expenses except the statement that board need not exceed seven or eight dollars a week.

Degrees.

CONFERRED IN 1898.

M.S.....	5
B.S.	199

President—James M. Crafts, LL.D.—*Annual Catalogue, 1898-99.*

OHIO.

COLUMBUS.

Ohio State University, divided into six colleges, of which the College of Arts, Philosophy and Science, leading to the A.B. degree, and the College of Engineering, leading to various technical degrees, coincide with the courses included in the description of the other colleges heretofore presented in these pages.

Students.

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE.

Graduate Students	24	
Four-year courses	324	
Course preparatory to law and to journalism...	30	
" " " the study of medicine...	9	387

COLLEGE OF ENGINEERING.

Graduate students	2	
Four-year courses.....	264	
Architecture	11	
Ceramics.....	12	
Mining	11	
Industrial arts	2	302
		<hr/> 689

Estimated Expenses.

	Low.	Average.	High.
Incidental fees.....	\$15.00	\$15.00	\$15.00
Laboratory fees	15.00	20.00	54.00
Books and stationery.....	15.00	25.00	40.00
Room.....	4.50	37.00	75.00
Furniture.....	10.00
Board.....	70.00	110.00	150.00
Uniform	14.00	14.00	14.00
	<hr/> \$143.50	<hr/> \$221.00	<hr/> \$348.00

President—James Hulme Canfield, LL.D.

—*University Bulletin Series 4-1: Jan., 1899.*

PENNSYLVANIA.

GETTYSBURG.

Pennsylvania College, coeducational. Two undergraduate courses: the classical leading to the A.B. degree; the scientific leading to the degree of B.S.

Students.

Graduate students	3
Seniors (1899)	34
Juniors (1900)	44
Sophomores (1901).....	55
Freshmen (1902).....	52
	<hr/>
	188

Estimated Expenses.

	Minimum.	Medium.	Maximum.
Board (38 weeks).....	\$ 71.00	\$85.50	\$114.00
Tuition	50.00	50.00	50.00
Room rent and heat (halfroom)	12.50	40.00	62.50
Gymnasium fee.....	6.00	6.00	6.00
Washing	12.00	12.00	12.00
	<hr/>	<hr/>	<hr/>
	\$151.50	\$193.50	\$245.50

Degrees.

CONFERR'D IN 1898.

First degrees not mentioned.

HONORARY DEGREES.

LL.D	1
D.D	3
M.A	1

President—Rev. Harvey W. McKnight, D.D., LL.D.—*Catalogue 1898-99.*

VIRGINIA.

CHARLOTTESVILLE.

University of Virginia.—The university uses the method of "schools" making the courses elective. The degrees conferred are the A.B., A.M., B.S., and also Ph.D., LL.B., and M.D. "No merely honorary degree is ever given by the University of Virginia."

Students.

Academic	262	
Engineering	17	
	<hr/>	279
Law	138	
Medicine	183	
		<hr/>
		600

Estimated Expenses.

Academic.....	\$265 to \$400
Engineering.....	290 " 425
Agriculture.....	265 " 400

Degrees.

CONFERRED IN 1898.

A.B.	22
B.S.	2
A.M.	9

Chairman of the Faculty—Paul B. Barringer, M.D.

—*Catalogue 1898-99.*

LEXINGTON.

Washington and Lee University.—Two courses, one leading to the A.B., the other, a civil engineering course, leading to the B.S. degree. The A.M. is granted for additional requirements beyond those demanded for the A.B.

Students.

Total number.....	157
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The students in many southern universities are not arranged in classes. There are a number of departments or schools, and a certain amount of work is required in each department, not always with the same sequence, to be eligible for a degree. 41 of the 157 are credited to "law" and, probably, should be omitted from the list of undergraduate students.

Estimated Expenses.

	Minimum.
Matriculation fee.....	\$ 5.00
University fee.....	25.00
Tuition fee, academic department.....	50.00
Meals, furnished rooms, and servants' attendance at university boarding house, at \$13, for nine months,	117.00
Washing for nine months at \$1.50.....	13.50
Fuel, light, etc. (estimated)	13.50
	\$224.00

Degrees.

CONFERRED IN 1898.

A.B.	9
A.M.	3
C.E.	2
B.L.	18

HONORARY.

D.D	2
L.L.D.....	2

President—William Lyne Wilson, L.L.D.

—*Catalogue 1898-99.*

HOSPITAL REPORTS.

[Will the members of hospital staffs have their reports sent regularly to the Bulletin in order that the department may be made to give as complete a statistical report as possible, of the work done by the hospitals in the United States?]

MISSOURI.

St. Louis. Alexian Brothers' Hospital.

Incorporated—February 24, 1870.

Governing Body—A board of trustees.

President—Bro. Aloysius Schyns; *Secretary*, Bro. Hubert Cremer.

Rector—Bro. Jodocus Schiffer.

Medical Staff—Nine consultants; four attending.

Resident Staff—Three house physicians.

Statistics.

Number patients treated since last general report.....	6,254
Discharged cured.....	4,826
" improved	497
" unimproved.....	215
Died	401
Brought in dying condition.....	134
Remaining in hospital Dec. 31, 1898	181
	6,254
Number of days of treatment.....	212,589
" " " " " of charity cases.....	68,754
Ambulance cases	478

Finances—Not given in the report.

Special Feature—The enlargement of this hospital by widening the central building and adding two more stories to its height. This change furnishes accommodation for 150 additional patients.

—*Twenty-ninth Report.*

MARYLAND.

Baltimore. Hospital for the Relief of Crippled and Deformed Children.

Opened—October 2, 1895. *Incorporated*, May 20, 1896.

Governing Body—A board of 10 trustees.

President—Mr. J. Wilcox Brown; *Secretary*, Mr. Robert M. McLane, Jr. (903 Cathedral St).

Medical Staff—R. Tunstall Taylor, M.D., surgeon-in-charge; three consulting surgeons; three consulting physicians; one assistant visiting surgeon; one assistant visiting physician.

Resident Staff—One house surgeon.

Nursing Staff—Miss Henderson, head nurse, and six nurses.

Statistics—For 10 months only. 314 cases, with 10,950 days of hospital care; 692 visits to the dispensary; three deaths, all in the dispensary cases.

Finances.

Balance from 1897.....		\$ 87.69
Received—board of patients	\$ 594.62	
City appropriation 1898.....	3000.00	
State “ “	3000.00	
All other sources.....	1384.07	7978.69
		<hr/>
		\$8066.38
Expenditures.....		7797.83
		<hr/>
Balance.....		\$ 268.55

Special Features—A new hospital, giving increased facilities, and a nurses' home separate from the hospital.

—*Third Annual Report.*

NEW HAMPSHIRE.

Concord. Margaret Pillsbury General Hospital.

Governing Body—A board of nine trustees.

President—Samuel C. Eastman; *Clerk*, Isaac Hill.

Medical Staff—Four consultants; four physicians; four surgeons; two medical and two surgical assistants; 20 associates.

Nursing Staff—Miss Ellen Smith, superintendent.

Statistics.

Number of patients remaining Dec. 31, 1897.....	10		
“ admitted during year :		Medical.	Surgical.
Males.....	114	72	
Females.....	21	34	
	<hr/>	<hr/>	
	135	106	241
Discharged well.....			148
“ improved.....			71
“ not improved.....			3
“ “ treated.....			7
Died.....			15
Remaining Dec 31, 1898.....			7

Largest number any one day, 55; smallest number, 3; average, 15. Total number of days 5,475. Average cost per patient per week, \$15.81. Number of out-patients, 49.

Finances.

Balance Jan., 1898.....		\$ 153.72
Received—board of patients.....	\$3,619.37	
All other sources.....	4,982.55	<hr/>
		8,601.92
		<hr/>
		\$ 8,755.64
Expended.....		12,598.49
Deficit.....		3,842.85

Special Features—Nurses' training school.

“Each patient paying not less than \$15 a week shall be allowed to select his physician; and any beneficiary who desires the attendance of a homeopathic physician shall also be allowed to select his own physician.”

—*Fifteenth Annual Report, 1898.*

Portsmouth. Cottage Hospital.

Incorporated—1887. *Reincorporated*, 1895.

Governing Body—Boards of 10 trustees; 12 directors (ladies).

President—Rev. Henry E. Hovey; *Secretary and Treasurer*, John S. Rand (of trustees); *President*, Mrs. Robert C. Pierce; *Secretary*, Miss Susan P. Spalding (of directors).

Superintendent—Miss Anna F. Alpaugh.

Medical Staff—The members of the Portsmouth Medical Association, nine are named.

Statistics.

Number remaining Sept. 30, 1897.....	17
" admitted—Males.....	126
Females.....	70 196
(Medical 97—Surgical 99).	
Discharged—cured.....	114
" improved.....	38
" unimproved.....	7
Born.....	5
Died.....	14
Remaining in hospital....	23
Number of days in hospital:	
"Paying".....	4,685
"Free".....	742 5,427

Finances.

Cash on hand October 1, 1897.....	\$1,011.76
Receipts from patients.....	\$3,149.61
" " all other sources.....	3,926.54 7,076.15
	\$8,087.91
Expended—For salaries and wages....	\$3,317.43
" all other purposes .. .	4,753.29 8,070.72
	\$ 17.19

Special Feature—The training school has been abandoned.

—*Thirteenth Annual Report.*

CHARITIES AND CORRECTION

[The management of the Bulletin urges the executive officers of boards of public charities, charitable associations, homes, asylums, etc., etc., to send in their reports regularly, that a tabulation of their statistics may be printed in its pages.]

MICHIGAN.

Pontiac. Eastern Michigan Asylum.

Governing Body—A board of six trustees.

Medical Staff—Edmund A. Christian, *Medical Superintendent*; one assistant medical superintendent, and four assistant physicians on the resident staff. One gynecologist and one pathologist—non-resident.

Statistics.

	Fiscal year.			Fiscal year.		
	1897.			1898.		
	M.	F.	T.	M.	F.	T.
Under treatment at beginning of year....	538	517	1,055	543	518	1,061
Admitted during the year.....	136	111	247	84	81	165
Whole number treated.....	674	628	1,302	627	599	1,226
Discharged, recovered.....	14	11	25	11	10	21
" improved.....	48	28	76	33	31	64
" not improved.....	30	47	72	8	12	20
Died.....	38	29	67	39	25	64
Not insane.....	1	0	1
Total number.....	131	110	241	91	78	169
Number remaining.....	543	518	1,061	536	521	1,057

*Finances.**Year ending June 30.*

	1897.	1898.
Total receipts excluding balance.....	\$199,880.24	\$193,175.39
" expenditures " ".....	187,803.75	234,129.59

Some of the salaries paid are: Medical superintendent, \$3,000.00 a year; ass't sup't, \$1,700.00; ass't physicians, \$1,300.00, \$800.00; \$700.00 (2). These are resident. The steward receives \$1,600.00 a year, the stenographer, \$1000.00 and are non-resident.

—*Report for Biennial Period, June 30, 1898.*

NEW YORK.

New York City. New York Juvenile Asylum.

Governing Body—A board of 29 directors (five *ex-officio*).

President—Mornay Williams; *Secretary*, Henry N. Tift.

Superintendent—Charles E. Bruce, M.D.

Statistics.

Number of children in this asylum, Jan. 1, 1898.....	1,048
Received during the year.....	983
	\$2,031
Discharged during year to friends.....	507
Expiration of sentence.....	272
Died.....	3
Transferred to other institutions.....	3
Escaped.....	3
Placed out near New York.....	12
Sent to Illinois or Iowa.....	108
Discharged by magistrate.....	57
	965
Remaining Jan. 1, 1899.....	1,066

Finances.

Receipts including balance.....	\$205,020.63
Expenditures.....	161,972.70

Balance on hand Jan. 1, 1898 \$ 43,047.93

Special Features—A supplemental report on anthropological investigations of 1000 white and colored children of both sexes, the inmates of the New York Juvenile Asylum by Dr. Alex. Hrdlicka is deserving of a more extended notice than our space permits.

The directors strongly urge the cottage home system as preferable to the congregate or barrack system.

—*Forty-seventh Annual Report for 1898.*

PENNSYLVANIA.

Oakbourne. The Pennsylvania Epileptic Hospital and Colony Farm.

Incorporated—May 2nd 1896, by Merger of the Pennsylvania Epileptic Hospital, and the Pennsylvania colony farm for epileptics.

Governing Body—Board of 21 managers.

President—Wharton Sinkler, M. D.; *Secretary*, Samuel W. Morton, M. D., 113 S. 20th St., Philadelphia.

Medical Staff—J. F. Edgerly, M. D., medical superintendent; one physician to dispensary; five specialists; four consulting physicians; two consulting surgeons; two consulting specialists.

Matron—Ida C. Bramble.

Statistics.

Number of patients at beginning of year	20
Admitted during the year	31
	—
Discharged “ “ “	51
	25
	—
Remaining.....	26

Of the 31 admitted but 17 were suitable patients; of the patients discharged 11 were not improved (being of the class not suitable as patients), 14 were improved. (The report is responsible for this arithmetic).

Finances.

Maintenance fund—Receipts.....	\$17,055.38
Expenditures	16,678.40

Balance..... \$ 376.98

Special Feature—The farm was occupied for the first during the year, on February 8, 1898, as soon as the buildings were in readiness.

—*Annual Report for the year ending Dec. 31, 1898.*

BOOK NOTICES.

ANNUAL AND ANALYTICAL CYCLOPEDIA OF PRACTICAL MEDICINE. BY CHARLES E. DE M. SAJOUS, M.D., and one hundred associate editors, assisted by corresponding editors, collaborators and correspondents. Illustrated with chromo-lithographs, engravings and maps. Vol. III. Dislocations to infantile myxodema. Philadelphia, New York, and Chicago: The F. A. Davis Company, publishers. 1899. 600 pp. Sold by subscription.

Apart from the handsome making-up of this book it is enjoyable in many ways. If any one desires to add a volume of encyclopedic medical information to his library, let him secure an opportunity to examine this series.

PUBLIC HEALTH. Papers and Reports. Volume XXIV. Presented at the 26th annual meeting of the American Public Health Association, Ottawa, Canada, September 27-30, 1898. Columbus, Ohio: The Berlin Printing Company. 1898. pp. 362, xliv.

The American Public Health Association has abandoned its quarterly journal and returned to the original plan of publishing a volume of transactions only. This is decidedly the better way when the publication of any society includes only the papers, etc., presented at its meeting. The objection to the necessary delay in issuing a completed volume, may be obviated by permitting the papers to be published before the issuing of the volume in any journal of the author's selection; or, by adopting the plan of the American Institute of Mining Engineers, where the papers are put in type as fast as received and issued in advance of the completed volume, "subject to revision."

The volume suffers in nothing by comparison with the previous volumes of the association, which, of itself, is no slight praise. We leave a fuller review of its contents to other journals, contenting ourselves with this word of praise.

SUGGESTIONS WANTED.

Opinions of health officers, registrars, sanitarians, pathologists, and physicians generally are desired as to the nature of the changes to be made in the revision of the Bertillon classification of causes of death. A pamphlet containing an account of the system, with full information, will be sent free upon request of Dr. Cressy L. Wilbur, Lansing, Mich., who is Secretary of the U. S. Commission of Revision, working under the auspices of the American Public Health Association.

BULLETIN

OF THE

American Academy of Medicine.

VOL. IV.

ISSUED OCTOBER, 1899.

No. 3.

THE AMERICAN ACADEMY OF MEDICINE is not responsible for the sentiments expressed in any paper or address published in the BULLETIN.

A PROFITABLE MEDICAL EDUCATION.¹

BY HENRY O. WALKER, M.D., of Detroit, Secretary Detroit College of Medicine.

In the following remarks, which it is now my pleasant duty to make, I shall bear in mind that I am addressing a select body of medical gentlemen on a most familiar topic; one that is uppermost in our minds on the occasions of these annual meetings; of the utmost importance to us as teachers as well as to our students, and a subject concerning which there are honest differences of opinion. It is not my intention at this time to elaborate a complete system of medical education, but rather to bring again before our minds some of the main elements in what constitutes for the nowadays average graduate in medicine a profitable training. In doing this I am aware that you may recognize some old straw being rethashed, but I am put to it by the conviction that they are worthy of frequent repetition.

The most conspicuous fact relative to medical education is its continual change. From the crude ideas on anatomy, which the early Egyptians must have had through their practice of the healing art and the embalming of dead bodies, and from the rules in hygiene with which the Book of Leviticus abounds, through the mysticism, fanaticism and reforms of the several intervening periods up to the present, medicine has been an ever-changing art, a constantly growing science. Within our own

¹ President's address before the Association of American Medical Colleges, Columbus, June 5, 1899.

memory, with the progressive development of the older correlated branches of medicine proper, such as physiology, physiologic chemistry, hygiene and pathology, and by the birth of histology, bacteriology, electrotherapy and other newer sciences, the curricula of medical schools have of necessity been greatly modified and expanded. Prescribed schedules of study have from time to time been lengthened to admit of additional courses, and at the same time a system of compression has been practised in all of them in order that new matter might be introduced. In calling attention to these incidents no thought of destructive criticism is indulged in. They are the inevitable results and evidences of the growth of knowledge. They are in fact evolutionary changes. As we have observed them in the recent past so they may be looked for in the future.

While these modifications are entirely consistent with real progress, it is nevertheless profitable for us as teachers to be frequently reminded of the true purpose of medical education and of what it should consist. As the mariner, in pursuing his journey of the trackless deep, turns ever and anon to the compass and by it shapes his course, so we, in guiding our pupils through the maze of useful and curious knowledge, need now and then to get our bearings lest we unwittingly stray from the proper path.

In considering the various uses of knowledge they are pertinent questions to ask : whether the accumulation of medical and correlated science, and whether mental discipline in medical lore do in themselves fulfil the most desirable intent of our instruction? Again, is the chief end of our college work to develop Harveys and Huxleys and Grays, and men like Agassiz, scientists who unravel bits of Nature, but doctors who do not practise? Even were we capable of doing this, something beyond the most of us, suppose we were to pick from off the benches those who gave promise of scientific discoveries, how rarely would future years demonstrate the wisdom of our choice! I feel confident that you will agree with me that the product of our medical schools should be first and always men of action ; men whose professional ability depends upon perfection in not so much the science as the art of healing. Such are they whom

the world most needs and demands, to whom it gives a substantial reward. Ideals are as noble and as attractive in our profession, presumably, as in any other, but the bread-and-butter motive will always be with most of us the more determinate force.

Equally as important as a proper appreciation of the ends of study is the administration of the needed training. There is involved in this an understanding of both the character of our raw material and the management of the machinery at our command. Some persons have regarded it of sufficient importance to declare the advisability of laying the foundation for technical study in early childhood, if possible, or in youth. This would seem to be an ideal and most desirable plan, but unfortunately for the bulk of those who come under our care it is only a dream of a lost opportunity. They come to us from the cities and from the farms, with limited literary attainments as well as after prolonged preparation. We hold entrance examinations, and during the successive terms also weed out the incompetent and unfit. There is left, we are wont to say, a lot of picked young men; but if we think them to have more than fair average capacities we are most truly mistaken. This fact should be borne in mind as we gradually raise the standard of admissions to our schools. I would in no wise curtail the requirements which the Association has already fixed. I do not forget the part which I feebly played in putting the standard to its present height. We shall doubtless learn that further advancement in this direction will be made with difficulty and at some cost in some of the schools. It is nevertheless most desirable, must come, and will most easily follow a rigid adherence to the rules we are now pledged to obey.

Upon the improved qualifications of our applicants will depend the solution of some of the problems now pressing their attention upon us. Our curricula have been taking on new, yet essential, branches, and in some respects need revising. Our laboratory work, so promising in its results, has been wonderfully increased in both breadth and depth, and, unless due caution is observed, is apt to crowd out other equally important training. To meet the exigencies we have lengthened the term of study and still the work is crowded. In our enthusiasm for diversified knowl-

edge and special training for our students, we should not forget the object in view. However patient and persevering our young Lydgate may be, his fellows will not be content with dry crumbs and long years of waiting, and we have no right to expect it of them. They are not destined to be martyrs to science, nor to be secluded by a cloistered wall. They are to be working doctors; men of affairs and of the world, partaking of its joys as well as soothing its sorrows.

There is no doubt as to the value of the fundamental branches of medicine. A fair elementary knowledge of physics, botany, general chemistry, biology and embryology is essential to a proper understanding of the superstructural branches and should, without exception, be insisted upon. Preliminary preparation in physics and botany is already very generally required for admission, and there is no sufficient reason in my mind why all the other subjects named above should not also be relegated to the preparatory schools. Gradually this list might be extended to include elementary physiology and general bacteriology, including a limited amount of laboratory instruction. In this direction there may be afforded a degree of relief and provision made for desirable changes affecting the more technical branches.

As to the instruction itself, what I have to say appertains, perhaps, less to the Association than to the faculties and teachers whom we severally represent. Its important bearing upon the subject in hand is my excuse for bringing it in here. It has reference, first, to the modes of teaching, and secondly, to the subject-matter in which we deal. The modes of instruction which we have adopted are, in the order of their probable origins, the clinical, the lecture or quiz, and the laboratory methods. They are distinctive in style and function. No one of them can be made to serve as a satisfactory substitute for either of the others. Each one has its place. Their comparative values for our present purposes is, however, the important matter. The question is, To what extent shall each be employed? For an answer to this inquiry we have only to consider the end in view. On this point Doctor Holmes has so pertinently expressed an opinion with which I fully agree, that I

quote his words. He said: "I, myself, have nothing to do with clinical teaching, yet I do not hesitate to say it is more essential than all the rest put together, so far as the ordinary practice of medicine is concerned; and this is by far the most important thing to be learned, because it deals with so many more lives than any other branch of the profession." For the great majority of our graduates the clinical features of their college work will have been found to have served them best. When time shall have erased the theories and details of the lecture-room, and effaced from the mind the laborious distinctions of the laboratory desk, the pictures of diseased yet living forms will still remain as a perennial spring of knowledge and advice. As far as the subjects are adapted and our facilities will allow, the clinical mode should predominate, and neither of the others should be permitted to encroach upon it. By reason of its objective and tangible style the laboratory method will be found preferable to the scholastic whenever a choice is possible.

Concerning the matter of instruction distinctions should be made between the essentials and non-essentials of knowledge. At best facts are only scintillations of truth. We see one here and another there, with a blank between. As Holmes has also remarked, "Science is the topography of ignorance. From a few elevated points we triangulate spaces inclosing infinite unknown details." While it is true that related knowledge is more easily taught and remembered than isolated facts, it is folly to unnecessarily consume our time and cumber our minds with useless non-essentials.

There is one more reform which appeals to me as worthy of our attention. For many years we have had laid before us the desirability of adopting the metric system of weights and measures. I need not go into details regarding the bungle and inexactness of the system we use and the obvious advantages of the other. Most of us have a working knowledge of the newer method, but habit and the want of unanimous action delays its exclusive use. We advise the teaching of it, and many of the schools have followed our instruction. Its general adoption is, however, too long delayed. Progressive men in other lines have very generally discarded the older modes as obsolete, and we

have the authority of their national association that the pharmacists are only awaiting our consent before doing the same. They have suggested a plan of action which commends itself as both feasible and promising in its results. It is that in our schools of medicine the metric system *only* shall be taught. As I am aware of no serious objection to this plan, I heartily recommend to this Association the grant of its influence and authority in promoting its success. It is in the line of progress, will have an incalculable effect upon the science we love and by which we live, and should receive our serious consideration and approval.

THE ELECTIVE SYSTEM IN MEDICAL EDUCATION.¹

By JOHN MILTON DODSON, M.D., Chicago.

Mr. President and Gentlemen :

The remarkable advance in medical education during the last two decades is a justly matter for pride on the part of the medical profession. This progress far exceeds that which had been made during the previous two centuries. It surpasses, moreover, the advance in any other department of education during the corresponding period, though it is to be noted that this is in large part due to the low standard which prevailed in medical education twenty years ago, and the large room for improvement which in consequence obtained. This progress has been the more creditable to the members of the profession because it has resulted solely from their efforts. The numerous legislative enactments, the changes in medical curricula and the development of public sentiment have been secured by the labors of the medical fraternity, oftentimes in the face of strong opposition from the general public for whose benefit these changes have been made.

Again, it is the more remarkable that the teachers in our medical schools, who have been so largely the efficient agents in this movement, should have developed the medical curriculum so greatly along purely pedagogic lines, though with few exceptions, they have been only incidentally teachers, being chiefly occupied with the practice of medicine.

Justly proud as we are with this gratifying growth, there fortunately seems no disposition to remain satisfied with it. The proceedings of this Association and of the American Academy of Medicine, the numerous articles in our medical literature, and the enactment each year of new medical practice acts or the revision of those already in force, furnish abundant evidence that this progress is to continue.

While this advancement has been going on in medical education, great progress has been made in other educational lines,

¹ Read before the Association of American Medical Colleges, Columbus, O., June 5, 1899

and especially in our colleges and universities. Pedagogy has developed greatly and the methods of teaching have radically changed. It will be interesting and profitable to compare the advance in medical education with that which has taken place in the literary and scientific colleges,—to note the lines along which this progress has been made, and to ascertain in what respects medical education can still further profit by the experience and thought of professional educators.

The lines along which medical education has progressed may be briefly stated as follows :

1st.—The increase in the number and duration of the courses required in attendance upon the medical school in order to procure the degree of M.D.

2d.—The increase in the requirements for admission to the medical schools.

3d.—The substitution of a graded course of instruction for the repetitional course of lectures.

4th.—The introduction of new branches into the medical curriculum, among them, histology, pathology, embryology, bacteriology, and the several specialties.

5th.—The employment, in all of the larger schools, of teachers for the fundamental branches whose time is exclusively devoted to teaching.

6th.—The development of the clinic in its true sense of instruction at the bedside to small groups of students.

7th.—The large increase in laboratory and practical courses, and, in connection therewith,

8th.—The encouragement of original research.

In collegiate education, the direction in which progress has been made may be summarized as follows :

1st.—An increase in the requirements for admission.

2d.—The introduction of new branches, especially the much larger place given to the sciences in proportion to languages and mathematics.

3d.—The great development of laboratory and seminar methods of instruction.

4th.—Encouragement of original research.

5th.—The change to a continuous session in a few universities as exemplified in the quarterly system now in vogue in the University of Chicago and the University of West Virginia, and finally,

6th.—The elective system in which the student is given his choice of a large number of courses of which he need take only a limited number.

On comparison of these statements, it will be observed that the advancement which has been made along certain lines is common to both medical and collegiate instruction. The increase in the requirements for admission has not been so great in the literary colleges, but, on the other hand, it has not been so uniform, and the great difference which exists in these requirements in the numerous colleges and universities of the country, far exceeds that which at present obtains in the medical schools. The introduction of new branches has been common to both the collegiate and medical course, and medical education has profited greatly by the large development of scientific instruction in the university course. It has made it possible for the student to lay a much better and broader foundation in those branches which are fundamental to practical medicine, such as physics, chemistry, and the biologic sciences, and this the medical schools have been glad to recognize by giving a credit of one year on the medical course for such training.

The large development of the laboratory method and the encouragement of original research, are also advances which have been common to both collegiate and medical education. The increase in the number and duration of the courses required in attendance, the introduction of the graded course of instruction, the employment of teachers whose time is exclusively devoted to that work, and the development of the clinic, are advances which are peculiar to the medical college.

It will be observed, therefore, that medical education has profited by all the advances which have been made in college education with the exception of the continuous session and the elective system.

The elective system is regarded by many of our best educators as the most conspicuous advance which has been made in educational methods in recent years. It has found its largest development, perhaps, in Harvard University, where practically all of the courses from the freshman year onward, are now elective. How generally it has also been adopted by the leading universities and colleges of our country, is known to all. It has even been adopted in some of the leading secondary schools; that is, the high schools and academies, and those pedagogic

experts who have been studying our public school system of late years, urge the adoption of some similar method (perhaps better, in such case, called a selective method), in even the primary grades.

Cannot this method be adapted with advantage to the medical curriculum? It is the purpose of this paper to present this question, and I address myself, therefore, to the discussion of the following queries:

1st.—What is the elective system and in what respects may choice be allowed the student?

2d.—What are the advantages of the elective system? and,

3d.—Is it applicable to the medical curriculum, and, if so, to what extent and under what restrictions or limitations?

First, then, what is the elective system? Election may be defined as that method under which the student pursuing a certain course looking to the acquisition of degree or diploma, is allowed some choice in the courses of study which he may take. To illustrate: In the institution with which I am connected, credits are reckoned in majors, a major comprising 60 hours of didactic or recitation work, or 120 hours of laboratory, practical, or clinical work. About 12 majors are required to be accomplished in each of the four years. Of the twelve majors of the senior year, it is proposed that about seven majors be in specified courses, which every student shall be required to take; for the remaining five majors, he may elect from a number of courses, aggregating say, 15 or 20 majors, a sufficient number to make up the twelve required. The term "election" is not applied to those studies which are taken by special students who enter the college with no intent of completing the course and receiving the degree. It is convenient, furthermore, to distinguish between elective and what may be called "optional courses," an optional course being defined as one which a student may take in addition to his regular work, but which is not accepted as part of the required majors of study, and for which no credit is given, excepting perhaps, a special certificate setting forth the fact that the student has taken the said optional course.

Election may be permitted the student in one or more of the following respects:

- 1st.—Choice of subject.
- 2d.—Choice of teacher, or,
- 3d.—Choice of the method of study.

In the election of subject the term applies not so much to choice between major branches, as for instance between anatomy, physiology, chemistry, and the like, but to choice of topics or portions of each subject.

In the election of teacher, the several instructors in a particular department may offer courses on the same topic, or courses on different topics, in which latter case the student choosing a particular course would have choice of both subject and teacher. In the matter of method, choice may be afforded a student as to whether he will pursue a subject taught by didactic lectures, by recitations, or by laboratory instruction, or by one or more of these combined.

The elective system presents advantages both to the student and the instructor. It enables the student to adapt his course to his abilities, his tastes, and his needs or purposes. The fundamental idea of the elective system is adaptability, or adjustability to the peculiarities of the individual. It recognizes the fact that, if all men are born free, they are by no means born equal in respect to mental capacity. No fact is more obvious than that individuals differ widely, not only, and perhaps not so much, in respect to what may be styled the "sum total of capacity," as in regard to the relative strength and development of the several faculties. Some men excel in powers of observation, others in memory, others in judgment, and if it is the purpose of an educational system to develop a well-balanced, thoroughly trained mind, it is manifest that, if there are wide differences in the individuals to be trained, the method of training must differ in different cases. This difference is noticeable in the child, as the result of inheritance, and it becomes increasingly manifest in the later years as the added result of differences in environment and in opportunity. Under the elective system, these differences are freely recognized and opportunity afforded for the student to adapt his line of study to

his peculiarities of mind, aided, of course, in his choice by the advice of his instructors.

Some consideration ought to be given also to the taste of the student. He pursues more earnestly, and with greater profit to himself, those subjects which interest him, while in many cases he should be advised, and perhaps compelled to take subjects which will develop and strengthen those faculties which are weak. In so far as possible, his interest should be aroused and sustained by giving him those subjects which appeal to him.

Again, the very opportunity and act of election on the part of the student himself has been found to be an educational resource of no mean value. This act of choice involves a careful estimation of his own faculties and a study of the courses offered and their adaptability to his peculiar needs.

In the collegiate course it is of decided advantage to the student to be able to select, for at least part of his work, those branches which will prepare him for his future life-work, and so elective courses have been provided in most of the larger colleges which are fundamental to medicine, or to law, to journalism, to engineering, and more and more provision is being made for lines of study which will, in part, equip one for the various pursuits in life. This election to suit the purposes of the student is less applicable to the medical curriculum, as will be explained later.

To the teacher, the elective system presents the advantage of the greatest possible incentive to good work. An instructor whose students are required to be in attendance upon his lectures, whether they would or no, is under no obligation to make his course the best possible, and he is very prone to become careless and indifferent in his teaching work. If, on the other hand, the attendance upon his classes is left to the choice of the student, who is at liberty to elect other similar courses taught by other teachers in the faculty, that attendance will depend solely upon his efficiency as a teacher and constitutes a continual and most powerful inducement to the best work.

It is, however, the testimony of all who have had to do with the elective system, that the greatest benefit which results therefrom is the difference in the spirit which animates both

student and teacher. It is wonderful, indeed, to observe the difference in the interest, the enthusiasm and the energy with which a student will pursue a course of study which he has himself chosen, in contrast to that which he manifests in a course that he has been compelled to take. I have seen this illustrated many times in students under my own observation, who have entered upon the study of medicine after pursuing a college course. The record of such a student may have been very indifferent in the literary college, the subjects in which did not especially appeal to him. Having decided, however, upon medicine for his life-work, and with, perhaps, an inborn taste and aptitude for the kind of work which is offered in the medical curriculum, he becomes, as it were, a new man when he enters a medical college, and the difference in the spirit which animates him, the energy and enthusiasm which he displays in his work, is gratifying indeed.

I have observed, too, that in some cases during his college course, where some of the branches were fundamental to medicine, his work in these would be excellent, while his work in the languages and literature, taken at the very same time, would be very mediocre.

The same difference in spirit animates the teacher, and the feeling that the studies are being pursued under different conditions seems to be mutual between teacher and pupil. The instructor is stimulated to vastly better and more satisfactory work, who feels that his students are pursuing his course, not from compulsion, but from choice, and their increased enthusiasm and interest reacts upon him.

Can the elective system be adapted to the medical curriculum? In the discussion of this question, let it first be noted and emphasized most strongly that the primary object of the medical course is *education*, and not the imparting of information. As it is the primary object of fundamental education to draw out, develop, and strengthen the faculties of the mind symmetrically, so it is the primary object of the medical course to teach the student to observe accurately, record faithfully, and think clearly upon medical subjects, and in connection therewith, to develop acuteness of perception in the eye, the ear, and the other

senses, and to train the hands in those manipulative procedures which are used in medical and surgical practice. The accumulation of facts is important, but secondary. But, granting the importance of acquiring information, what is our present situation in regard to the matter? It will be conceded by everyone that the amount of information which the best student can acquire upon any subject of the medical curriculum bears but a small ratio to the sum total of knowledge in that subject. The professor of anatomy, for example, devotes his life to the acquisition of knowledge upon his chosen subject, and finds that life all too short for its mastery. How obvious that the amount of anatomical knowledge which he can impart to his students is but a fraction of the sum of knowledge which pertains thereto. Conceding this fact, is it certain that the course of study which has been mapped out in any medical curriculum is the best possible for every medical student? Is it at all probable that any course which might be outlined by the wisest faculty, would be the very best course which might be arranged for each individual student? A sufficient answer to this query may be found in the report of your committee on the condition of medical colleges, to be presented at this meeting. That report sets forth very clearly that there is the widest range of difference between the curricula in our various medical schools, not only in the subjects which are included in the curriculum, but also in the relative amount of time assigned to each. It is certain that each one of these schedules of study cannot be the most perfect one possible. If, then, medical teachers differ so widely among themselves as to the best course of study, why may not the student be allowed some choice in the matter, and permitted to arrange his course to suit his individual capacity and temperament? He should not, of course, be allowed to omit any of the major branches, but in each of these he may, with advantage, be allowed to select those topics and to pursue their study by that method which is best adapted to his own case. For the present, it is perhaps better to restrict the election of subject to the junior and senior years, but in the choice of teacher, especially in the recitation or quiz courses, there seems no good reason why choice should not be permitted in the freshman and sophomore

years. Allusion has been made to the great stimulus which is thus afforded to the teacher. Illustration of this effect is afforded in the system of *privatdozenten* in vogue in the German universities. These instructors offer private courses in preparation for the regular examinations, which are accepted as equivalent to those given by members of the regular faculty. A fee is exacted by the *privatdozent* for this course, and his income therefrom depends upon the number of students which are attracted to his classes, and this in turn depends directly upon the strength and efficiency of his teaching. The advantage of this plan in developing teachers is obvious. Many of the most distinguished professors in the German universities began their teaching career as *privatdozenten*. Nothing is so essential to the development of a teacher as the opportunity to teach. How frequently it happens in this country that a physician who may have attained some distinction in the practice of a special branch in medicine, has been called to fill a professor's chair with no previous experience in teaching whatever, and, if, as has often happened, he is no longer a young man, though he may be a recognized authority upon his special branch, he never becomes an efficient instructor! The elective system affords a plan by which younger men may be kept in constant training for the higher positions in the faculty, under conditions which will induce them to continue in teaching work, though in subordinate position, for a long time. The regular professor, too, will feel a new incentive to better work if the attendance upon his classes depend upon the usefulness and attractiveness of his course and not upon the compulsion of college rules.

The choice of method of study is to my mind of great value. To be sure, every student should take advantage of all of the means which are offered,—the didactic lecture, the recitation, the laboratory course, the practical and clinical courses are all needful to him,—but the relative amount of time given to each, or the manner in which he shall pursue a particular topic may be well left to his choice. We have had, of late, much sweeping, and in part, unjust and foolish criticism of the didactic method of instruction. The imparting of knowledge by word of mouth is doubtless the oldest of teaching methods. It still has,

and always will have its place, and is of especial value to certain students. Some individuals acquire more readily and retain more permanently, knowledge acquired by the spoken word than that communicated by the written page. Some students, on the other hand, especially need the laborious exacting drill of the quiz room, while others do better work in the laboratory, and may be safely left to follow out their own bent, it being certain that they will do faithful and efficient work. There is great latitude, therefore, in the choice of a method of study, at least in certain branches.

Some consideration, too, may properly be given to the tastes of the student, for no student does as faithfully or as profitably to himself, work which is not to his liking, as that which he thoroughly enjoys.

Should a student be allowed to adapt his course to his purpose in after-life, that is, to a preconceived intent, to follow some special line or practice? I would answer this question most emphatically, "No!" We have had far too much of callow specialism and of the embryonic specialist. It is to be hoped that the near future will deliver us from the precocious young man who becomes a specialist, that is, endowed with special knowledge and special experience along a particular line of practice, by suspending a shingle on his office door announcing that fact the day after his graduation. It is to be regretted, that in the profusion of legislative enactments in regard to medical practice with which we have been favored in recent years, some consideration should not have been given to this matter and some means not have been provided to protect the public against the imposition of the pseudo-specialist.

As has been indicated, it should be the aim of the medical college to develop the all-round general practitioner. No encouragement, whatever, should be given to the student to prepare for a specialty. Every student should be advised that no man can properly enter upon the practice of a specialty in the profession until he has been in general practice for a number of years. Parenthetically, may I remark, that it seems to me the special branches have come to occupy too large a place in our curricula, and one of the advantages of the elective system will

be that it affords a ready means of subordinating these special lines of study to the more important fundamental branches.

If the elective system be adopted in our medical schools it must be done under certain restrictions and limitations which would not be necessary in the collegiate courses. First, there are restrictions properly imposed by the several medical practice acts and the rulings of the state boards of medical examiners requiring that instruction shall be given in certain specified branches. This problem can be readily met, however, by the adoption of a rule specifying that no student shall present more than a stated number of majors of credit in any one branch. This would indirectly compel him to give a minimum amount of attention to each of the major studies, and that is as it should be, quite irrespective of any attitude of the examining boards.

The number of elective courses which can be offered in many schools will, for the present, be limited by lack of space, restricted laboratory facilities, and the small size of the faculty. The need, however, for larger equipment in all of these respects is already upon us if the demands of modern medical education are to be met. The time is past when a series of didactic lectures delivered to large classes will suffice to comprise the curriculum. While the didactic lecture even to large classes has, and will continue to have, a useful function, it must be accompanied by abundant recitation, laboratory and practical courses given to small groups of students, and this means more space for laboratory equipment and more teachers, quite irrespective of the elective system. On the other hand, the elective courses provide an opportunity to utilize the clinical facilities of many hospitals not directly connected with the medical college, whose resources are not now being used.

May not the elective system, furthermore, point the way to a concentration and cooperation of resources now wastefully distributed in rival schools? In the city of Chicago there are eight medical colleges of the regular school, with an aggregate attendance of over two thousand students, and a combined faculty of over five hundred teachers. What a waste of administrative energy is involved in this arrangement! How much better it would be to have one medical school with eight professors in

each department, and a corresponding number of assistants, than to have eight medical schools with one professor in each department! What an increase in enthusiasm, strength and efficiency might result of combination and cooperation of the resources of these several colleges! This condition is not confined to Chicago, but is to be found in almost every other large city in the United States, and in many smaller ones as well. The elective system affords a ready means of utilizing all these forces in a single institution in each city.

Finally, to summarize briefly the points of this discussion:

1st.—The elective system is one of the greatest advances which has yet been made in educational methods.

2d.—It is one of the two improvements in pedagogic science which has not yet been adopted by the medical colleges.

3d.—The election is not necessarily confined to choice of subject, but pertains also to choice of teacher and method of study.

4th.—The elective system possesses great advantages for both student and teacher, especially in the difference in spirit which animate both, and

5th.—It is readily adaptable to the medical curricula under certain restrictions and limitations, and ought to be promptly introduced into our medical colleges.

DISCUSSION.

DR. JAMES W. HOLLAND, Philadelphia: Mr. Chairman—I was deeply interested in this paper. The subject-matter was extremely interesting and inspiring. I will, however, have to take issue with the gentleman in some points stated. One point was in anatomy classes, allowing the student to select for his study the particular parts of the body which would interest him. As to electing to follow out of a number, a particular teacher, nobody could complain of that. One good effect would be the stimulus given the teacher in vieing with other teachers so as to make himself popular. I think that is an excellent thought. The only difficulty is how are we going to pay so many teachers to teach one branch? But when we come to letting the students elect certain parts of the body, I do not see how we could recommend such a method. We cannot allow the student in his first year to say to himself: "I will not study the joints; they are hard, they are disagreeable and I will never be a joint specialist, so I will limit myself to the viscera or the surgical regions." We do not know what he will be, nor does he know what he will be. I do not believe that we should consider one part of the body more important to the student than another. I would say that while

studying fundamental branches, it is not desirable that the student should elect a particular part or function of the body that he will study. When it comes to electing the specialties that he will study in his second or third year, we meet with another difficulty. A school I was connected with tried this one year. We permitted the student to elect three out of six or seven special branches to be examined in. The result was that certain of those branches, that everybody would consider highly important for an all-round practitioner, were neglected. The average student is looking for snaps. We found about three-fourths of them would elect genito-urinary diseases and gynecology, and these three-fourths would divide in two groups, one taking the eye and the other the larynx. But as to diseases of the ear and nervous system, we could hardly get together a sheriff's posse to listen to those lectures. And yet what physician is prepared to make even a provisional diagnosis without some knowledge of these departments? The amount a man can learn in those special branches is small even when he gives all his time to them. In the four-year curriculum we now compel every student to study all the special branches, in addition to the general branches. But there is only one examination. Each examiner asks a question upon each subject. So the student does all his work in every department—in the eye, ear, nose, throat, and so on, for he knows the day of judgment is coming. But after all, it is only the practice of medicine and surgery divided among a number of teachers. The professor of surgery cannot cover the whole ground, as he did, or pretended to, some years ago. What we have done is simply to divide up general medicine among a number of teachers, each one having a part. Surgery is divided in the same way. For these reasons it seems to me it would not be advisable to allow the student to pick out the subjects he prefers, permitting him to ignore others, while he is an undergraduate.

DR. W. H. WATHEM, Louisville: Mr. President—I did not have the pleasure of hearing all the paper read, but I heard the discussion of Dr. Holland, which called my attention to the parts of the subject discussed. I am fully in accord with Dr. Holland in that it is a bad principle to allow medical students, during their collegiate course before graduation, to select subjects such as they may deem proper in accordance with their own judgment as to what they think might be to their interest. These students do not know what is best for them, and they do not know what course of work they will pursue after they have been graduated in medicine. Again, no student ought to begin a specialty until he has mastered, as far as possible, during his collegiate course, every subject alike. Then, when that has been done, according to the best judgment of the teaching faculty, he is prepared to come to a more intelligent conclusion as to what department of medicine he prefers to elect as a specialty, if any, and he is better prepared with a solid and a lasting foundation upon which to base his future work. It is a great misfortune, I take it, that in many of the schools private prizes are allowed upon individual branches, because every student wants some honor and he will apply himself more especially to that department to the exclusion of other depart-

ments equally important, and therefore, he is not the well-rounded educated doctor that he ought to be when he graduates. So I do not think we should allow any student to elect any special departments or subjects. But the school should direct its course of study in every particular, and every student alike should be compelled to conform to it. But when he has graduated he should be permitted to enter the college and elect any course he may desire and prepare for a post-graduate course in special departments, or general medicine, or general surgery, or what not. But I consider it pernicious for any college to allow any student to elect certain subjects and neglect others.

DR. J. E. MINNEY, Topeka, Kas.: Mr. President—I am certainly in accordance with the paper, with the sentiment and idea expressed. Working it out is another thing. The emergency is upon us and we have got to meet it. The medical schools must keep up with the literary schools and their methods of education. Now to take one instance, for example, how many graduates of the schools of our country, when they enter into the practice of medicine, can diagnose the common diseases of the eye? It matters not from what school they come, from Jefferson, the University of New York, or any of them—as oculists we meet them all—and I am not speaking disrespectfully of them either, but how much knowledge have they of that one subject? It shows us, gentlemen, that the field of medicine at the present time is so great and broad and wide and deep, that it is impossible for us to cover the ground, and we are forced to the elective plan, difficult as it may now seem to us.

DR. HENRY D. DIDAMA, Syracuse, New York : Mr. President—The paper that was read was a very fascinating one, and we followed it throughout and cheered the writer as he deserved to be. But, as he admitted, there are some difficulties in carrying out the plan that he suggested. If the student during his four years' course is to select the things that are to his liking, and the teacher who is fascinating, rather than the sound teacher, then we are likely to have some difficulty, at least in New York State. In the school with which I am connected, after the student has had all his examinations by his particular professor, he has an oral, extra examination by a committee consisting of his teacher and two others who are not connected with that department. This examination is to ascertain his fitness for graduation and to prepare him for the state licensing examination after he has received his diploma. If this elective plan is followed he may fail to pass the state examination, for the questions there are prepared for those who have taken the entire course and not for those who have taken only what pleased them. The questions are alike for all, and those who elect certain things in the general course and neglect others, may be left without a license to practise in the State of New York.

DR. ROBERT REYBURN, Washington, D. C.: Mr. Chairman—I am opposed to letting the student elect any branches. I consider it one of the great evils that a young man may start out as a specialist before he is acquainted with general medicine. If we adopt this course, shall we leave out chemistry, or hygiene, or bacteriology, or any of those things? We must leave out

some things if we adopt such a course. But students are men, and they will select the branches that are easy for them and neglect other possibly more important branches. I do not see how such a plan can be carried out. My belief is that the field is so vast, and there is so much to cover, that we cannot leave the student any choice of branches. After he graduates he may take up any specialty he desires, but I believe it would be a great mistake to allow them to become specialists. They ought to practise medicine five, ten, or fifteen years, before they attempt a specialty, for the reason that when an individual becomes a specialist he becomes narrowed. The medical man must not only see the organ, but he must understand its relation to the body. The man is spoiled by paying exclusive attention to any one organ ; so I am very much opposed to the suggestion.

DR. BAYARD HOLMES, Chicago : Mr. President—I want to try to help Dr. Dodson just a little bit, for he seems to be either misunderstood or else he is altogether on the wrong track. My own opinion is that he is right, and that the assumption which has just been made that the elective system would be designed to make specialists, is incorrect. The elective system is not designed to make specialists but to educate men in medicine. It is designed to educate, not to instruct. The course it seems to me has three distinct objects in view: The first is liberty for the student; the second is intensity, that is, intensity of study on the part of the student so that he may be red-hot in his pursuit of knowledge in some particular direction, so that he may pursue the anatomy and physiology and histology and embryology or some particular part of the body in a red-hot manner, so that he may get as much as possible out of it. At present our courses of study are designed for the most stupid men in the class, and the less stupid men and the brilliant and original men are at a terrible discount. He is either filled with great discontent in college or he leaves and goes into some other profession, or scenting in advance this unreasonable method of education, he chooses some other profession, leaving only about 10 per cent. of our graduates as graduates from colleges, while in law 30 or 40 per cent. are graduates of universities and colleges. Unless we can make our education more intense and adapt it to the medium and the most brilliant and the mediocre, we cannot expect to get the best men to study medicine. The third thing is adaptability. The medical curriculum should be adapted to the ability of the teachers and to the ability of each student, so that if we have first class work in anatomy, anatomy can be pursued, because it is not essential that the man should go skimming over the principles of anatomy, physiology, etc. We do not want the principles of these things at all but an actual concrete understanding of them. It is not that our students know anatomy when they get through, but it is essential that they should know how to know some anatomy. At the present time our students not only do not know any anatomy, but they do not know how to know anatomy. They do not study any one organ until they understand what it is possible to know of the anatomy of that part. I have some other things I want to say, but as the discussion is limited to five minutes, I cannot say them. I have worked over

this elective course since 1894, and have urged it in season and out of season. As it is we are losing men and educational power, and what we need most of all,—well trained men. If the elective system is adopted we will not have specialists but the old-fashioned doctor who went riding about with his preceptor. The student will study medicine from the standpoint of being a doctor, instead of from a lot of text-books and all of those deceitful things. Text-books will be at a discount, and we shall be opposed by the publishers of text-books on this account. But experience will be at a premium and real medical teachers will increase.

DR. LEWIS SCHOOLER, Des Moines, Iowa: Mr. President—As to the specialist, I think the paper answers its own argument. Although there may be many defects, the elective system is calculated to do just what the argument was against. If the student is allowed to select his course, he comes to the college imbued with the idea that he is adapted to some particular class of work, and if you encourage this you will soon have some men connected with the colleges (in fact, those connected at the present time, as well as those who will connect themselves with colleges in the future), who will divide the subject so that we will have abdominal schools and ophthalmologic schools, and thus the schools will be divided into specialist schools as the legitimate outcome of the elective system advocated this morning. I do not believe there is anybody here who would like to see such a division, yet the views advocated here this morning have a strong tendency that way. They will imbue in the coming generation the idea that they will want a school of that kind. One will go to a school for nervous diseases, another to an eye and ear school, and another to a school for diseases for women, and so we will come to have many schools that we now do not know of. All schools want students, and if the elective system is adopted, catalogues will soon appear advertising great advantages for students who desire to take elective courses. The old ads. are well worn and something new is demanded.

DR. WILLIAM RITTENHOUSE, Chicago: Mr. President—It is often advanced, as a reason for the elective course, that the scientific colleges are following this plan. Well, the cases are not quite analogous. Medicine is itself a special department of knowledge, and while it is true, as the doctor has suggested, that the student should learn how to learn, the medical school is not so much for that purpose. Let us have that taught in the common schools, and then the medical school can be a place for acquiring information, and not so much a place for learning how to learn.

DR. H. W. LOEB, St. Louis: Mr. President—I arise to express my thorough support of Dr. Dodson's position. These oppositions to election present the same arguments that were advanced against the elective system in the universities, and they have been fully answered by the universities without exception. This matter of election in the universities is not of the last few years. It began a great many years ago, and as I understand Dr. Dodson, he does not advocate that this should be a rapid change, begun to-day and concluded to-morrow, but that it should be a gradual, with, at first, perhaps

two or three electives and then later five or six. It finds its greatest sphere in graduate work. I incline to the opinion that we should have this object in view, to adopt an elective course eventually if we cannot adopt it just now.

DR. SAMUEL E. WOODY, Louisville: Mr. President—It seems to me the essayist has been entirely misunderstood. I did not understand him for a moment to advocate special knowledge *instead of* general information, but that this special knowledge should be in addition to, and built upon, a general knowledge of scientific medicine. He would not expect the gynecologist to learn pelvic anatomy and surgery to the exclusion of general anatomy and surgery. The well-educated specialist should, in medicine at least, fill Lord Bacon's definition of a clever man—"One who knows something of everything and everything of something." The day is past when he can claim all knowledge as his realm; life is too short and the art too long for a man to be a master in all.

Now that we have a four-year curriculum, and will perhaps make it still longer, it seems perfectly feasible, according to the means suggested by Dr. Dodson, for the student to get a full, round knowledge of medicine, and at the same time acquire the special knowledge that will enable him to do special work. One gentleman here advocates a man's waiting fifteen years in general practice before undertaking a specialty. That would bring him to at least forty years of age, when the mind loses much of its power to learn new things, when the tactile and muscular sense begins to be blunted, when the eye loses its accommodation, and the would-be specialist must fumble into special operative skill with the help of spectacles. You can't teach such an old dog new tricks. I heartily endorse Dr. Dodson's paper and believe he has shown us that this special teaching and training is feasible in medical colleges.

DR. C. H. HUGHES, St. Louis:¹ Mr. President—I do not share the apprehensions of our friend from Des Moines, in regard to the outcome of election, and I believe the gentleman from Louisville is on the right track. I do not believe as one of our friends does in regard to prizes. I think the prizes are about as hurtful as the prizes in a baby show, where the woman with the big fat baby goes away satisfied and all the others disgruntled. But, to make it rather ungrammatical, we have *got* to do it. The emergency is upon us now and we cannot escape. We have to provide for election, although we may have to do it by adding another year, making a five-year curriculum. Let these gentlemen, who wish to have the approval of a medical college, take another year and let them graduate in a specialty. These young men do not stay long in the profession as specialists before they got out of the business. I think the fault lies largely in our text-books and methods of teaching. We go into too much detail for the general practitioner of medicine. Each teacher seems determined to show the importance of his department and saddle upon the student a large amount of special knowledge that may be of no value to him when he gets out into practice. We should revise our methods so as to give a more practical course. We have to think about this;

¹ Stenographer's report without revision by Dr. Hughes.

there is no question about it. The requisites for medical education nowadays, according to the present methods of instruction, are such that no medical student can acquire the knowledge that is thrust upon him. The average medical student is paralyzed by the manner that we come at him in our several departments. I usually endeavor to be as plain as possible and to teach nothing more than I think is necessary for the medical student to understand, and nothing that is beyond his comprehension. But I do not suppose there is a single teacher here who has not realized what an extremely difficult thing it is to teach medical students so they will actually learn what you are talking about. You often see that revealed in the primary examinations, and also in the final examinations. I am in accord with the sentiment of the paper. We should consider how we will provide for the necessities of medical education. This probably confronted other scientific institutions and it is confronting the medical students to-day. I do not believe that we should allow the man to select too soon what his subjects shall be. But I believe we ought in the third year adopt this system of elective studies, for the men have not tastes for every department.

You will recall, Mr. President, when you were a student, which was a good while ago—it was some time ago since I was—how we abhorred the chair of chemistry and hoped to get by that chair without paying attention to all the multitudinous details of that multitudinous subject. We must stare these facts in the face.

DR. DUDLEY S. REYNOLDS, Louisville: Mr. President—If those who are discussing this subject will stop to think for a moment that the study of medicine is not to be undertaken until after the preliminary training of the elementary schools, up by regular gradation through the high schools, and the undergraduate departments of the universities, it will easily appear to them that the medical college is simply an advancement in regular order of proceeding; it is, therefore, necessary to insist upon every medical student giving due consideration to each subject in the curriculum. It must then, be apparent that none but the trained expert specialist in each of the several departments of the medical curriculum should be engaged to conduct such important work.

From the student possessing reasonable preliminary training, surely we can demand the same standard of familiarity with each subject of the curriculum, giving no undue importance to any one subject. That is the only kind of training which can prepare for any branch of practice.

DR. FRANCES DICKINSON, Chicago:¹ Mr. President—I fully agree with the last speaker. And when every teacher is a specialist and fully able to take care of every student desiring an education, he must have a salary, for he cannot depend upon his practice for his salary if he is to attend to the elective student. When every student gets a living salary, then we can take care of our elective students. There are a great many facts to be considered.

¹ Stenographer's report without revision by Dr. Dickinson.

I think, as a number have said, it is a question whether the student should elect a single study. If it is anatomy, they need anatomy taught in a medical atmosphere; they can bring something later, in physiology, for instance, to text-book teaching. In the second year they need also the anatomy and physiology, and all those branches. Possibly by the third year he has a chance, but until he has had all that early training he has not the judgment. When we take into consideration a four- or five-year course, the method of teaching in each subject, the time necessary for each department or branch, the number and character of the students, we are forced to conclude that the majority of the undergraduates of the 25,000 students to-day cannot be left to the elective course. We are giving them opportunities to-day in small classes, but to adopt this method as a whole I think would be a great mistake at this time.

DR. ROSA ENGELMANN, Chicago: Mr. President—It seems to me that there is an absolute misunderstanding as to the point made by Dr. Dodson. From what he said, election was modified in the first two years of the medical course only, and the primary studies were obliged to be taken, but there was an election of different parts of the primary studies, while later in the course election might be freer.

DR. JOHN M. DODSON, in closing: Mr. President—The author of a paper like my own must always lay himself open to the possibility of being misunderstood, because he is compelled to be so brief. I am not surprised, therefore, to have been misunderstood. There is no necessity that the course I have advised should lead the student to specialism. As the doctor in front of me said, we are forced to an elective system because of the impossibility of teaching more than a fraction of the sum total of medical knowledge in the time at our disposal. What we have now may be properly styled a *selective* system. A student desiring a four-year course in chemistry alone could employ his full time in that branch very well, but the professor of chemistry in a medical college has only part of a year at his disposal. He must select, therefore, those facts which the student most needs to know. In outlining a course in medical chemistry it is perfectly certain that no two professors of chemistry would agree. Is it not a bit egotistical for us to assume that we have selected absolutely the best course for every medical student, especially in view of the fact that no two faculties in the country are agreed as to what that is? Is the student not entitled to some choice in the matter? It is not meant that one student ought to choose anatomy, another physiology, or another chemistry, for each student should acquire a good knowledge of every one of these subjects. But why may not the student have something to say, with the advice of his teachers, as to what portion of these subjects he shall take, and as to the method by which he shall pursue them?

As to the necessity of a larger number of teachers, it was remarked that this would be very expensive. That is true, but we must meet that difficulty, gentlemen, whether the elective system be adopted or not. The time has passed when the didactic lecture, delivered to several hundred students in an amphitheater, will alone suffice. Students must be taught in small classes,

and a sufficient number of teachers must be provided for that purpose. If that be done there seems no good reason why the student should not be given some choice in the matter of teachers. It is argued that students will select the teacher who is most fascinating.

Ought not a teacher be fascinating, or at least interesting? A teacher who gives a dry, uninteresting course, ought not to teach.

In the matter of examinations, the teacher who gives the course should not do the examining for that course, but an examining board or committee should be appointed to examine all students. Then the student will select that teacher who gives him the best possible preparation and equipment for that examination.

And now let me say that I believe a wrong attitude is often adopted toward our students. The character of the medical student in America has changed greatly in the last few years. Our students are men and gentlemen. I have found that when students are treated as gentlemen we are far more likely to secure gentlemanly behavior from them. When they are treated as rowdies and hoodlums they are pretty sure to behave as such.

The elective system, gentlemen, is not coming: it has arrived. It has already been adopted by a few of the medical schools, among them the Medical Department of Harvard University, the College of Physicians and Surgeons of New York, the University of Pennsylvania, the Medical Department of Johns Hopkins, and Rush Medical College. I predict that if there be a discussion of this subject of election in this association five years from now, we will all be in favor of it. But the subject will be beyond the point of discussion long before that time.

Harvard University for the last 20 years has exercised a larger influence in educational matters than any other half dozen colleges in the country. And why? Because it has been so thoroughly progressive. No step taken by Harvard has exerted so powerful an influence, and has been so emphatically a step in advance, as the introduction of the elective system. The whole course in the literary and scientific departments at Harvard is now elective. I confidently believe that the work of our medical curricula, at least in the junior and senior years, will be wholly elective within five years.

REPORT OF THE COMMITTEE ON THE CON-
DITION OF MEDICAL EDUCATION IN
THE UNITED STATES.¹

Mr. President and Representatives of the American Medical College Association :

GENTLEMEN—In the preparation of this report your committee has written to all of the colleges whose names have appeared as members of this Association during the last two years, 82 in number. To every college from which we have received no report we have written at least three times and to some colleges we have written four or five times. We have received reports from 56 of these colleges, the figures from a few of which are given with some misgivings as we fear the writer misunderstood our meaning. However, from a careful analysis of all the letters we have to make the following report which appears to us to accurately represent the teaching facilities and the requirements of the 56² colleges that have answered our letters. These colleges may fairly be considered the whole number that are interested in our work for the advancement of medical education.

It is understood that all colleges of the Association now require that before graduation a student must have studied medicine in college for four years embracing not less than four courses each of at least six months' duration, but there is nothing in our constitution or by-laws specifying how much work must be put into each course, so that at present it would be possible for a school to meet our requirements that demanded only one hour's work a day during each of these courses or even less time than this.

The subjects involved in our inquiry may be considered under three heads; *viz.*,

1st. Preliminary requirements,—that is, the amount of education, a student shall be required to possess before he can enter one of our colleges.

¹ Presented to the Association of American Medical Colleges, Columbus, O., June 5, 1899.

² Letters from two or three other colleges have come in too late to be incorporated in this report.

2nd. Advanced standing,—that is, the credentials he must have before he can advance from a given year in one college to a more advanced class in some other college. In this connection we might also profitably consider the conditions that should be imposed upon a student before advancing to a higher class in the college he is attending.

3rd. The number of actual hours' work in college that should be demanded of each student before he is eligible for examination for the degree of doctor of medicine and the facilities for teaching as follows :

(a) Laboratory such as dissecting, and work in the laboratories of chemistry, pathology, bacteriology, physiology, etc.

(b) Practical work, as ophthalmology, physical diagnosis, bedside and dispensary study of patients in small classes, etc.

(c) Obstetric cases ; *i. e.*, the number of obstetric cases personally attended by each student.

(d) The number of clinical cases available for teaching purposes during each year.

(e) Clinical lectures. The minimum number of clinical hours' teaching each student is required to attend during his four years' course.

(f) Didactic work. The minimum number of hours including all didactic lectures, and recitations that each student is required to attend during his four years' course.

(g) The minimum total number of hours' work in college demanded of each student during his four years' course.

We will consider these subjects, *seriatim* :

1st. Preliminary requirements. We find that *seven* colleges require nothing more than a common school education, a term capable of very loose interpretation. *One* requires only a teacher's certificate. *Three* require the student to have studied only one year in a high school, which implies an education that is often attained by boys and girls before they are 13 years of age. *Eleven* require for admission evidence of having completed the course of instruction in a common high school. *Thirty-four* require a diploma from a high school giving a thorough preliminary education. We believe that the time has come when no student should be allowed to commence his course in medicine before he has a thorough high school education.

2nd. Advanced standing. *Four* colleges apparently require no evidence of previous college attendance, excepting the student's statement, to allow him to enter one of the higher classes. *Six* require no evidence of attainments but allow a student to enter a higher class who brings evidence that he has previously attended for one or more courses, any other college without any evidence of having successfully passed any examinations. *Twenty* require nothing more than evidence of previous attendance for one or more courses at some *recognized* college without evidence of having passed any examinations. *Fourteen* require certificates of having passed examinations in recognized medical colleges with examinations in the branches embraced in their own curriculum that are not covered by such certificates. *Eight* require that these certificates must have been issued by colleges, members of this association. *Three* require examination on all branches.

While the latter appears to us the ideal method of ascertaining whether a student is qualified to enter a higher class, it would necessarily restrict the student largely in his selection of a college. We would recommend that before a student may enter an advanced class he must present certificates from a college whose requirements fully equal those of this association, of having successfully passed the examinations in at least three-fifths of the branches embraced in the curriculum of the previous years of the college he desires to enter or must pass examinations on the same; upon the remaining branches he may be conditioned but these conditions must be removed by taking the work, providing it has not already been taken, before he can enter the succeeding class (that is, a man cannot carry conditions for more than one year) providing, however, that this shall not prevent colleges from allowing students who have earned the B.A. or B.S. degrees, or graduates from dental, pharmaceutical, or veterinary colleges, who possess the proper preliminary education, to enter the sophomore class.

(Students in passing from one class to a higher class in the same college should not be allowed to carry over as conditions more than two-fifths of the branches of the class they wish to leave, and all of these conditions should be removed before they

can advance to the class succeeding the one they are allowed to enter.)

3rd. The number of hours of college work to be demanded in a four years' course.

(a) Laboratory work including dissections. *One* college makes no report. *One* college gives less than 300 hours' laboratory work in four years. *Five* give between 300 and 500 hours; *twenty-seven*, between 500 and 1000 hours; *fourteen*, between 1,000 and 1,500 hours; and *eight*, over 1,500 hours. We would recommend that every college in this Association should provide at least 500 hours' laboratory work.

(b) Practical work. *Five* colleges offer less than 100 hours' work.

Ten give from 100 to 200; *thirteen*, from 200 to 300; *eleven*, from 300 to 500; and *sixteen*, over 500 hours.

We should recommend that every college should offer at least 150 hours in these various practical methods.

(c) Obstetric cases. *Five* of these colleges afford their students no opportunity to attend obstetric cases before their graduation. *Twenty-eight* afford the students opportunity to attend personally from one to three cases; *seven*, from three to five cases; *six*, from five to ten cases; and *seven*, over ten cases.

We would recommend that all colleges, members of this Association, should withhold the degree of doctor of medicine from every student until he has attended personally at least one case of obstetrics.

(d) Clinical cases *yearly* available to the college for teaching its students. *Three* colleges furnish no evidence of having even one patient to present to their students before graduation. *Four* have less than 500 patients all told from which to select clinical cases. *Four* others have less than 1,000. *Five* have between 1,000 and 2,000. *Nine* have between 3,000 and 5,000. *Eight* have between 5,000 and 10,000. *Six* have between 10,000 and 20,000. *Six* have between 20,000 and 40,000. *Three* have between 40,000 and 100,000.

We believe that no college can be considered properly equipped for teaching the practice of medicine which has not at least 3,000 individual patients per annum from which to select cases to pre-

sent to its classes; therefore, we would recommend that colleges belonging to this Association unable to obtain this number of clinical cases for class instruction should limit their teaching to the branches of the first two years.

(e) Minimum number of hours' clinical attendance by each student.

Six colleges offer less than 300 clinical hours' work in four years.

Six give only from 300 to 400 hours. *Seven* give only from 400 to 500 hours. *Nineteen* give from 500 to 800 hours. *Fourteen* give from 800 to 1,200 hours. *Four* give over 1,200 hours.

The best medical schools throughout the world are to-day making a large part of their instruction of a clinical nature, and we believe that the fair name of this Association suffers greatly by permitting any of its members to continue in the archaic methods of teaching represented by some of these figures. We therefore recommend that any of our members that devote but little time to clinical work modify their curriculum so that they shall give at least 750 hours' clinical teaching to each student during his junior and senior years.

(f) Didactic work. *Two* colleges give less than 1,000 hours' work in four years.

Seven give from 1,000 to 1,500 hours. *Twenty-two* give from 1,500 to 2,000 hours. *Thirteen* give from 2,000 to 2,500 hours. *Four* give from 2,500 to 3,000 hours. *Eight* give over 3,000 hours.

The number of didactic hours' work that a college should give depends upon the number of hours devoted to clinics so that the college giving the minimum number of hours' clinical work should give a large number of didactic hours.

(g) Total number of hours college work to be demanded of medical students. *Three* colleges demand less than 2,000 hours; *two*, from 2,000 to 2,500 hours; *eleven*, from 2,500 to 3,000 hours; *seven*, from 3,000 to 3,500 hours; *seven*, from 3,500 to 4,000 hours; and *twenty-six*, over 4,000 hours.

Children 12 years of age usually put in five or six hours a day in school and many of them two or three hours' study at home, and college students do more than this. The undergraduate in literary colleges is expected to put in at least 3,000 hours' solid work in four years.

Thirty hours' work a week for 24 weeks would give medical students 2,800 hours' work in four years, but when we consider the age of the average medical student the amount he has to learn, and the short sessions, there is no good reason why he should not do much more than the child.

Laboratory and clinical work require only a moderate amount of mental effort; therefore, the medical student who puts in only 2,800 in four years does only about half as much work per year as the child in our public schools.

The majority of our medical colleges require over 3500 hours' work of their students, therefore we would recommend that the minimum number of hours' work in college required of each student by colleges of this association before he may take his final examinations for the degree of doctor of medicine shall be 3300. It is understood that one hour's didactic work in college requires of the average student about two hours of study in preparation therefor, and one hour of laboratory, practical or clinical work about half an hour's study.

Your committee recommend that the constitution and by-laws of the American Medical College Association be altered so as to embrace the following provisions and that all parts of the same inconsistent with these provisions be repealed.

I. We recommend that from and after July 1st, 1900, and until more stringent rules be adopted, students beginning the study of medicine must possess a diploma from a high school giving a thorough preliminary education, or must pass a thorough examination in all the branches usually taught in such schools. This examination is to be conducted by a state superintendent of public instruction or some one delegated by him, or by members of the faculty of a university or college, who are not connected with the medical faculty of the college the student wishes to enter, or by such a body as the board of regents of the university of the State of New York.

II. Before a student may enter an advanced class he must present certificates from a college whose requirements fully equal those of this Association of having successfully passed the examinations in at least three-fifths of the branches embraced in the curriculum of the previous years of the college he desires to

enter or he must pass examinations on the same ; and upon the remaining branches he may be conditioned, but these conditions must be removed by taking the work, providing it has not already been taken and by passing examinations before he can pass on to the succeeding class (that is a man shall not carry conditions for more than one year), providing, however, that this shall not prevent colleges from allowing students who have earned the B.A. or B.S. degree and who have had an adequate course in science, or graduates in dentistry or pharmacy, who possess the proper preliminary education, to enter the sophomore class.

III. Before a student can be eligible for the degree of doctor of medicine he must have attended in a well-equipped medical college, four courses of lectures of at least six months each. These courses must embrace at least 3,300 hours' actual work in the college, including beside didactic lectures and recitations : (a) 500 hours' laboratory work ; (b) 150 hours of practical work ; (c) One or more obstetric cases personally attended by each student ; and (d) 750 hours' clinical teaching. At least 45 months must intervene between a student's matriculation and the date of his graduation. All of the work should be fairly apportioned throughout the four years.

IV. No college can be considered capable of giving the requisite instruction that cannot command each year at least 3,000 hospital or dispensary patients for presentation to its classes.

Signed,

E. FLETCHER INGALS,
THOS. H. HAWKINS,
JOHN C. OLIVER,

Committee.

MEDICAL EDUCATION IN THE SOUTH.¹

BY G. C. SAVAGE, M.D., Nashville, Tenn.

The subject suggested by Dr. Holmes, your secretary, when he invited me to address you on this occasion, will not be considered in its broadest sense, so far as territory is concerned. If the District of Columbia, Maryland, and Missouri were included in our study of "Medical Education in the South," I would have to announce that there are forty medical colleges located in the South in which regular scientific medicine is taught. This number does not include the three medical colleges that have been established for the negro race. The status of the three colleges in the District of Columbia, the three in Maryland, the four in Kentucky, and the ten in Missouri, is well known to you, for these help constitute your membership. One in Arkansas and one in Virginia are also your members. Deducting these 22 colleges from the entire number located in the South, there remain 18, 12 of which constitute the membership of the Southern Medical College Association, the remaining six belonging to no association. Within the past eighteen months two medical colleges, one in Georgia and one in Alabama, have ceased to exist.

It is of medical education, as conducted by the colleges constituting the Southern Medical College Association, that I shall speak. Prior to 1893 literary qualifications were not considered in matriculating medical students in our colleges. This was neither better nor worse than the practice of most colleges east, north and west before your organization was effected in 1890. Only two courses of five months each were required before graduation, as was the prevailing custom among colleges all over this country up to 1890, only a few of the eastern colleges having required three courses before that date. Each of these courses, here as elsewhere, was an exact repetition, the one of the other. Not infrequently the first-course student came a month late and left a month before the close of the session, having received only three months' instruction. The second session was often entered a month late, and now and then a

¹ Read before the Association of American Medical Colleges, Columbus, O., June 5, 1899.

premature examination was asked for, and sometimes granted, two weeks before the end of the course. The actual attendance on college instruction, before graduation, in many instances, was only seven months. The examinations were oral and light, else 90 per cent. of the students would have failed. What I have said of our southern colleges prior to the organization of the Southern Medical College Association, could be said, with equal regard for the truth, of the colleges now constituting the Association of American Medical Colleges before this organization was effected. I know it is true for I graduated at one of the best of your colleges, the one with which your presiding officer of a year ago, is now connected.

Laboratories for the training of the individual student were, at that time, few and poorly equipped. Practical chemistry was taught by experiments performed by the professor and his assistant before the whole class, the greater number of whom were so far away as not to be benefited by such exhibition. Microscopes were few in any of the colleges, and were not often called into requisition. Surgical operations were performed on the cadaver by the professor or his assistant, while the whole class looked on, and not by the student himself handling the knife and the saw. To do these operations himself, and even to learn, by personal experience, the application of bandages, the ambitious student was forced to fee some enterprising young doctor who often did not have even a nominal connection with the college. Physical diagnosis, if experimentally learned at all, was acquired in the same way. Nor were these conditions peculiar to colleges in the South. In my honored alma mater I performed no chemical experiments, for I had no opportunity to do so; and the only things I saw under the microscope were a section of bone and the circulation of the blood in the web of the frog's foot.

Such conditions ought not to have been; and yet in spite of them many medical students of the olden time, by hard work in college, and still harder work after entering actual practice, became learned in medicine and surgery, and that too without having gone to Europe.

To us, it is now astonishing that the old methods of medical teaching in America should have lived so long. While they

were still in vogue, it is not to be wondered at that a great number of young doctors, ambitious to learn more under more favorable conditions, should spend a year or two, as soon as able, in the medical centers of Europe. To have gone to Europe then for study meant much; to go now means but little, for medicine is as well taught in America to-day as on any other part of the globe.

In the advancements that have been made it was only natural that the colleges in the east, the north, and the west, under more favorable environments, should take the initiative. It is well known to you all that less than two generations ago, the South was devastated by the most dreadful war recorded on the pages of history—by the fortunes of this war the rich were made poor, and the poor were made poorer still. Hindered by pestilential yellow fever, it was an Herculean task to scatter the ashes of war, and throw aside the sackcloth of the poverty it entailed. While the work of restoration has been largely accomplished, there yet remains much to be done in the way of acquiring wealth with which to endow and equip institutions of learning.

The history of your own association is well known to you. Your first steps looking towards the advancement of medical education had not grown cold before the colleges of the South began to feel their way in the same direction.

On November 16, 1892, in response to a call issued by the late W. T. Briggs and myself, the representatives of eleven medical colleges assembled in Louisville, Ky., and effected the organization of the Southern Medical College Association. The following declaration was then made:

“The objects of this Association are to cultivate a closer and more intimate relation between medical colleges, and to elevate the standard of medical education by requiring a more thorough preliminary training and an increased length of medical study.” The minimum requirement as to preliminary education, as adopted at that meeting, was “educational attainments required of second-grade teachers of public schools.” As to the length of the course the following was enacted: “Candidates for graduation, in addition to the usual requirements of medical colleges, must have attended three courses of not less than six months

each, in three separate years; must have dissected in two courses and attended two courses of clinical or hospital instruction; and must have attended one course in each of the special laboratories: (1) histology and bacteriology; (2) chemistry; (3) operative surgery." These requirements were made to apply to all students who should matriculate for a first course after September 1, 1893. Though the beginning was small, it was certainly a distinct advancement.

The Association held its second meeting in Nashville, Tenn., April 20, 1893, representatives of twelve southern colleges being present. At this meeting a resolution was passed allowing each college to regulate its own fees. Another resolution passed was to the effect that all legislatures be asked to repeal laws compelling their colleges to take beneficiaries. The two following certificates were adopted, and ordered to be published in each annual announcement:

CERTIFICATE NO. 1.

.....189..

Dear Sir:

Mr of is a gentleman of good moral character. I recommend that he be allowed to enter upon his medical studies in your college.

Yours,

.....M.D.

CERTIFICATE NO. 2.

.....189..

Dear Sir:

I have examined Mr..... of and find his scholastic attainments equal to those required for a second-grade teacher's certificate in our public schools.

Yours,

.....

Supt. of Public Inst.

As is shown in certificate No. 2, the scholastic attainments were to be determined by a school official, and not by a college itself, a principle to which the colleges of this Association still adhere.

It was at this meeting that the secretary was instructed to correspond with the secretaries of the several state medical

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societies with the view of procuring the passage of a resolution to the effect that medical colleges should not be recognized whose requirements were less than those of the Southern Medical College Association. This became unnecessary, for all existing colleges at once adopted the advances instituted by the Association.

At the meeting of the Southern Medical College Association in New Orleans in November, 1893, this resolution was adopted: "After the next annual session, 1894-5, every medical student, whether first admitted before or after 1893, must have attended in a regular and reputable medical college, three full courses, in three separate years, before he can be graduated," thus setting the final time limit for graduating two-course students.

At the Charleston meeting, in 1894, no advance steps were taken, but there was no receding from the advances before made.

At the Washington meeting in 1895, no further advances were made, nor was there any disposition to take steps backward.

At the meeting in Atlanta, May, 1896, the constitution was amended so as to allow advanced standing to such students as may be,

(1) Graduates in dentistry, pharmacy, or veterinary surgery.

(2) Graduates and matriculates of colleges of homeopathy and eclectic medicine.

(3) Graduates of recognized colleges and universities, who have completed therein prescribed courses in the elementary branches of medicine, including chemistry and biology.

At this meeting, also, there were added to the regular requirements previously adopted, "hygiene, ophthalmology, otology, and laryngology."

At the same meeting an amendment was offered to advance the preliminary requirements from "a second-grade teacher's certificate" to "first-grade," the latter to be procured, as was the former, from some county superintendent of public instruction. This was a distinct step forward and became a part of the organic law at the meeting which was held in Nashville in 1897.

It was at the Atlanta meeting, also (in 1896), that it was proposed to pass from three to four courses before graduation. This would have been incorporated in the constitution of the Associa-

tion at the meeting in Nashville, in May, 1897, except for the request of one college that final action be deferred until the next annual meeting.

At the Memphis meeting, December 5, 1898, the amendment, introduced two years before, to establish the four years' graded course was unanimously adopted. This amendment has been effective since January 1, 1899. This amendment does not apply to students who matriculated for a first course prior to that date; but if, for any cause, they should not apply for graduation, at or before the annual commencement in 1903, they must attend a fourth course. Thus is a time limit set for the graduation of any student at the end of his third course. In doing this we have but followed the example of the colleges constituting the Association of American Medical Colleges; for, if I mistake not, your last third-course classes graduated at your commencements of last year, some years after you had adopted the four courses. We believe that we are both legally and morally bound to give those who matriculated under the old régime, a reasonable length of time, after due notice, in which to complete their medical studies at the end of the third course.

A third advance in the line of preliminary educational requirements was proposed at the Memphis meeting and will come up for final action at the meeting in New Orleans in November, next. When adopted the minimum will be:

(1) In English, a composition on some subject of general interest. This composition must be written by the student at the time of the examination, and should contain at least two hundred words. It should be criticized in relation to thought, construction, punctuation, spelling, and handwriting.

(2) In arithmetic, such questions as will show a thorough knowledge of common and decimal fractions, compound numbers, and ratio and proportion.

(3) In algebra, such questions as will bring out the student's knowledge of the fundamental operations, factoring, and simple quadratic equations.

(4) In physics, such questions as will discover the student's understanding of the elements of mechanics, hydrostatics, hydraulics, optics, and acoustics.

(5) In Latin, an examination upon such elementary work as the student may offer, showing a familiarity attained by one year of study; for

example, the reading of the first fifteen chapters of Caesar's Commentaries, and the translation into Latin of easy English sentences involving the same vocabulary.

(6) In place of this examination, or any part of it, colleges, members of the association, are at liberty to recognize the official certificates of reputable literary and scientific colleges, academies, high schools, and normal schools, and also the medical student's certificate issued by any state examining board covering the work of the foregoing entrance examination.

(7) Colleges, members of this Association, may allow students who fail in one or more branches in this examination the privilege of entering the first year's course, but such students shall not be allowed to begin the second course until the entrance requirements are satisfied.

Thus I have shown you the remarkable advances that have been made in medical education in the South within the remarkably short time of seven years. The preceding half century had not been attended by such advances. To emphasize these changes allow me to recapitulate.

First, as to preliminary requirements: seven years ago, none; first, a second-grade teacher's certificate; then a first-grade teacher's certificate, each to be obtained as the result of an examination by a county superintendent of public instruction; and now the requirements are proposed which are the same as those of your own organization.

As to course of medical instruction: the session has been lengthened from five to six months; the number of sessions was in 1893 increased from two to three, and in 1898 from three to four; before 1893 the second course was a repetition of the first, while now the course is graded and students complete the fundamental branches before taking up the practical. This is well-shown in the following schedule for the four year course:

FIRST YEAR.

General Chemistry; Anatomy; Histology; Physiology; Materia Medica; Pharmacy; Physics; Dissecting; Chemical Laboratory; Pharmaceutical Laboratory; Histological Laboratory.

SECOND YEAR.

Organic Chemistry; Anatomy; Histology; Physiology; Therapeutics; Regional Anatomy; Physical Diagnosis; Hygiene and Sanitary Science; Embryology; Dissecting; Chemical Laboratory; Histological Laboratory; Clinics.

THIRD YEAR.

Therapeutics; Pathology; Medicine; Surgery; Throat, Nose, and Ear; Obstetrics; Gynecology; Physical Diagnosis; Pathologic Laboratory; Medical Laboratory; Venereal Diseases; Clinics.

FOURTH YEAR.

Medicine; Surgery; Ophthalmology; Obstetrics; Gynecology; Bacteriology; Nervous Diseases; Genito-urinary Diseases; Electrotherapeutics; Medical Jurisprudence; Pediatrics; Autopsies; Skin Diseases; Bacteriologic Laboratory; Medical Laboratory; Surgical Laboratory; Gynecologic Laboratory; Physical Diagnosis; Clinics.

In view of the advances that have been made, and in consideration of the resolution affecting southern medical colleges, introduced and passed at the Denver meeting of the American Medical Association, it is not to be wondered at that Dr. Hays, president of the Louisiana State Medical Society, should move, and that Dr. Cocran, president of the Louisiana State Board of Medical Examiners, should second the following, which was passed unanimously by the Louisiana State Medical Society on May 17, 1899:

"Whereas the American Medical Association, at its last annual session, June, 1898, adopted a resolution, that: hereafter no professor or other teacher in, nor any graduate of, any medical college in the United States—which shall, after January 1, 1899, confer the degree of doctor of medicine, or receive such degree, on any conditions below the published standard of the Association of American Medical Colleges—be allowed to register either as delegate or permanent member of the Association.

"*Resolved*, That the Louisiana State Medical Society strongly protests against the resolution as unfair and unjust, for the following reasons:

"1. Said resolution is in conflict with the constitution of the American Medical Association in regard to the requisites for membership.

"2. This constitution should not be so amended, as to membership, that professors and teachers would be allowed to violate their contract with students to graduate them at the end of the third course; that professors and teachers on the one hand and graduates on the other, would be discredited because they honorably maintain their mutual obligations.

"3. Said resolution threatens and boycotts many of the most reputable members of the American Medical Association and of the medical profession, and thereby greatly encourages discord and disunion; such action is not in harmony with the tolerant and forbearing spirit of the medical profession and, heretofore, of the American Medical Association, and it is not by such means that the association has gained the power it now threatens to abuse.

"4. The adoption by the Southern Medical College Association of the three-year course in 1893, and of the four-year course in December, 1898, gives conclusive proof of the commendable determination of these colleges to advance the interests of medical education as rapidly as their environment justifies.

"5. During the many years prior to 1890, the conditions, surrounding the great majority of the colleges whose representatives urge invidious action against southern medical colleges, were far superior to the conditions still confronting the latter; and yet the former persistently maintained only a two-year course. The southern states were devastated by war, and their medical colleges have been at great comparative disadvantage as regards such important influences as public wealth and education, density of population, and the deficiencies and needs of sparsely inhabited states. Hence, southern medical colleges deserve not condemnation but the very highest commendation for the unprecedented progress they have made during the past eight years; and the American Medical Association should be foremost in manifesting its appreciation of this progress, and in exercising the sympathy and the wisdom indispensable to securing the support of every reputable physician in every section of our country, thereby best promoting its own future influence and progress."

DISCUSSION.

DR. HENRY D. DIDAMA, Syracuse: Mr. President—May I ask, if the requirements of the Southern Medical College Association are just the same as those of the American Medical College Association, why don't they unite with us?

DR. S. F. EARLE, New York: Mr. President—Do I understand that this paper was read by invitation?

THE PRESIDENT: Yes, sir.

DR. EARLE: Then I move that the thanks of the Association be extended to the essayist and that the paper be exempt from discussion.

DR. G. C. SAVAGE, Nashville: Mr. President—The object Dr. Holmes had in view when he asked me to present this paper was that it might be discussed. I would rather have a discussion than otherwise. If any point can be made clearer, I would like that other members of the Southern Association who are here, may be permitted to speak.

DR. EARLE: I only made the motion as an act of courtesy, but since he wishes to have it discussed, I will retain only the first part of my motion, that the thanks of this organization be extended to Dr. Savage. (The motion was put and carried.)

DR. JAMES W. HOLLAND: Mr. President—We could not pay the essayist a higher compliment than to show him that we listened to his paper and that he stimulated our minds to certain lines of thought. I think the gentleman who spoke a while ago probably misunderstood the doctor's paper to a certain extent. When he spoke of the entrance require-

ments, he told us, what the Southern Medical College Association intended to do, and not what standards are in actual operation. Am I right about that, Doctor?

DR. SAVAGE: Yes, sir.

DR. HOLLAND: It is not what they have done but what they hope to be able to do, so there is still a well-marked difference in the standards of the Associations, and I think the doctor will agree that we could not unite while our standards are not the same.

Now, there is one plea, made by the Louisiana Board, which I think must appeal to every right-minded man who wishes to deal justly with his fellow men. If it be conceded that an obligation has been entered into, we would lose in our respect for these gentlemen if they violated their obligation for fear of incurring reprobation from another body. They have got to stand by their word. Now, if it be conceded that they are bound to their matriculates to continue the same three-year curriculum until those matriculates are graduated, that does not involve any obligation on their part to the matriculates of other colleges, nor does it involve any obligation on the part of the student to take advantage of it. If the resolution of the American Medical Association, instead of condemning any professor or instructor in a medical college which does not conform to the regulations of the college association, had said, that any person graduating hereafter under requirements which are beneath those of the Association of American Medical Colleges shall not be considered in good standing. The main point is that the men who come into the medical association hereafter shall come up to our standards. We have already passed upon the men in the medical association and found them all right. But suppose it says that no man shall hereafter enter the association who has not taken a four-year course, how would it affect the obligations the professors in the colleges of the South have made? Our friend, Dr. Savage, can go back to his students next year and say, "Gentlemen, we will keep our obligations with you, but it is my duty to give you warning that if you graduate in less than four years, the American Medical Association has said that after a certain date you will not be accepted as members, and my advice to you is to take four years of college study. The school is prepared to fulfil its obligation and graduate you but the American Medical Association will not accept you as members." What would be the result? Perhaps three-fourths of the students would take the four-year course. Some of them who were in a hurry and those who intended to be quacks anyhow, would perhaps graduate in less time. But it will give a great stimulus, to the higher education if the American Medical Association will still adhere to that part of the resolution. The college then will be exempt from any condemnation. You can fulfil your obligation to the student. But the student has not entered into any obligation to graduate in three years. He has not, for instance, obligated himself to attend Vanderbilt University for three years. If there is any obligation at all, it is all on one side. The student

is at liberty to stay four or five years. I hope, whatever shall be the outcome of the action of the American Medical Association upon this request of the Louisiana Board, that the distinction will be drawn very sharply, first, that the southern medical colleges are under no obligation to graduate, in three years, men who have not yet matriculated or who have matriculated somewhere else; next, that while the faculty may be under obligation to graduate in three years, yet the student is under no obligation, to avail himself of a privilege considered hurtful by the association.

DR. W. H. WATHEM, Louisville: Mr. President—I live on the borderland of the South and the North. Probably because I live just across the river from Jeffersonville I am in the South. I have had relations with the southern schools, in regard to medical students, more than most of us have had, because the northern schools have but little such relations. I am much interested in doing what I can to bring about the proper feeling between the schools of the Association of American Medical Colleges and those of the Southern Medical College Association. And the difference is now so little that it requires but few concessions on the part of each association to bring together this entire country into one college association. The southern schools claim that they are, in an honorable way, compelled to allow previous matriculates in their respective schools to graduate after having attended the next two years, which I am willing to concede, provided that does not extend to any school save the one in which such students may have matriculated. For instance, there is certainly no obligation that compels any school to graduate students of other schools in that time, and in this position Dr. Savage agrees with me.

In the Southern College Association there is a provision that permits any school to matriculate a student to the succeeding year within three months after completing his course in another medical school. Hence a student who matriculated in a medical school in Louisville on the first of January, completing his course in the first week of July, may in the same year, within nine months after his first matriculation, matriculate again for another year in a college of the Southern Association. In other words, it is in positive conflict with the requirement of the Association of American Medical Colleges as acted upon specifically upon more than one occasion by our judicial council and unanimously adopted; namely, that no part of any two years of the graded course shall have been taken within the same twelve months. Now many students who matriculated in Louisville in January 1898, entered, the various schools of the South in October. That must be changed if these two associations are to become blended. Again some of the southern schools do not seem to understand what constitutes credit for a course of lectures to enable them to advance a student to a succeeding year. Several of the students of the Kentucky School of Medicine accepted by these schools for advanced standing who had passed no examination whatever and had nothing but a receipt for the money paid and a matriculation ticket and tickets admitting them to the laboratories, without any evidence of having attended lectures in the

school. I wrote them about this but received no satisfactory reply. The question must be decided, as to what credentials shall be received by the colleges as evidence that the student had attended a regular course of lectures.

DR. PHILIP R. TAYLOR, Louisville: Mr. President—The direction in which this discussion is going does not have a bearing on the paper by Dr. Savage. Neither he nor any of the schools in the South are amenable to our law. We have two other members of the southern schools present and I would ask that they be heard from as well as Dr. Savage.

PRESIDENT: All visitors are invited to take part in the discussion.

DR. CHRISTOPHER TOMPKINS, Medical College of Virginia: Mr. President—I heard with a great deal of interest Dr. Savage's paper and am heartily in sympathy with everything he said. The school I represent is the Medical College of Virginia which is in its sixty-first year. It is not the Medical Department of the University of Virginia. At the end of the Confederate War, when I was a boy, I saw all of the business portion and a good part of the residential portion of Richmond destroyed by fire. In the State of Virginia at that time, and for many years afterwards, all that was required in the eye of the law to constitute a man a doctor was to put up a sign and pay \$5.00 license. I graduated in a Virginia medical college and then finished my medical education in one of the large schools in the North. I have, along with others, been greatly impressed with the progress made in medical education in this country. But, comparatively speaking, the progress that I have seen made during these years in the north is as nothing compared with the progress made in the South.

You, gentlemen, I hope will hold up our hands and help us to make still further progress, and not, by hostile legislation, cut us off from membership in your medical associations and make it impossible to longer hold fellowship with you. We ask you rather to encourage us to go on with the great work that we are now doing. Dr. Savage will recollect that I spoke in favor of increasing the college term in the South to four years at the meeting of the Southern Medical College Association in 1897.

We have three medical colleges in Virginia—two in Richmond where I reside. The school, which I have the honor to represent, voted to go into the four-year course, and did go into the four-year course, not knowing what the other two schools in the state would do. The Medical College of Virginia did this in the face of what was then expected to be great competition,—a competition that it was thought would threaten its existence.

The medical men of the South more often visit the North than do the medical men of the North visit the South. It is not uncommon for us to spend our vacation in the North, and it is perhaps true that we know better what is being done in the North than those in the North know what is being done in the South. To illustrate the straitened circumstances of some of the people with whom we have to deal and its baneful influence,

I will state, that not long ago I was interviewed by a student, who wished to matriculate in my school. He was offered matriculation and his tuition fees in another school for \$25.00 less. I explained to him that \$25.00 should not deter him from going to the school that he thought the best. He said to me: "Doctor, \$25.00 looks as big as a house to a man who comes from my section of the country." He voiced the sentiment of very many others. Under such circumstances our advances have to be made much more cautiously than in other sections of the country that are more prosperous.

Many of us belong to the best of the medical associations and consider it an honor to be members of such associations. We hope that at no distant day the educational requirements of medical colleges of the south will be the same as those of the Association of American Medical Colleges. We ask this body to aid and assist us in the attainment of this end.

DR. DUDLEY S. REYNOLDS, Louisville: Mr. President—I would like to make two suggestions: First, we have nothing to do with the action of the American Medical Association. We have no right to criticize that body in this assembly. Secondly, the Medical College of Virginia is announced here as being one of the institutions that exacts the same requirements as are required by this Association.

DR. TOMPKINS: I should like to know upon what authority that statement is made.

DR. REYNOLDS: That is what I want to know.

DR. TOMPKINS: I am the dean of that institution and should know.

THE SECRETARY: I am responsible for this, so far as it goes. I sent out from the office in Albany, N. Y., the best abstract that possibly could be made from the catalogues of each and every college in the United States, and I sent them to the deans of the several colleges with the request that if they were incorrect in any particular, that they correct them and return. Many were corrected and returned, and if this were returned, and I see by the appearance of it that it was, it must have been corrected in the office of the dean, and therefore I assume that it is correct.

DR. TOMPKINS: I corrected that report myself, but knew full well at the time that it did conform with the requirements of the American Medical College Association. There are many ways in which our school differs from the schools of this Association, as pointed out by myself, and I could explain any discrepancies that may appear.

MR. PRESIDENT: (Reading "four years for those graduating after '98").

A MEMBER: That is intended for the new matriculants after '99. The report from the secretary was received after January, '99.

DR. REYNOLDS: Please permit me to make my point, then. I have

nothing but this to say in reference to the institutions which are announced in the Bulletin to require four courses after '98. I noticed then in the list of eleven colleges, printed as members of the Southern College Association, the name of the Medical College of Virginia, and that is why I asked that question. I hoped it was true as announced. I would say, also, to facilitate discussion, that there is a college in Nashville, for the colored people, announced as exacting precisely the same requirements as those of our Association, and on that basis it has been admitted to membership here. This school requires the same preliminary training and exacts the same graded instruction before conferring the degree. And in New Orleans, there is another institution for colored persons, known as the University of New Orleans, which has the same preliminary exactions and the same graded course of instruction required by us before conferring a degree. I do not see why the white folks of the South cannot come up to the standard when the colored people are able to do so. I would like to ask of Dr. Savage whether those requirements, which have been mentioned, are actually in effect, or is it only a promise that they will do it on and after 1903; and, further, whether those requirements in regard to the subjects to be studied, are part of the law or only proposed amendments to the law to be acted upon hereafter.

DR. H. A. MOODY, Mobile, Alabama (Medical College of Alabama):—I wish to say, Mr. President, that we, who are here from the South, very highly appreciate the courtesy which accords us the privilege of the floor this morning, and we will not abuse that privilege. We, who are members of the Southern College Association strive to the best of our ability to conform to the requirements set forth in the little circular just referred to by Dr. Reynolds. There is nothing in that circular which is a mere promise. If I am not misinformed, and if I am misinformed I will ask the secretary, who is present, to correct me, everything there stated has been put into effect. No student could matriculate in any of the colleges therein listed since the first day of last January, except with the understanding that he must take four full courses of medicine before he can graduate at that college. In my own college the understanding is, I believe, in sympathy with the views expressed by Dr. Holland, that to only matriculates of our own college do we owe any obligation to graduate sooner than four years. And if a student from another school were to come down there, matriculated under the four-year course, we would not consider ourselves at liberty to graduate that student at the end of three years. Am I correct, Dr. Savage?

DR. SAVAGE—Yes, sir.

DR. MOODY—We are all here, gentleman, for the same purpose, that is for the elevation of the standard of medical education. The pendulum is swinging very rapidly in that direction and it seems to me not impossible that it may swing a little too far; as Dr. Hughes has said, we may impose upon our students impossible conditions for honest graduation. I

will say here that the members of the Southern College Association have the highest regard for your Association, but we feel that you are riding a faster horse than we are. The whip fell upon our flanks last fall and we did not feel at all pleased, knowing that because of geographical and other causes we could not keep up with you though our advance is rapid, honest, and thorough; and we are rapidly catching up, but we felt it better to come here and have a familiar talk with you before the meeting of the Southern College Association. I am satisfied, gentlemen, there is not one here who is not thoroughly in accord with the effort to raise the standard of American medical education, and when sensible men want a thing and can get together they generally secure it.

We all desire four years of thorough collegiate instruction, and honest, practical standards of examinations. When these are secured we can safely leave the results to the genius of our students and the practical common sense of the American people. Such, I believe, are the objects of the two great Associations of American medical schools.

DR. C. B. STEEMAN, Ft. Wayne, Ind.: Mr. President—We certainly appreciate the efforts of our good brethren of the South to elevate the standard of medical education. But this Association is not in a position to go backward. The probabilities are that we will increase more rapidly in our requirements and elevate the standard higher in the next few years. We are glad our brethren in the South are honestly laboring to elevate the standard of medical education and we would be glad if all sectional lines could be eliminated and we could be but one Association. But we could not lower our standard, and from the remarks made, it seems that they cannot elevate theirs to comply with the requirements adopted by the Association of American Medical Colleges. Consequently, I cannot see any way that we can unite, except possibly this matter might be referred to a committee to report hereafter.

DR. M. F. PORTER, Ft. Wayne, Indiana: Mr. President—We have heard from our southern brethren, and we often hear from our northern brethren, that they have a great many men who cannot afford to spend quite the four-year course in school, or, on the other hand, that they cannot afford to pay quite as much as the good colleges charge for a medical education. I submit, Mr. President, that this argument is a specious one; it is likely to carry with it more weight than it deserves. I may very much want to ride and drive thoroughbred horses but if I have not money enough to do it, then, sir, I should be content with a cob. If a man has not the money to buy stock, he must do without it. I submit that the time is past when men, who cannot spend money for a medical education, should expect to be educated. I state this not from the standpoint of a man who has money but of a man who must get it. A man cannot have his pie and eat it too, and I do not believe that the argument that has been advanced should carry any weight with this Association

DR. E. FLETCHER INGALS, Chicago : Mr. President—I am entirely in harmony with the sentiments of the last two gentlemen who have spoken. But I feel very greatly interested in the paper we have heard. I am greatly pleased to know that the Southern Association has made such an advance. As has been said, we cannot recede, but it would be only a little step for the Southern Association to come to our standard. The southern colleges could do this now as well as at any time in the future. We do not expect them to violate their obligation, and they would not need to for their new requirements would only apply to students who matriculated after they were adopted. If they will adopt a standard as high as ours they will lose nothing, for experience has shown that the more a college asks, the larger its classes will be. I hope these gentlemen from the South will go home and impress this fact on their colleagues. I believe we can have one association and can go forward together from year to year, steadily increasing our requirements until our graduates will rank with those of European schools.

DR. BENTLEY, Arkansas :¹ Mr. President—I am under the impression that my constituents will expect me to say something on this question as the representative of a southern college. The institution I represent is a young college, scarcely 21 years of age, that in its beginning joined the American Medical College Association, and has abided by that standard to the present day. I am delighted, as I know others will be, that Dr. Savage has given us so good an account of the southern colleges, and I am only sorry they did not come to these requirements three years ago. During these three years of the future, which he asks, those feeble institutions of the South, that have stood by the American Medical College Association, must continue to suffer as they have suffered. Students coming to our college, we requiring four years, will say and do say, "Here are medical colleges all through the South where we can graduate in three years, and we will go and graduate from them." It is not fair that this allowance should be given to them, that they may say "We will graduate your students; they may come in with us in the three-year course." No member of the Association would be more delighted than myself, and no class of men more delighted than my colleagues, to receive the whole Southern Association as a band into this Association. But there is a disadvantage in extending to them this courtesy of three years that we have not enjoyed. They were better able to stand the pressure which we have stood. We began in a country not blessed with advantages, and we have grown until we have now a standard as high as that required by this Association. And if they wish to come into our Association, they should come in now and not wait three years longer.

DR. G. C. SAVAGE, Nashville, in closing : Mr. President—I am glad the matter was discussed here and not by individuals after they had gone out, because I would not have had an opportunity to answer individuals and I can answer the remarks here.

¹ Stenographer's report without revision by Dr. Bentley.

Dr. Reynolds has said that this body has nothing to do with the matter. I must say that we have been greatly deceived if the Denver resolution was not an emanation from this Association; it certainly was an emanation from a member of this Association. Whether or not that is correct, it does not affect my good feeling in the matter at all. If ever I had kind feeling upon any subject I have it upon this subject and have had since I commenced the preparation of the paper.

The question was asked by Dr. Didama : Why not unite with this Association now? You will remember at the banquet last year, under the impulse of the moment, I was guilty of a breach of etiquette in that I interjected a remark that the southern colleges had already moved in the direction that Dr. Holland said he wished they would move. But I suppose everything that ends well is well. Why not unite now? Some of our institutions could have come in before now, but we felt it better to try to elevate all the colleges rather than to elevate only ourselves and leave the others out. Our constitution says that nothing shall be enacted into organic law without laying over one year. I stated, when reading my paper, that amendments already proposed would be enacted at the next meeting. These requirements, equal to your own, having been enacted then, we are ready to apply for membership or not as we may think best. If we desire to enter this Association, as I believe we shall, we can then ask to be admitted. Then will come the time, as I prophesied at the banquet last year, when we will all be one, and no one desires that more than I and my confrères from the South.

We desire the union of all the medical men, in the various departments of medicine, throughout the country. It has been a long, hard pull for our colleges to get where we are now but we are determined to go forward still. Once we catch up with you in our equipments and requirements we dare you to get ahead of us again.

It has been asked "How about our second-course students entering your third-year class?" They cannot do it unless they have had one year in the practical branches, in addition to having completed the fundamental branches. We require of our own students two years in the practical branches. If I am not clear on this point, I would like to state it more clearly. Students must present evidence that they have taken two courses in the practical branches of medicine before they can apply for graduation.

Your first-year students who matriculated before January 1st, 1899, can apply for, and obtain, admission into our second-year class, but only by means of a certificate or examination.

It is the consensus of opinion that we are under both a legal and moral obligation to graduate our men who matriculated before January 1st, 1899 at the end of the three-year course, if they take the third course within a reasonable length of time. Eleven medical colleges appear on that list of members; one was admitted only a few days ago, now making our membership number twelve.

Now as to the colored schools of the South. It is wonderful the progress the colored people of the South have made, and largely that progress has been

due to the money spent by the men who were impoverished by the late war. The white men of the South have spent much to educate negroes. Northern and western money has largely endowed the medical schools for the colored men while no such good endowment has come to any of our white medical schools.

A MEMBER—How about Tulane University?

DR. SAVAGE—Tulane University, so far as I know, has no endowment. I know of none that have any endowment except the universities of Texas, Arkansas, and Virginia. I refer, of course, only to the medical department. There are many well-endowed literary institutions in the South.

A MEMBER—How about Vanderbilt?

DR. SAVAGE—Vanderbilt has a great deal of money, but it is spent on other departments than the medical.

DR. REYNOLDS—How about the handsome building you have there?

DR. SAVAGE—It was built with Vanderbilt money and is owned by the Board of Trustees.

Much more, Mr. President, could be said on this subject. I do know that there is deep down in our hearts a desire to be as high as anybody in medical matters as well as in other matters. We have had a long and hard pull to get to the height we now have attained in medicine. We desire our colleges to be on a par with those in other parts of our own country, and with those of other countries as well. I have visited the schools in Europe and I believe that medicine is better taught in the United States to-day than it is in Europe.

ASSOCIATION OF AMERICAN MEDICAL COLLEGES.
TRANSACTIONS.

COLUMBUS, OHIO, June 5, 1899.

The Association of American Medical Colleges met, pursuant to call, in the hall of representatives in the State House, at 10 o'clock A.M. Dr. H. O. Walker, the president, called the Association to order.

The minutes of the last meeting having been published for almost a year were approved without being read.

Dr. John M. Dodson, junior dean of Rush Medical College, of Chicago, then read his paper on the "Elective Course in the Medical Schools."¹

The president then appointed as a Committee of Nomination: J. W. Holland, of Philadelphia; J. E. Minney, of Topeka; and W. H. Earles, of Milwaukee.

The Association then adjourned to meet in business session at 3 P.M. The following named colleges were represented:

Little Rock, Ark., Medical Dept. Arkansas University. Edwin Bentley.
Los Angeles, Cal., College of Medicine, Univ. So. Cal. H. Bert Ellis.
San Francisco, Cal., Medical Dept. of University of California. Douglass V. Montgomery.

Denver, Colorado, Gross Medical College. Thomas H. Hawkins.

Denver, Colorado, Medical Dept. of University of Denver.

Washington, D. C., Medical Department Howard University. Robert Reyburn.

Washington, D. C., Medical Department National University. Noble P. Barnes.

Chicago, Ill., Am. Medical Missionary College. Alfred B. Olsen.

Chicago, Ill., College of Physicians and Surgeons of Chicago.

Chicago, Ill., Harvey Medical College. Frances Dickinson.

Chicago, Ill., Illinois Medical College. R. N. Hall.

Chicago, Ill., Jenner Medical College. Wm. Rittenhouse.

Chicago, Ill., Northwestern Univ. Medical College. Frank A. Johnson.

Chicago, Ill., Northwestern Univ. Woman's Medical School.

Chicago, Ill., Rush Medical College. E. Fletcher Ingals.

Ft. Wayne, Ind., Ft. Wayne College of Medicine. C. B. Stemen, Miles F. Porter.

Indianapolis, Ind., Central College of Physicians and Surgeons. Joseph Eastman.

Indianapolis, Ind., Medical College of Indiana. Wm. Flynn.

Davenport, Iowa, Medical Dept. State Univ. of Iowa. Wm D. Middleton.

Des Moines, Iowa, Iowa College of Physicians and Surgeons. Lewis Schooler.

¹ See p. 331 of this number.

- Keokuk, Iowa, Keokuk Medical College. George S. Jenkins.
 Sioux City, Iowa, Sioux City College of Medicine.
 Topeka, Kansas, Kansas Medical College. J. E. Minney.
 Louisville, Ky., Hospital College of Medicine. P. Richard Taylor.
 Louisville, Ky., Kentucky School of Medicine. Wm. H. Wathen.
 Louisville, Ky., Kentucky University, Medical Dept. Sam'l E. Woody.
 Baltimore, Md., Baltimore Medical School. Samuel F. Earle, Jr.
 Baltimore, Md., Baltimore University School of Medicine.
 Baltimore, Md., College of Physicians and Surgeons. Wm. S. Gardner.
 Baltimore, Md., Univ. of Md. School of Medicine. Randolph Winslow.
 Baltimore, Md., Woman's Medical College of Baltimore. W. M. Lewis.
 Boston, Mass., Tufts College Medical School. Frank G. Wheatley.
 Ann Arbor, Mich., University of Mich., Dept. of Medicine and Surgery.
 Detroit, Mich., Detroit College of Medicine. Henry O. Walker.
 Detroit, Mich., Michigan College of Medicine and Surgery. Hal C. Wyman.
 Minneapolis, Minn., Minneapolis College of Physicians and Surgeons, Hamline Univ.
 Minneapolis, Minn., University of Minnesota College of Medicine and Surgery. Parks Ritchie.
 St. Louis, Mo., Barnes Medical College.
 St. Louis, Mo., Marion-Sims College of Medicine. H. W. Loeb.
 St. Louis, Mo., St. Louis College of Physicians and Surgeons.
 Omaha, Nebraska, John A. Creighton Medical College. B. F. Crumer.
 Omaha, Nebraska, Omaha Medical College.
 Buffalo, N. Y., University of Buffalo, Medical Dept. Eli H. Long.
 Syracuse, N. Y., Syracuse Univ. College of Medicine. Henry D. Didama.
 Cincinnati, O., Cincinnati College of Medicine and Surgery. W. E. Lewis.
 Cincinnati, O., Medical College of Ohio.
 Cincinnati, O., Miami Medical College. J. C. Oliver.
 Cleveland, O., Cleveland College of Physicians and Surgeons. A. R. Balcer.
 Cleveland, O., Western Reserve University, Medical Dept. John P. Sawyer.
 Columbus, O., Ohio Medical University. D. N. Krusman, G. M. Waters.
 Columbus, O., Starling Medical University. Starling Loving.
 Portland, Oregon, University of Oregon, Medical Department.
 Salem, Oregon, Willamette University, Medical Department.
 Philadelphia, Pa., Jefferson Medical College of Phila. Jas. W. Holland.
 Philadelphia, Pa., Medico-Chirurgical College of Philadelphia. John A. McKenna, William L. Rodman, James N. Anders.
 Philadelphia, Pa., Woman's Medical College of Pa. Ruth Webster Lathrop.

Nashville, Tenn., Meharry Medical Dept., Central Tenn. College. G. W. Hubbard.

Nashville, Tenn., Vanderbilt Univ., Medical Dept. G. C. Savage.

Richmond, Va., Medical College of Virginia. John P. Davidson, Christopher Tompkins, George Ben Johnston.

Milwaukee, Wis., Milwaukee Medical College. W. H. Earles.

Milwaukee, Wis., Wisconsin College of Physicians and Surgeons. A. H. Levings.

The following visitors were present :

H. A. Moody, Mobile, Alabama; Charles McIntire, Easton, Pa.; Mrs. Catherine Reyburn, Washington, D. C.; Mrs. Corinne S. Brown, Chicago, Ill.; George F. Bretter, Chicago, Ill.; John Milton Dodson, Chicago, Ill.; Rosa Engelmann, Chicago, Ill.; J. Lase Stubbs, Chicago, Ill.; Mrs. W. F. Waugh, Chicago, Ill.; B. S. Horne, Bluffton, Indiana; Mrs. J. E. Minney, Topeka, Kansas; H. Z. Gile, Topeka, Kansas; Dudley S. Reynolds, Louisville, Ky.; James U. Barnhill, Columbus, Ohio; R. E. Jones, Gomer, Ohio; N. M. Dodson, Berlin, Wis.; Geo. V. I. Brown, Milwaukee, Wis.; W. B. Hill, Milwaukee, Wis.

The afternoon session was called to order at 3 P.M. by the president, who then read the annual address.¹

The Committee on the Condition of Medical Education in the United States then reported by a paper² which was read by its chairman, Dr. E. Fletcher Ingals, of Chicago.

On motion of Dr. Holland, of Philadelphia, this report was accepted and ordered printed. The recommendations relative to the amendments to the constitution were referred back to the committee, with instruction to report to the secretary in time for the next annual call.

The judicial council reported favorably on the application for membership of the following named colleges:

✓American Missionary College, Chicago; ✓Harvey Medical College, Chicago; Medical Department Kentucky University, Louisville; Medical Department University of Buffalo; ✓Jenner Medical College, Chicago; University of North Carolina; Meharry Medical Department Central Tenn. College, Nashville, Tenn.

The judicial council reported unfavorably on the application for membership of the following named colleges:

Hiram College, Hiram, Ohio; Grand Rapids Medical College,

¹ See p. 325 of this number.

² See p. 351 of this number.

Mich.; Marion Normal and Business College, Marion, Indiana; Cornell Medical College, N. Y. City.

On motion of Dr. E. Fletcher Ingals the report of the judicial council was received. On motion of E. Fletcher Ingals the report of the judicial council in relation to the following named colleges was referred back to the council for further investigation, and a report at next meeting:

X The American Missionary College, the Jenner Medical College. and the Harvey Medical College, all of Chicago.

The following named colleges were then elected to full membership:

The Medical Dept. Kentucky University; the Medical Dept. University of Buffalo; the Meharry Medical College of Nashville.

Dr. Dudley S. Reynolds, chairman of the judicial council submitted the following action:

I.

✓ In reply to interrogatories of the University Medical College, Richmond, Va., it was held that, schools holding their sessions for a longer period than six months are not recognized by the College Association as superior to other institutions holding membership in that body, and which comply with all the details of a graded system of instruction, character of equipment, and methods of instruction, within the minimum period of the time requirement.

II.

In answer to the inquiry of the Gross Medical College, it was held, that the scientific character of instruction at the American Missionary College of Medicine, at Chicago and Battle Creek, is such as to entitle it to recognition by the members of the Association of American Medical Colleges.

III.

In answer to the Ohio Medical University it was held that, registered pharmacists, and practitioners of pharmacy cannot be accorded advanced standing.

Second Section.—Two students from the National Normal School, at Lebanon, Ohio, might be accorded advanced standing, provided they possessed the preliminary educational requirements of the constitution, and successfully passed the intermediate examination. 2

IV

Before proceeding further, the Chairman of the Council requested the

Association to decide whether the *ad eundem* degree is, under any circumstances, to be conferred by members of the Association. On motion of Prof. Wathen, of the Kentucky School of Medicine, the Association unanimously decided that no diploma of graduation shall be issued to any previous graduate, without full examination on all the branches of the last year's curriculum in the college granting the post-graduate degree; and, that no *ad eundem* degree shall be conferred, or recognized, by any member of this Association.

V.

In reply to the Kansas State Board of Health, the Kansas City Medical College, of Missouri, is a member of the Association of American Medical Colleges, and amenable to all its rules and regulations. The Judicial Council can take no action against either the Missouri Medical College, or the Kansas City Medical College, until written charges, supported by documentary evidence, are submitted in due form.

VI.

In answer to interrogatories of the Wisconsin College of Physicians and Surgeons, of Milwaukee, it was decided that, "If a person matriculated for the first time in September, 1896, he cannot be allowed to come up for examination in April, 1899. The Association of American Medical Colleges cannot recognize the right of any of its members to grant advanced standing to a licentiate in pharmacy. Licentiate and graduate are different terms. It is the graded instruction of college training which the College Association recognizes, and not the so-called knowledge implied by the granting of a license by a board of examiners appointed by political authority. No college has authority to grant such advanced standing, and you cannot recognize it without violating the requirements of Sections 5 and 6 of Article III of the constitution. Section 4 of Article III carries no obligation, but extends the privilege of members to honor official credentials, except in the branches of study embraced in the last year of their own curriculum."

VII.

In answer to interrogatories of the Central College of Physicians and Surgeons, of Indiana, it was held that graduates in pharmacy are entitled to advanced standing on the first one of the four courses, and not on any subsequent course.

VIII.

Replying to interrogatories of the University of Denver, Colorado, it was held that, reputable graduates of the dental department of that university are entitled to advanced standing, on subsequently entering the Medical Department.

Second Section.—Certificates of state boards of examiners do not entitle registered pharmacists to advanced standing in a medical school.

Third Section.—No student who claims to have taken lectures in

another college can have credit, without presenting an official certificate of the institution, setting forth full attendance upon the instruction for which credit is claimed. Such official evidence must show attendance upon the entire course of instruction required for the grade which the claimant occupied; and, unless it shows successful intermediate examination, he cannot be passed to a higher grade, without successfully passing the required examination for advancement.

IX.

In reply to a communication from Walter V. Metzenbaum, of Cleveland, Ohio, who claims he will receive the degree of bachelor of arts, June 15th, 1900, and asking for a year's time on his medical course, which is to terminate May 1st, 1900, the council decides that no amount of study, excepting that set forth in Section 6 of Article III of the constitution, entitles any student to advanced standing. The conditions entitling a student to advanced standing must exist at the time, and cannot be made up afterward. The first of the series of four courses may alone be conceded to eligible applicants. Literary studies pursued during the medical course are of no avail, excepting to make up deficiencies specifically set forth in Section 3, Article III of the constitution.

X.

With reference to the death of Prof. James H. Etheridge, of Chicago, the council, on February 20th, 1899, sent the following communication, which the Association is respectfully requested to record in its minutes:

MRS. JAMES HENRY ETHERIDGE, Chicago, Ill.

Dear Madam: The Judicial Council of the Association of American Medical Colleges has just learned of the sad bereavement which has come upon you. We share your grief, and tender our sincere sympathy and condolence.

The death of your illustrious husband has cast a gloom upon the whole country. Nothing is dearer to the interests of humanity than the elevation of the standard of medical education, and the maintenance of the dignity and honor of the profession of medicine. As a champion of these good causes, your late husband won renown, and endeared himself to his colleagues in the council, as well as to vast numbers who gained wisdom from his instruction.

Be assured, dear Madam, we shall always cherish the memory of our departed colleague with reverential devotion.

We are, with profound respect, the humble survivors of our esteemed colleague and friend,

Very faithfully yours,

STARLING LOVING, \\
JOHN B. ROBERTS,
RANDOLPH WINSLOW,
ALBERT R. BAKER,
VICTOR C. VAUGHAN,
DUDLEY S. REYNOLDS.

February 20, 1899.

XI.

For final answer to interrogatories concerning the application of the Hiram College, of Ohio, the Marion Normal College and Business University, of Marion, Ind., and other similar institutions:

First, the Association of American Medical Colleges cannot accept into its membership any but regularly organized and properly conducted medical colleges.

Second, the judicial council of the Association of American Medical Colleges is not sufficiently informed as to the merits of the several institutions having preparatory medical courses, to justify an expression of opinion as to which, if any of them, are entitled to recognition by the Association of American Medical Colleges.

Third, the only claim for advanced standing which can be recognized by the members of the College Association must be the degree of A.B., B.S., or equivalent degree from reputable literary colleges, homeopathic or eclectic colleges, reputable colleges of dentistry, pharmacy, and veterinary medicine, and such official credentials issued by medical colleges of equal requirements, as members may choose to recognize, excepting however, the requirements of the curriculum for the last year's work, in colleges conferring degrees.

Fourth, the practice of colleges in small towns of adding a preparatory medical department, open to all students, the entire course in anatomy, physiology, chemistry, and materia medica being conducted by one professor, is entitled to no respect, and should not be encouraged, or in any way recognized, by members of the Association of American Medical Colleges.

XII.

ANSWER TO THE LETTER OF PROF. JAMES W. HOLLAND, M.D., DEAN
OF THE JEFFERSON MEDICAL COLLEGE, PHILADELPHIA, PA.,
OF NOVEMBER 10th, 1898.

It is the opinion of the council that the constitution of the Association of American Medical Colleges does not contemplate all the circumstances which may arise in relation to claims for advanced standing, based on previous collegiate training, received in regular and systematic order.

Section 4, of Article III, of the constitution authorizes the Jefferson Medical College to recognize the credentials issued by the Ohio Medical University. The student referred to by Prof. Holland seems to have complied sufficiently with the requirements of the constitution to entitle him to the advanced standing accorded him, provided it can be shown he possessed the preliminary education exacted in Sections 1 and 2, of Article III of the constitution.

The council does not presume to say what recognition should be given to the work done by students in the Ohio State University, nor the West Virginia State University, in their preparatory medical courses. Deans

must be allowed some discretion in individual cases, not specifically provided for in our constitution.

It is the opinion of the council that it is permissible to recognize the two years of medical preparatory work in certain universities as equivalent in time to the first year of the medical curriculum, provided, however, that the applicant exhibits the required preliminary education, and passes the standard intermediate examination for admission to the second-year grade.

The report of the judicial council as submitted, was, on motion of Prof. James W. Holland, of Philadelphia, unanimously adopted.

DECISION IN ANSWER TO INTERROGATORIES OF THE MILWAUKEE MEDICAL COLLEGE, OF WISCONSIN.

The following interrogatories are propounded by the Milwaukee Medical College of Wisconsin, Nov. 26th, 1898.

FIRST.—How many years' attendance, under our association rules, must be exacted of a graduate who had taken but two years' college work in the school from which he graduated, before permitting him to apply for the post-graduate degree?

ANSWER.—The Association of American Medical Colleges exacted, in 1895 and subsequently, of all candidates for the degree of Doctor of Medicine, three courses of graded instruction of not less than six months each, in three separate years. Graduates, therefore, of all recognized colleges must have taken at least the minimum number of courses required at the time of graduation, and possess all the other required qualifications to entitle them to enter for the post-graduate degree. If a person had attended some other recognized college before the two years' college work, in the school from which he graduated, that might be placed to his credit. In no other case should a graduate of medicine be accepted for the post-graduate degree referred to, unless the degree was conferred in regular order by a recognized college, and the holder thereof has attended one full course in the last college conferring the degree. It is admissible to allow graduates of other colleges, after having fulfilled the time requirements of our association, on completing the final course, to apply for the degree of doctor of medicine in ordinary, just as other students are required to do. Prior to 1895, reputable colleges did not all require more than two courses. Deans should, therefore, exercise some discretion in giving recognition to graduates of that period. Section 6, Article III, of the constitution of 1891, provided for the exemption of students who matriculated in a recognized college, prior to July 1st, 1892, and demanded of all others attendance upon three graded courses, in three separate years. The council decided, in a published opinion, that the students must continuously pursue the study to avail themselves of that exemption.

SECOND.—Does a diploma from a normal school, not conferring degrees, entitle the student to one year's advanced standing?

ANSWER.—A diploma from a normal school not conferring degrees does not entitle a student to one year's advanced standing. The council decided, in answer to interrogatories of the Jefferson Medical College, of Philadelphia, Nov. 23rd, 1898, that the constitution of the Association of American Medical Colleges does not contemplate all the circumstances which may arise in relation to claims for advanced standing, based upon previous collegiate training, received in regular and systematic order. Deans must be allowed some discretion in individual cases, not specifically provided for in our constitution.

"THIRD.—What time credit, if any, may be given to a student who having matriculated about October 1st, 1897, and having nominally attended the session of that year, but failed at the close of the term to secure any college credentials either as to time or studies?"

ANSWER.—If it can be shown by official evidence that he met the entrance requirements and actually attended the full course, and, that he had lawful and satisfactory reasons for his failure, he is entitled to intermediate examinations, on offering to matriculate for a second course; otherwise he should be treated the same as a person who had never matriculated in a medical college. Section 3, Article III, of the constitution, provides that students who fail in one or more branches in the entrance examination shall not be allowed to begin a second course until the entrance requirements are satisfied.

The amendment proposed by the Medical College of Ohio was then discussed, and it was unanimously adopted as follows:

Article 5, Section 5. Every penalty for violation of an article of the constitution (such violation having been reported to the association by the judicial council, after due examination made by said council) shall be determined by vote of the association at the annual meeting at which the violation has been reported, a three-fourths' affirmation vote of the colleges represented being required for expulsion.

The amendment to Article 3, Section 5, was laid upon the table.

A vote of thanks was extended to Dr. Charles McIntire, of Easton, Pa., and to J. Russell Parsons, Jr., of the University of the State of New York, for valuable assistance given the Association.

A vote of thanks was extended to the local Committee of Arrangements for the unequalled preparations made for this meeting.

The report of the Committee on Nominations was then read, and the following officers elected for the ensuing year :

President, Prof. Parks Ritchie, University of Minnesota ;
Vice-president, Prof. Edward Bentley, Little Rock, Arkansas ;
Secretary and Treasurer, Prof. Bayard Holmes, Chicago ;
Judicial Council, Harold Williams.

The president-elect was then led to the chair, and after a few remarks appointed the following committee on the elective course in medical schools: Dr. John M. Dodson, of Rush Medical College; Dr. Lewelyn Barker, Johns Hopkins University; Dr. R. O. Beard, University of Minnesota.

The Association then adjourned.

[Signed]

BAYARD HOLMES, Secretary,
104 E. 40th St., Chicago.

SECRETARY'S TABLE.

ELECTIVES IN THE COURSE LEADING TO THE M. D. DEGREE.

The transactions of the Association of American Medical Colleges, have a value to a far wider circle than encompasses the members of the Association. Every inhabitant is liable to have a direct personal interest in the ultimate results of the deliberations; and every public-spirited citizen is interested in the processes to be employed in the production of physicians. It is not, then, *ultra crepidam* for an onlooker to contribute a word to the discussion of Dr. Dodson's paper. It is offered more especially because, as is so often the case, much of the actual discussion was not upon the paper itself, but on some creature of the imagination substituted for the paper. Those who will take the pains can see how many speakers took exception to the paper because, so they said, it advocated the very conditions actually condemned by the essayist. Because of this and of the importance of the subject, the Bulletin will be pleased to publish a limited number of brief communications in continuing the discussion.

Exception can be taken to the broad assertion that the course in a medical school is primarily for *education*, and not for *instruction*. That pedagogic scheme which divides the educational process into the essential, the liberal, and the technical affords a good working basis upon which to found an educational system. That which provides mental exercise ("mental gymnastics") pervades the entire scheme; and one characteristic of modern pedagogy is to obtain this mental development while employing apparatus affording useful knowledge. Hence instructing goes hand in hand with the educating. Keeping this in mind, the effort at the first is to impart knowledge. However, much mental discipline may be given when teaching the "three R's," the chief object is to enable the child to read, to write, and to cipher: this is the essential.

Then follows the liberal education, where, formerly, the subjects were selected solely for mental drill and development, apart from any idea of conveying any information directly of use in the world's workshop. The mind being trained, then follows the

technical course, wherein the acquirement of knowledge to be used in the pursuit of one's calling by the liberally educated, is the prime end in view. If this is the correct idea, any argument favoring electives in a technical course for educational value rather than for instruction, fails because founded upon a false premise.

Exceptions might be taken to other suggestions in the paper, which are excellent in their idea, but only serve to make the proposition more complex when studying it as a question of a course of study best fitted to furnish a technical training for intending physicians. To make these exceptions here would in like manner cloud this criticism.

The point is well taken that any medical school—or, more broadly, any educational institution sets its standard for the pupils of minimum ability acceptable to it. If an institution does not afford the opportunity for the brighter pupils to accomplish more than this minimum, it is pursuing a very short-sighted policy. As a matter of fact all institutions do so provide in one way or another.

The questions arise: What is the minimum standard to be set for a medical course? and, what is the best provision to be made for those who can accomplish more than this minimum? The first of these questions is answered by the requirements of the various states for their licensing examination. Any college having a student fail in a state examination (provided always the applicant is in a physical condition to take the examination) has its standard too low.

The second question is not so easily answered, but the essayist suggests *e. g.*, if, while some of the students must give their entire time to acquiring this minimum, a fair proportion can readily make use of educational advantages beyond the minimum, provision should be made by which these can elect certain studies of their liking and pursue them beyond the minimum required. If one man must put all the time assigned for anatomy to secure the necessary amount, and another can easily acquire it in one-half the time, why not make provision for this one to take up some special study in anatomy, or, if the proficient student, having secured just as much knowledge of anatomy as his less able classmate, has a fondness for chemistry, why not permit him to

advance beyond the minimum in chemistry. Surely an election of studies upon these conditions must needs be stimulating to study.

Again, students do not all acquire knowledge of the same subject with equal readiness in the same way. One may easily acquire the required amount of chemistry by attending the lectures and demonstrations, while another must needs perform the experiments with his own hands in the laboratory. Why not permit the former to elect a maximum amount of lectures with a minimum of laboratory practice, while the other reverses the method of study, each knowing that the same examination awaits him.

Election of studies involving either of these principles does not train specialists, except incidentally. Each man must acquire the minimum, and the extra work the student is able to do will be that much gain to him, whether it develops a specialist or not.

Of course a procedure of this kind must be adopted cautiously and permitted to grow. A person so desiring, could acquire an A. B. *summa cum laude* at Harvard, after pursuing a very odd course of study. It would not be advisable for some smaller college to arrange a series of electives which would work out one of these *outré* possible courses as a most likely consequence. The question of the subjects to be made elective, however, is foreign to this discussion and will not be pursued further at this time.

It may not be useless reiteration to repeat the invitation for a limited series of brief communications to the Bulletin in continuation of the discussion.

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The members of the faculties of the colleges affiliated with the Association of American Medical Colleges, are urged to consult the prospectus of the BULLETIN OF THE AMERICAN ACADEMY OF MEDICINE sent to their deans during the summer. While the response to the request for additional subscriptions has been gratifying, many more must be secured to render the proposed plan practicable.