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BULLETIN

OF THE

American Academy of Medicine.

JUNE, 1896.

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BULLETIN

OF THE

American Academy of Medicine.

VOL. II.

ISSUED JUNE, 1896.

No. 7.

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

AMERICAN ACADEMY OF MEDICINE.

TRANSACTIONS OF THE XXI. ANNUAL MEETING.

HOTEL ARAGON, ATLANTA, GA., May 2, 1895.

The Academy was called to order by the president, Dr. Henry M. Hurd, of Baltimore, and the minutes of the last annual meeting were read and adopted.

The Secretary read the annual report of the Council, as follows:

The past year has not been marked by any special events to be reported to you by your Council. It was determined at a meeting held immediately after the adjournment at Baltimore to publish the transactions of that meeting in a single number of the Bulletin, and to issue an enlarged edition for distribution among those who were, presumably, interested in Hospital management. A special guarantee fund was pledged for the former and donations made for the latter object. An increasing interest in the proceedings of the Academy is taken by the Medical Press and the demand for copies of the Bulletin by those who are not connected with the Academy has been larger than in any previous year. Medical journals have quoted quite freely from our pages, for the most part giving due credit; the latest extract noticed is in the last number of the *Zeitschrift für sociale Medicin*, published in Leipzig. The six numbers issued since the last meeting contain 436 pages of reading matter, a much larger

number than ever before published in one year. As the funds for prosecuting the work of the Academy depend largely upon the receipts from the Bulletin, your active cooperation in securing subscribers and advertisements is requested.

At the last meeting, a resolution was adopted instructing the Council to arrange for a discussion on Methods of Medical Education. In arranging for this discussion, as the Association of American Medical Colleges and the National Confederation of State Boards of Medical Examiners and Licensers were to meet in Atlanta at about the same time, and as their interest in this subject equals our own, it was thought not only courteous but to our mutual advantage to arrange for this discussion at a specified time and to invite these societies to be present and to participate in the general discussion. The invitation has been accepted by both societies and, in return, an invitation has been received from each to be present at their meetings. As these societies have made the Bulletin their official publication, and as the efforts of the three organizations parallel each other along those lines we hold in common, the cultivation of cordial relations to, and a harmony of action with these societies will be mutually helpful to the success of our efforts.

From the very inception of the Academy, there has been a problem presenting itself and which still remains unsolved. This problem is brought about by historic and sociologic conditions by which many of our physicians, who have proved themselves worthy of that honorable designation from the breadth of their culture as well as their skill in medicine, have not had the advantages of a preliminary collegiate education. At the same time, it was accepted as a truth that a preliminary collegiate education was practically essential for the proper preparation of the intending medical student, and that as much influence as the Academy might ever come to possess should be used to the end that intending medical students should not only enter upon but also complete the course leading to the first degree, by calling their attention to the fact that a number of physicians thought the preliminary education of so much importance that they did not admit to membership in their society any who had not a collegiate degree. At the very first, honorary degrees were accepted under certain conditions but experience soon taught two things: (1) that degrees were sought for in order to unite with the Academy, and (2) Fellowship was sought for by those who wished to use their association in the Academy as a "Hall-mark" of a training they did not possess, and the Constitution was amended to accept only degrees in course.

In the mean time there has been development or growth in the Academy itself and its relation to the profession is more clearly understood. And as one after another became interested in the workings of the Academy, the manifest hardships of our requirements in a number of cases became more and more apparent. In addition to this there are problems await-

ing investigation and statement (if not solution) of interest to all classes, that require the expenditure of time, postage, clerical work, etc., that few individuals can give. The increase of the Academy's membership and probable increase of income to an amount much larger than at present would permit appropriations to be made for such purposes.

With these two thoughts in mind, the Council presents for your consideration a revision of Article third of the Constitution, creating a new class in the membership.

ARTICLE III. MEMBERSHIP.

SEC. 1. The Membership of the Academy shall consist of Fellows, Members, and Honorary Members.

SEC. 2. The Fellows shall be reputable physicians who shall, in addition to their degree in Medicine, be graduates from respectable Institutions of learning; having received therefrom a Bachelor or Master degree after a systematic course of study: provided, should the candidate be an alumnus of a foreign Institution, evidence of an equivalent training may be accepted in lieu of the degrees.

SEC. 3. The Members shall be reputable physicians who, while not able to manifest their Academic training by the possession of a degree by examination after a course of study, have shown, by the character of their contributions to medical literature, the evidence of a liberal education: provided they shall not be eligible until they have been graduated in medicine for a period of, at least—years.

SEC. 4. The Members shall have all the privileges and rights of the Fellows with the single exception of voting upon amendments and alterations to the Constitution.

SEC. 5. The present Sec. 3.

SEC. 6. The present Sec. 4.

SEC. 7. The present Sec. 5.

In making an additional class instead of incorporating them among the Fellows, the Council is led by the following reasons: (1) The old rule still holds, that a proper collegiate training is the fittest preparation for a course in Medicine for the great majority of students, and we do not wish even to appear to depart from our contention for the past twenty years. (2) In acknowledging the true worth that has accomplished our ideal despite the handicap of the lack of the best preliminary training, the equality of the two classes of members is so evident that true worth will not take exception, while those who might desire to unite with us to affect a possession that they have not will not be so apt to be attracted. (3) The purpose in keeping the right to change the constitution in the power of the Fellows is simply to secure to the Academy the present conditions of a society asserting the necessity of a broad educational foundation as prerequisite to the study of medicine as long as it shall be deemed best so to do. While it is hoped that all who may be elected as members shall be enthused with the same high aim, yet, of the two

classes, the Fellows would be likely to be the more conservative and thereby be the more apt to preserve the traditions of the Academy.

. Because of the ever recurring subject of a deficiency of revenue, the Council also suggests the following modification of Article VIII. of the constitution.

ARTICLE VII. REVENUE.

SEC. 1. Every fellow and member shall before admission and registration pay an initiation fee of five dollars.

SEC. 2. An annual fee of one dollar, shall be due and payable at each Annual Meeting from each Fellow and Member, except from such Fellows elected before the Annual Meeting in 1897 as the Council may from time to time excuse.

The Necrologic Roll for the year includes the following names :

1. J. S. B. Alleyne, of St. Louis, Mo., A.B., St. Louis University, 1845; M. D., the same, 1848; elected to the Academy, 1885; died, May 2, 1895.
2. Lewis D. Harlow, Philadelphia, A. B. Dartmouth, 1843; M. D., Univ. Penn., 1845; elected to the Academy, 1880; died June 23, 1895.
3. George McLellan Staples, Dubuque, Ia., A.B., Waterville, 1849; M. D., Harvard, 1855; elected to the Academy 1889; died. September 7, 1895.
4. James Collins, Philadelphia, A.B., Amherst, 1858; M.D., Univ. Penn. 1860; elected to the Academy, 1877; died October 7, 1895.
5. W. Herbert Dunlap, Syracuse, N. Y., B.S., Syracuse Univ., 1875; M. D., the same, 1878; elected to the Academy, 1890; died, November 11, 1895.
6. W. W. Jaggard, Chicago, A. B., Dickinson, 1877; M. D., Univ. Penn., 1880; elected to the Academy, 1884; died.—1896.
7. Walter D. Bidwell, Colorado Springs, A. B. Williams, 1881; M. D., Harvard, 1885; elected to the Academy, 1890; died, February 1, 1896.
8. J. M. Stevenson, Pittsburg, A. B., Jefferson, 1854; M. D., Jefferson Medical School, 1859; elected to the Academy, 1884; died February 3, 1896.

Your Council has examined a number of applications for membership and present to you for action those that are eligible.

It was moved by Dr. A. P. Clake, of Cambridge, Mass., that the report be accepted, which was seconded by Dr. Bayard Holmes, of Chicago, and after discussion by Drs. H. O. Marcy, of Boston, George M. Gould, of Philadelphia, Clarke and Holmes, the motion was adopted.

The following physicians, making application for fellowship, were presented to the Academy by the Council, with their recommendation for election: Drs. M. H. Richardson, Boston; Guy Hinsdale, Philadelphia; W. A. Newman Dorland, Philadelphia; F. B. Chapman, Middleton, Mass.; T. H. Shastid,

Galesburg, Ill.; Charlotte B. Brown, San Francisco; Adelaide Brown, San Francisco; Paul Bartholow, Philadelphia; R. H. Babcock, Chicago; M. H. Lackersteen, Chicago; J. Chambers Dodds, Tolono, Ill.; R. G. Collins, Chicago; Edmund Ludlow, Chicago; De Saussure Ford, Augusta, Ga., and J. T. Searcy, Tuscaloosa, Ala. The Secretary was authorized to cast the ballot for the candidates, and they were elected.

The Council nominated Drs. Frederick Peterson, of New York, J. W. Babcock, of Columbia, S. C., and William Warren Potter, of Buffalo, for Honorary members, the same motion prevailed and they were elected.

The President appointed Drs. H. D. Didama, of Syracuse, Bayard Holmes, of Chicago, and C. W. Foster, of Woodford's, Maine, as the Nominating Committee.

The Treasurer's report was read, and referred to an Auditing Committee, consisting of Drs. A. P. Clarke, of Cambridge, and Elmer Lee, of Chicago, who reported the accounts correct at a subsequent meeting.

It was announced that Dr. Robert Lowry Sibbett, the founder of the Academy, was seriously ill, and, on motion, the Secretary was authorized to communicate an expression of the sympathy of the Academy to Dr. Sibbett.

The hour of the executive session having passed, the Academy proceeded to the reading and discussion of the papers. These papers will appear in subsequent numbers of the BULLETIN. The papers read before the recess were:

1. "A Study of Some of the Distinguishing Characteristics of the *Homo Medicus*." By Charles McIntire, Easton, Pa., which was discussed by Drs. Flood and Hurd.

2. "Insanity in the South." By J. T. Searcy, Tuscaloosa, Ala., which was discussed by Drs. J. T. Babcock, Didama, Clarke, Bayard Holmes, Marcy, Hurd and Searcy.

3. "Tuberculosis in Public Institutions." By J. W. Babcock, of Columbia, S. C., which was discussed by Drs. Martin, Clarke, Gould, Bayard Holmes, and Babcock.

At the conclusion of the discussion of Dr. Babcock's paper, the Academy took a recess for lunch. On reassembling, Dr. H. O. Marcy was called to the chair and the Academy listened to

the Annual Address by the President on "Laboratories and Hospital Work," which was discussed by Drs. Marcy, Elmer Lee, Clarke, and J. W. Grosvenor, of Buffalo.

At the conclusion of the discussion, the President resumed the chair, and the reading of the papers was resumed. The following papers being read :

1. "Vivisection." By George M. Gould, of Philadelphia, which was discussed by Drs. Marcy, Grosvenor, Martin, Hurd and Didama.

2. "The Confusion of Pharmacy relating to the Theory and Practice of Medicine." By Elmer Lee, of Chicago.

3. "Homicide in the United States." By Paul Bartholow, of Philadelphia. This paper was read, in the absence of Dr. Bartholow, by Dr. Gould, and was discussed by Drs. Hurd, Clarke, Bayard Holmes, and Searcy.

At the conclusion of the discussion the Academy took a recess, reassembling for the Reunion Session at eight o'clock, when both *prandium* and *post prandium* were enjoyed.

At the Executive Session on Monday morning, May 4, Dr. W. S. Hall, of Chicago, was elected to fellowship.

The following resolutions presented by Dr. Gould, and recommended by the Council, were discussed and adopted unanimously.

Resolved, That the American Academy of Medicine desires to express its opinion that no legislation is required or desirable in the United States in regard to the so-called practice or subject of "Vivisection," and for the following reasons :

1. Because only by careful discrimination and collection of facts can public and legislative opinion be truthfully formed. To illustrate but a single of many popular errors upon this subject: the dissection or use of dead animals by scientific men is termed "vivisection," when the same proceeding carried out by the butcher, the hunter, the restaurant keeper, cooks, etc., does not enter into the consideration, neither do the cruelties in the use and keeping of domestic animals, nor those in the deaths of animals for other purposes than those of experimental medicine.

2. While admitting and deploring the facts of abuses in the past and in some European countries,—to a very limited extent also in America—it is the conscientious belief of the members of the Academy that at present with us such abuses do not exist, nor are they in danger of occurring, to a degree justifying or calling for legislation, as, under the circumstances,

the evils that would inevitably result from such legislation would greatly exceed the benefits to be obtained by it. The charge implied or openly made that physicians, either in theory or in practice, are more cruel than other classes of the community, is a fancy or prejudice of ignorance which cannot be proved, and which we strenuously deny.

3. Legislation upon the subject of cruelty to animals should be so framed as to include consideration of cruelties infinitely greater and more extensive in many other fields of human activity at present not actively objected to by those who urge legislation as regards experimental medicine. Not only this, but legislation concerning these matters should be broadened out in order to prevent the destruction of species of birds and other animals by the votaries of fashion, by the hunters, etc., to prevent derangement of the delicate balance of animal and vegetable life upon which civilization ultimately and largely rests, to prevent deforestation of the head-waters of our streams, to establish Sanctuaries or Resorts for animals, and many such biologic requisites,—as also to establish such arrangements with other nations as will ensure their permanent and extensive effectualization.

4. Legislation upon a subject of vital importance to a peculiarly technical branch of science should be framed under the guidance and by the aid of those who by education and experience are alone fitted and capable of forming and expressing sound judgment upon it, *i. e.*, the experts in the special subject. It would be as absurd to have legislation as to vaccination, inspired and shaped by laymen who were anti-vaccinationists, without weighing the opinion of the medical profession, as to allow legislation upon the question of vivisection by laymen who are anti-vivisectionists, and even inexperienced in any branch of inductive science.

5. The American Academy of Medicine therefore urges its members and physicians generally to write to their representatives in Congress, (or wherever legislation of the kind in question is proposed), and otherwise seek to influence public and official opinion against the passage of a particularly ill-advised bill before Congress, to wit, Senate Bill No. 1552, introduced by Mr. McMillan, entitled *A Bill for the Further Prevention of Cruelty to Animals in the District of Columbia*. In the opinion of the Academy the passage of this bill would be harmful to the true interests of medical and social science and to the public health.

On motion of Drs. Searcy and Grosvenor, Dr. Gould, with the President and Secretary, were appointed a committee to present the whole subject to Congress in the way that seems to them best.

On motion of Drs. Wilson and Lee, the same committee were instructed to bring the action of the Academy to the attention of the American Medical Association.

A motion prevailed for a recess in the Executive Session until the conclusion of the discussion on Methods of Medical Education.

The Academy then yielded to the National Confederation of State Medical Examining and Licensing Boards, in order that they might be able to organize at the time for the call of their meeting. After the Confederation had completed its organization, the Academy resumed its session for the discussion on Methods in Medical Education. As the Association of American Medical Colleges and the Confederation of Examiners had accepted the invitation of the Council to participate in this discussion, the meeting was virtually a joint session of the three organizations and freely participated in by all.

The lack of time prevented the reading of all the papers prepared. The following only were presented in full :

1-a. "The Preparatory Mental Discipline for the Medical Student."

1-b. "The Subjects to be known before beginning the Study of Medicine," by F. H. Gerrish, Portland, Me. (Read by the Secretary.)

2. "The best Method to Teach Anatomy," by Dr. John B. Roberts, of Philadelphia.

3. "The best Method to Teach 'Practice,'" by J. C. Wilson, of Philadelphia.

4. "The best Method to Teach Physiology," by C. D. Smith, of Portland, Me. (Read by the Secretary.)

5. "The Seminary Method," by Bayard Holmes, of Chicago. After which interesting and valuable discussions followed.

At the conclusion of the joint session, the Academy listened to a paper on "Colonies for Epileptics," by Frederick Peterson, of New York, which was discussed by Drs. Hurd, Searcy, Gould, Grosvenor, Elmer Lee, and Peterson.

At the conclusion of the discussion the Academy went into executive session. The nominating committee presented the following report, which was adopted and the nominees elected :
President, J. C. Wilson, Philadelphia.

Vice Presidents, J. T. Searcy, Tuscaloosa, Ala. ; Elmer Lee,

Chicago ; Everett Flood, Baldwinsville, Mass. ; J. W. Grosvenor, Buffalo.

Secretary and Treasurer, Charles McIntire, Easton, Pa.

Assistant Secretary, Edgar M. Green, Easton, Pa.

The papers not read *in extenso* were read by title and referred to the council.

A vote of thanks was tendered to the manager of the Aragon for his kindness and care, and to the committee of arrangements for their labor.

Dr. Henry M. Hurd expressed his gratification at the work of the Academy in his parting words as president.

A vote of thanks to the retiring president was moved and adopted by a standing vote, and the Academy adjourned.

ASSOCIATION OF AMERICAN MEDICAL COLLEGES.

MINUTES OF THE VII. ANNUAL MEETING.

The seventh annual meeting of the Association of American Medical Colleges was held at the Hotel Aragon in Atlanta, Georgia, May 4, 1896, at 10 A. M. On invitation of the American Academy of Medicine the Association met with that body and listened to papers by its members and by members of the Confederation of State Boards of Medical Examiners. The regular official session was held at 4 P. M. on the same day. The Association was called to order by the President, William Osler, of Baltimore, and the minutes of the previous meeting were read by the secretary. After these minutes were corrected, so as to expunge that portion, which related to the disability of the Kentucky School of Medicine, they were adopted and approved.

The President's address was then read by Professor W. Osler and ordered printed.

The report of the Committee on Syllabus was then presented and the work of the committee was commended and the committee continued with instructions to carry on the work in the same manner during the coming year. Dr. Fletcher Ingals, Chairman of the committee on Preliminary Education reported that it was the sense of the committee, that no change be made in the requirements of the Association in relation to Preliminary Education.

The financial report of the Secretary was then read, showing total receipts during the year of \$479.90, total expenses \$229.33, leaving a balance in the Treasury of \$250.57. On motion of Dr. Holmes, the Secretary was directed to pay a honorarium of \$189.90 to the former Secretary, Dr. Perry Millard, and convey at the same time a letter expressing the appreciation of the Association for his valuable and devoted services during the first five years of the life of this Association. On the motion of Dr. Millard, a committee of five was appointed to codify the constitution and by-laws of the Association. On motion of Dr. Larrabee, the Secretary was directed to send to every college at least 30 days before the regular meeting a complete report of the provisions to be substituted for the present constitution.

The Judicial Council then reported through its Chairman Dudley S. Reynolds. The report was adopted on motion of Dr. Opie.

The Committee on Constitutional amendment, consisting of Dr. H. O. Walker, J. A. Larrabee and Randolph Winslow, reported as follows: Your committee appointed to report on amendments to the constitution namely: Section 1, Article 3; Section 4, Article 3 recommend that the consideration of these amendments be indefinitely postponed. The report of the committee was accepted and adopted. On motion of Dr. Baldwin of Columbus and the second of Dr. Hughes of St. Louis the previous motion was reconsidered, so far as it related to Section 4, Article 3.

On motion of Dr. Perry Millard the amendment to the constitution proposed by the representatives of Chicago Colleges was unanimously adopted namely:

“That for the first paragraph of Section 4, Article 3, the following be substituted:

College members of this Association are free to honor credentials issued by colleges of equal requirements except in the case of branches embraced in the fourth year of their curriculum.”

On motion of Dr. Walker, of Detroit, the Secretary was instructed to ask each college in the Association to send the committee on codification such amendment of the constitution as it proposes.

The Association then proceeded to the election of officers with the following result, J. M. Bodine, of Louisville, President; C. A. Hughes, of St. Louis, first Vice President; John D. Blake, of Baltimore, second Vice President; Bayard Holmes, of Chicago, Secretary and Treasurer; Members of the Judicial Counsel: John B. Roberts, 2 years; Rudolph Winslow, 3 years; Albert R. Baker, 3 years. The association then adjourned.

BAYARD HOLMES, SECRETARY.

PROCEEDINGS OF THE SIXTH ANNUAL MEETING
OF THE NATIONAL CONFEDERATION OF
STATE MEDICAL EXAMINING AND LI-
CENSING BOARDS, HELD AT AT-
LANTA., GA., MAY 4TH, 1896.

The president, Dr. William Warren Potter, of Buffalo, called the meeting to order at 10 o'clock A. M., in the assembly room of the Hotel Aragon, and introduced Dr. J. C. Olmstead, of Atlanta, member of the Georgia State Board of Medical Examiners, who welcomed the Confederation in the following words :

Mr. President and Gentlemen : In behalf of the medical profession of Atlanta, and the Board of Medical Examiners of this State, it gives me pleasure to welcome you to this, our "Cracker City of the Red Hills," and to the glorious old state of Georgia. The presence in our midst of your distinguished body is indeed an honor that we deeply appreciate. Representing as you do, a legislative force emanating from our own profession and of comparatively recent date, which has become most potent in its influence for good upon medical education and qualification, your conventions, proceedings and wise councils must ever command the interest, sympathy and high respect of all who have at heart the true welfare, honor and elevation of the medical profession.

The influence for good and the consecration of the public weal attained through many obstacles, despite the political demagoguery and prejudice inspired generally by ignorant or selfish men, in the institution of State Medical Examining Boards, has already been so clearly demonstrated that we have good hope that the day is not far distant when every state of our glorious union will have its independent, unprejudiced examining board, which shall stand as an impregnable bulwark in defense of the ignorant and weak against the selfishness and ambition of those known by the *name* of physician only.

And as the tendency of modern science, like the political status of our country, is toward unity and a completed whole, so in ours, the most liberal of professions, the harmony, purpose and unity of design point toward the same goal. We should aim to accomplish the inauguration of a system of state medical examinations that shall know no North or South, no East or West, but which shall recognize only the perfected harmony of a united whole. This I understand to be your chief aim and object—namely, by the confederation and unity of our honored profession, in its efforts to benefit mankind and advance the interests of its own noble purpose, shall by its devotion to the welfare of its fellowmen when truly followed entitle it to Ben Adhem's motto, "leads all the rest."

Trusting your sojourn amongst us may be conducive to the pleasure

and advancement of your association again, gentlemen, permit me to welcome you to our hearts and homes.

The president invited Dr. James Mackintosh Hays, of Greensboro, N. C., Vice President of the Confederation, to respond. Dr. Hays spoke as follows :

Mr. President and Gentlemen : Through the partiality of our distinguished presiding officer, the pleasant duty has been assigned me of touching the button, so to speak, which is to set the machinery of this meeting in motion. I feel that I should be recreant to my trust, however, were I not first to thank the distinguished gentleman who has so cordially welcomed us to this beautiful city and extended to each of us its entire freedom. While, therefore, we are all grateful to him for this kind welcome, it really seems, in a certain sense, almost a work of supererogation to extend the hospitality of this city to any particular sect ; for, within the last twelve months have we not all seen this "Gateway of the Sunny South" thrown wide open to every nation and kindred, tongue and tribe? And has not the whole world here enjoyed a hospitality in which the land of "Dixie" is found to excel?

Atlanta is not the pride of Georgia alone. Each of our states has its capital : Virginia is proud of her Richmond ; the old North state points with a warm interest to her little capital nestling among the ancient and grand old oaks ; but Atlanta is the pride of the whole South, and we glory with the Empire state in her magnificent schools, her medical colleges, her argentiferous "Constitution" and her auriferous "Journal," her wonderful railroad facilities and her enormous mercantile establishments. Let me also congratulate Dr. Olmstead and his colleagues in their skillful fostering of obstetrical cases which enables Atlanta to double her population with clockwork regularity every ten years ; so that while thanking Dr. Olmstead on behalf of our organization for his charming words of welcome, I feel that I must be allowed also to join with him in extending the hospitality of this beautiful city to those of you who are not fortunate enough to have a home beneath our Southern skies.

And, Mr. President, permit me to say in this connection that you are now among a people who, while loving and revering the "conquered banner" as a sacred memory, are as loyal as any in this broad land to "Old Glory." Let but the call for volunteers under the old flag ever be made and the nations of the earth will be astonished at the magnificent response from our Southern boys. There is no state this side of Mason and Dixon's line that would not be glad to accept the commission singly and alone, at this very moment, to free poor bleeding Cuba from the mercenary grasp of that heartless monarchy whose name is synonymous with greed and gore.

Our meeting here at this time, Mr. President, is peculiarly auspicious. We see representatives of the North and South, the East and West assem-

bled in this room with a single purpose—namely, to elevate the standard of education in the noblest of all professions.

There is much to be accomplished. Our peculiar work is in almost virgin soil. I am proud of the fact that I represent the state which was the pioneer in establishing a separate examining board. The laws of the various states that have laws at all, differ widely. The question of reciprocity should engage our most serious attention. It is not at all improbable that this very organization will solve the problem of universal state laws—a consummation devoutly to be wished.

One of the most serious questions before us too, is that of preliminary education. New York has set a splendid pace in this regard, and other states are very properly making an attempt to regulate that matter. It is the most serious problem that confronts us in North Carolina.

I had thought to touch on several of the more important subjects which should come before us, but by reference to the program, I note that the ground is wellnigh covered by able thinkers, and as time is precious, I will now give way that the regular order may proceed.

At this point the Confederation went into joint session with the American Academy of Medicine and the American Association of Medical Colleges, for the purpose of listening to a discussion on "Medical Education" arranged by the American Academy of Medicine, Dr. Henry M. Hurd, President, in the chair.

AFTERNOON SESSION.—2.30 O'CLOCK.

The Vice-President, Dr. James Mackintosh Hays, in the chair. The President, Dr. William Warren Potter, then delivered his annual address, choosing for his subject: "Relations of Medical Examining Boards to the State, to the Schools and to each other."

ABSTRACT OF THE PRESIDENT'S ADDRESS.

He said there were three conditions in medical educational reform on which all progressive physicians could agree—namely, first, there must be a better standard of preliminaries for entrance to the study of medicine; second, that four years is little time enough for medical collegiate training; and, third, that separate examination by a state board of examiners, none of whom is a teacher in a medical college, is a prerequisite for license to practise medicine. It is understood that such examination can be accorded only to a candidate presenting a diploma from a legally registered school.

He further stated that a high school course ought to represent a minimum of academic acquirements, and that an entrance examination should

be provided by the state for those not presenting a high school diploma or its equivalent.

He did not favor a National Examining Board as has been proposed, but instead thought all the states should be encouraged to establish a common minimum level of requirements, below which a physician should not be permitted to practise; then a state license would possess equal value in all the states.

In regard to reciprocity of licensure, Dr. Potter thought it pertinent for those states having equal standards in all respects to agree to this exchange of inter-state courtesy by official indorsement of licenses, but that other questions were of greater moment just now than reciprocity. Until all standards were equalized and the lowest carried up to the level of the highest, reciprocity would be manifestly unfair.

He urged that the states employ in their medical public offices none but licensed physicians. This, he affirmed, would tend to stimulate a pride in the state license, and strengthen the hands of the boards.

He denied that there was antagonism between the schools and the boards, as had been asserted. He said that both were working on parallel lines to accomplish the same purpose, that there could not possibly be any conflict between them, and that they were not enemies but friends.

The medical journals of standing from one end of the country to the other, he affirmed, were rendering great aid to the cause of reform in medical education, and the times were propitious.

He concluded by urging united effort by the friends of medical education, saying that "the reproach cast upon us through a refusal to recognize our diplomas in Europe, cannot be overcome until we rise in our might and wage a relentless war against ignorance, that shall not cease until an American state license is recognized as a passport to good professional standing in every civilized country in the world."

Mr. James Russell Parsons, Jr., of Albany, Director of Examinations University of the State of New York, upon invitation, then delivered an address on "Preliminary Education, Professional Training and Practice in New York."

At the conclusion of Mr. Parsons's address, Dr. Charles A. L. Reed, of Ohio, moved that the thanks of the Confederation be tendered to Mr. Parsons for his able, comprehensive and instructive address. The motion was unanimously carried.

Dr. Joseph M. Mathews, of Louisville, expressed his high appreciation of Mr. Parsons's address and tendered his personal thanks to Mr. Parsons for coming such a long distance to attend our meeting, and to present so superbly the work done by the great state of New York in advancing the standard of medical education. He wished to announce, however, that the smaller, yet great state of Kentucky, has also done a great work

though in a different manner. During a recent journey to Chicago and New York he was amazed to see upon almost every street corner advertisements of charlatans and quacks. And yet Illinois and New York had done almost more than any other states to improve educational methods in regard to medicine. He could, however, in contrast point with pride to Kentucky, where 1150 quacks and charlatans had been driven across her borders, and now Kentucky was freed from the humiliation of their presence.

This announcement was greeted with great applause.

Dr. Mathews then read a paper entitled "Limitations of the Standard of Modern Educational Requirements as Determined by State Medical Examining Boards."

Dr. Charles McIntire, of Easton, Pa., next read a paper entitled "Some Obstacles to an Inter-State Recognition of a State License to Practise Medicine, with Suggestions for their Removal."

The Vice-President : We have listened with great pleasure and profit, I am sure, to the four carefully prepared papers that have been read this afternoon, all bearing more or less upon the same subject. The whole question is now open for consideration, and I request Dr. VanderVeer to open the discussion thereon.

Dr. A. VanderVeer, of Albany.—Mr. Chairman : The four papers cover the ground so completely that it is almost impossible for any one to take up each paper separately for discussion in a way that can add materially to what has already been said. Permit me to say, however, that I was greatly interested in each paper.

About fifteen years ago an effort was made in which I took an active part to have a law passed to bring about a more uniform system of teaching in the state of New York. After struggling four years with the legislature, we finally succeeded in securing the passage of a law providing for the registration of physicians. It was well received by the profession which encouraged us to go further. Looking to Illinois as our guide, and citing the action of the Illinois State Board of Health as an illustration, we sought to impress the members of our legislature with the necessity of passing a law that would relieve the embarrassment presented by the fact that medical students would come from adjoining states, and after attending two courses of lectures of from ten to sixteen weeks each would graduate and begin practice alongside of our own physicians who had received much longer training. We first attempted to obtain a mixed board of state examiners, but the legislature said to us : "We have passed laws recognizing three distinct medical societies in this state. We will encourage the passing of a law giving you a board representing each state

medical society." After carefully considering this proposition the three several state societies representing regular, homeopathic and eclectic medicine were authorized to nominate each a state board of medical examiners. The appointing power was placed in the hands of the regents of the University of the State of New York. This law took effect in 1891, and we have been operating under it ever since. The results have been carefully and ably set forth by Mr. Parsons here to-day. In our last legislature, no less than twenty-three bills relating to medical affairs were introduced some of which were of a vicious nature, and one of which was a stealthy attempt to modify our present law relating to the preliminary requirements for medical students. Out of this group but one bill passed, however, which was the bill referred to by Dr. Potter and Mr. Parsons in their addresses, which establishes a four years' course after January 1, 1898.

I believe the members of our legislature are now alert and thoroughly alive to the necessity of supporting our medical practice act, hence in future it will not be easy for designing persons to secure improper amendments or additions. It will not be difficult it seems to me for other states to secure similar legislation, provided the medical profession sets itself to work on solid lines, manifesting an earnest desire to obtain good and wholesome laws and impressing the several legislatures with the importance thereof.

Our president gave us some excellent points in his address regarding the preliminary acquirements, medical collegiate training and final examination of students. I believe Dr. Potter presented very clearly and concisely the views of the profession in the state of New York on the subjects dealt with, and I commend them to the careful consideration of the members of this body.

Dr. William S. Foster, of Pittsburgh.—I have been most pleasantly and profitably entertained in listening to the different addresses and essays bearing on the several points pertaining to state medical examination for license that have been presented here to-day. In Pennsylvania we have adopted the New York standard for preliminary requirements, and we have a medical council which to all intents and purposes exercises the function of the New York Board of Regents in the supervision of the issuance of licenses to practise medicine. I regret, however, that we have no protection in Pennsylvania against the quack unless he does some criminal act, and thus far it has been impossible to remedy the defect through adequate legislation.

Dr. Charles A. L. Reed, of Cincinnati.—It is a matter of very great regret on my part that I was unable to hear all the papers in their entirety, but I may be permitted to remark, judging from expressions I hear on all hands, that we are all moving on convergent lines toward the accomplishment of a definite purpose—namely, that of uniform state requirements for the legalizing of the practice of medicine in this country. Having had but little opportunity of judging, I do not feel competent to discuss the details of this movement, but I beg you all to consider that we are not dealing with theories but with conditions; that these conditions vary in

different particulars in different states, and that each state and community presents its own peculiar problem. Finally, though I am fully committed to the principle of uniformity of methods and standards, I yet must urge that we move slowly and judiciously toward the accomplishment of that end, to which purpose I pledge my best efforts.

The papers were further discussed by Drs. J. E. Chancellor, and R. W. Martin, of Virginia, and Mr. James Russell Parsons, Jr., of Albany.

The Committee on Constitution and Revision of By-Laws presented its report which was unanimously adopted. (See Bulletin, American Academy of Medicine, December 1895, page 350, for full report of this committee.)

The report of the secretary and treasurer was then read and made part of the proceedings of the meeting.

The chair having been duly authorized, appointed a Committee of Nomination, consisting of Dr. Perry H. Millard, of Minnesota, Dr. Joseph M. Mathews, of Kentucky, and Dr. William S. Foster, of Pennsylvania.

This committee subsequently reported the following-named as officers for the ensuing year, who were unanimously elected :

President—William Warren Potter, M.D., Buffalo, N. Y.

Vice-Presidents—Charles A. L. Reed, M.D., Cincinnati, O., J. N. McCormick, M.D., Bowling Green, Ky.

Secretary and Treasurer—A. Walter Suiter, M.D., Herkimer, N. Y.

Executive Council—Perry H. Millard, M.D., St. Paul, Minn., Joseph M. Mathews, M.D., Louisville, Ky., William S. Foster, M.D., Pittsburgh, Pa., Hugh M. Taylor, M.D., Richmond, Va., Jas. Mackintosh Hays, M.D., Greensboro, N. C.

Dr. Perry H. Millard moved that a committee of five on minimum standard of requirements, to report next year, be authorized.

The president appointed the following Committee on the Minimum Standard of Requirements : Drs. Perry H. Millard, Minn., chairman ; N. R. Coleman, Ohio, B. M. Griffith, Ill., J. M. Hays, N. C., and Gardiner T. Schwartz, R. I.

The following named were elected to membership :

HONORARY.

James Russell Parsons, Jr.....Albany, N. Y.
William Osler, M.D.....Baltimore, Md.

ACTIVE.

Charles McIntire, M.D.....	Easton, Pa.
John B. Roberts, M.D.....	Philadelphia, Pa.
J. C. Wilson, M.D.....	Philadelphia, Pa.
A. Vander Veer, M.D.....	Albany N. Y.
J. D. Spencer, M.D.....	Watertown, N. Y.
A. W. Suiter, M.D.....	Herkimer, N. Y.
H. M. Paine, M.D.....	West Newton, Mass.
Wm. E. B. Davis, M.D.....	Birmingham, Ala.
Geo. H. Rohé, M.D.....	Baltimore, Md.
Henry M. Hurd, M.D.....	Baltimore, Md.
J. A. Larrabee, M.D.....	Louisville, Ky.
C. W. Kelly, M.D.....	Louisville, Ky.
J. M. Bodine, M.D.....	Louisville, Ky.
D. S. Reynolds, M.D.....	Louisville, Ky.
Henry R. Hopkins, M.D.....	Buffalo, N. Y.
Hunter McGuire, M.D.....	Richmond, Va.
Geo. Ben Johnston, M.D.....	Richmond, Va.
N. S. Davis, M.D.....	Chicago, Ill.
E. Fletcher Ingals, M.D.....	Chicago, Ill.
L. S. McMurtry, M.D.....	Louisville, Ky.
Daniel Lewis, M.D.....	New York City, N. Y.
Albert L. Gihon, M.D.....	New York City.
Brig.-Gen. Geo. M. Sternberg, Surg. Genl. U. S. Army.....	Washington, D. C.
Walter Wyman, M.D., Superv'g. Surg. Gen. U. S. M. H. S.	Washington, D. C.
John B. Hamilton, M.D.....	Chicago, Ill.
W. F. Westmoreland, M.D.....	Atlanta, Ga.
L. Duncan Bulkley, M.D.....	New York City.
Frank Woodbury, M.D.....	Philadelphia, Pa.
Geo. W. Stoner, M.D.....	U. S. M. H. S.
H. A. Hare, M.D.....	Philadelphia, Pa.
John O. Roe, M.D.....	Rochester, N. Y.
J. A. Outcherlony, M.D.....	Louisville, Ky.
J. D. Griffith, M.D.....	Kansas City, Mo.

The next annual meeting was appointed at Philadelphia, to convene at 10 o'clock, A. M., Monday, May 31, 1897.

The president expressed himself as deeply grateful to the gentlemen who had come great distances to read papers and discuss the subjects presented at this meeting. This organization, he said, though yet in its infancy, gave promise of great usefulness, and he hoped in bidding them good bye to meet them all in Philadelphia next year.

The meeting was then adjourned *sine die*.

BENJ. M. GRIFFITH, M.D., Secretary.

NOTE.—The papers read at this meeting will be published in an early future number of the BULLETIN.

“VIVISECTION.”¹

Recently one of the best scientific men in America said to me, “I would make thousands of animals suffer the most atrocious torments for a thousand years if thereby a human being could be spared one pain.” This was said by one who is a physician, one not himself a vivisector, and one who is a particularly moral and gentle-mannered man. There was, however, a certain peculiar emphasis and even passionateness in his manner when he said this, that betrayed the subconscious feeling that he was exaggerating. It seemed to me a noteworthy and significant utterance.

To this testimony I will add the words of another scientist, also a physician, and also not himself a vivisector :

In answer to objections against vivisection in public schools this gentleman wrote: “I certainly think that children and every one ought to be familiarized with the sight of blood, the pangs of disease, and the solemn event of dying. Death and pain should not be concealed; they are the greatest of educators, for they teach us the value of life in its highest measure.” (This logical conclusion therefore would seem to be that the more death and pain the better.) These words were *written*, not spoken in the haste of discussion, and were in response to a request for candid, well-considered scientific judgment, to be published for the world’s pondering. To these two many others might be added, but it is unnecessary.

Now I do not, for the moment, aim at any criticism of these statements, nor of the essential truth or error I may think is contained in them. I adduce them and all the *practices* of “vivisection” only as the thesis to be fixed in the mind, and over against which we may now place the antithesis. Without especial quotation this antithesis consists of the *fact* of large and powerful societies, counting in their membership hundreds of the great names of intellectual and social life—societies devoted to the total abolition or prohibition of “vivisection.” In the antithesis must also be included the fact of laws enacted and

¹ Delivered at the Meeting of the American Academy of Medicine at Atlanta, May 2, 1896.

proposed for the prohibition, limitation, or governmental control of all scientific experimentations upon animals.

And now let us keep firmly before the attention the uncriticised, unmodified facts,—the thesis of the justification and the practice of unlimited vivisection, on the part of most scientific men, and on the part of antivivisection societies the antithesis of zealous and organized opposition, more or less successful, to any and all vivisection.

Is it not plain that there must be extremism and exaggeration somewhere? I think wise men have long ago come to the sensible conclusion that truth does not dwell with extremes. Partisanship is not conducive either to learning the absolute truth or to a convenient *modus vivendi*. *In medio tutissimus ibis* is a pretty good old road for comfort, either in intellectual or in any other traveling.

In this connection it readily occurs to you that a *tertium quid* has been omitted from our resume of the situation, and that a large proportion of science-loving minds would not assent to the thesis involved in the statements quoted—whilst an equally high proportion of intelligent laymen would not join the ranks of the total prohibitionists. And this is true, but not so true as might be supposed. Mugwumpery is sadly lacking in this controversy.

I confess, after a somewhat extensive review of the literature, to a feeling of pitying disgust of both parties in this controversy, and viewing the wild and almost insane hysterics or dogmatic bitterness of both controversialists, one quite despairs, and almost wishes that a sort of Kilkenny-cat battle might leave peace by extermination.

There seems to be a sorry tendency for good people to rush to arms hotly for, or dead against the other party, and to lose that sane self-control and judiciousness of disposition which saves us from woful error in all other affairs of life. Sensible people smile at the unsaintly simplicity of one who thinks that all political goodness is covered by one of the meaningless names, democracy or republicanism, whilst thinking that all governmental and legislative deviltry naturally comes under the other meaningless word. If this is so in politics is it not much more

true, or *should* it not be, of a definite and clear concern of science? It is my purpose to try in a general way to discover some happy middle way, and to ask if we may not lift this unfortunate question out of the silly bitterness and partisanship into which it has fallen. To do so it is plain that we must seek to make clear the truth and the error in the position of each partizan, and thus to unite the good dispassionate people of both parties in a common cause, and by harmonious methods make all to work for ends desired of both, and higher perhaps than either alone have heretofore sought.

What is the Truth and Strength of the Antivivisection Party.— Let us now leave out of sight all criticism, just or unjust, all extremism and exaggeration, all sentimentality and nonintellectuality, and seek to learn the essential truth whence the antivivisectionists derive their strength, and which must become at least one of the fundamental principles of the *credo* of sensible people. The secret of wisdom is to learn from your enemy; the true philosopher knows that no controversialist has all the truth or is wholly in error, that opinion wins credence only by the truth hidden, however deeply, somewhere in it.

It can scarcely be doubted that the primary condition of human progress out of the most utter savagery consisted in the fact of the primitive man calling to his service and aid the wild beasts about him. This view is brought out with clearness in the most admirable book of Professor Shaler on *Domesticated Animals*. "The process of domestication," he says, "has a far-reaching aspect, a dignity, we may fairly say a grandeur, that few human actions possess. If we can impress this view, it will be certain to awaken men to a larger sense of their responsibility for and their duty to the creatures which we have taken from their older natural state into the social order. It will, at the same time, enlarge our conceptions of our own place in the order of the world."

It was by the domestication of wild animals that the savage got his first lift out of the lowest barbarism; their food, help, clothing and protection, directly and indirectly enabled one tribe or race to conquer the rival neighbor. It did more; it helped to found and fix the idea and to establish the fact of home life

upon which all further progress depended, and upon which civilization itself rests. It did more. During thousands and perhaps millions of years this daily association with animals drew man out of his bigoted subjectivity, which is the great obstacle of all mental development, as objectivity, sympathetic knowing of other beings, is the condition of mental progress. His animals became for man a sort of mirror wherein he saw himself reflected, and from this self-study in others there has gradually and progressively dawned upon humanity a faint and growing recognition of the truth of the unity and interdependence of all life. *Tat twam asi, this (animal) art thou*, was the grand truth condensed into a sentence epitomizing much of the wisdom of Brahminic civilization. Forth from the unknown, inexplicable, awful, by the subtle, mysterious agency of cell-life and of sexualism, springs the million-fold, ever renacent forms of living things, each dependent upon all others, just as literally and exactly as in physics or chemistry, each particle is interrelated with others. No animal or man can live without the aid of the vegetable, no animal or man without vital relations with other animal forms, no man independent of any or all other men. Each *is* his brother's keeper, whether the "brother" be the blade of grass, the bacillus, the cow, the savage, or the law-maker.

Civilization is but just beginning to grow conscious of this fact, but the consciousness has been aroused only by hard knocks. It has taken great disasters of flood and drouth and loss, only to begin to get into our heads the lesson of the stupidity of the denudation of the country of forests. Tuberculosis in cattle is teaching us that the cow is something more than a digesting, milk-giving, and meat-producing mechanism. The value of the product of the domestic hen is greater than that of all our silver mines. The loss of harvests by insects is millions of dollars annually. The death-rate of the human race depends upon our knowledge and control of the laws of lowly forms of life, and when that knowledge and control are perfect we may halve or quarter the mortality.

To this conception, science, reaching always last toward the heart of the mystery, is slowly now groping her way. But the

truth is already plain: Commensalism, cosmic commensalism, we may denominate the scientific aspect of the truth of what we have called the unity and interdependence of all the world's life. We are all brothers or cousins and we feed at the same table. There is no truth plainer than this, and disease and dependence are daily convincing us of the existence of the close relationship and of the fatuity of ignoring the rights of all living forms.

Now it is the incomparable merit of the antivivisectionists and their allies that they have first recognized this all-important truth. I agree with you if you dissent saying they have only seen it partially, narrowly, and emotionally, but that is no great criticism after all. They have seen it, dumbly, and partially if you please, but still most vividly. Their rational account of the matter may be faulty and ridiculous, but the heart always outruns the head, the emotions always point out the objects and motives to the intellect. Animals, all the worlds of living things, have rights *per se*, and the sooner science builds upon that basis the speedier will be the coming of her kingdom. Commensalism is an expugnable fact. Utter and reckless use of any living thing for human selfishness, with complete indifference to the nature and rights of that living thing, is as unscientific as impolitic, and as suicidal as was slavery. It is no great foresight to leave the hive enough honey for it to live upon through the winter. That the honey should be left because we love the bees is also quite as good a motive as because it is good policy or to our selfish interest. Sympathy or sentimentalism, properly understood, seems to me eminently proper and good, and not a reason for contempt or blame. "The great tide of mercy and justice which marks our modern civilization had first to break down the grievous and strongly founded evils of human slavery. Having effected that great work, the sympathetic motives are moving on to a similar conflict with the moral ills which arise from an improper treatment of those slaves of a lower estate, the domesticated animals." (*Shaler.*)

To have recognized even emotionally the fact of Life's commensalism, to have earnestly, personally, vitally recognized the fact of the unity, relationship, and interdependence of all life, to have seen it, however partially and narrowly, but so acutely as

to inspire a profoundly sincere and unselfish zeal,—this seems to me the ground and strength of the antivivisectionist cause. Upon this basis they may safely build, for it is as inevitable as is the fact of evolution itself, that evolution is builded, and will continue its development, upon that principle. Whatever contradicts it will be destroyed, because humanity and science will both unite to work out our destiny in obedience to it. In our upstart egotism, and flushed with scientific success, we have at times so placed and so expressed ourselves as to give the impression that we were not only indifferent to but derisive of this principle and fact, and our vain conceit has been answered by a responsive indignation which has placed in the Antivivisectionists many of the greatest names of our civilization. If we have but a fool's wisdom we will not repeat this unpardonable error. As protesters, the strength of the antivivisection-protest has been, or has seemed to have been in the denial of what has been or of what has seemed to have been, a contemptuous ignoring of the unity idea, an indifference to the rights *per se* of the animal world, an outrageous hypertrophy of human egotism. Wherever such denial or forgetfulness of commensalism, such non-recognition of animal right has existed, wherever such inordinate exaggeration of human right has shown itself, the vivisection protest is valid, and will prove to be valid so long as time and life lasts. It is at once good sense and good science, to acknowledge this, and to build future action upon the acknowledgement.

The weakness and errors of antivivisectionists, are, however, many and patent. They may all be summed up in the one criticism that these good people have not intellectualized their emotions. They have been zealous in the right but so blindly passionate against but one form of wrong, that their zeal has all the attributes of wrong. The emotions are good incentives but poor guides. They need to be rationalized and the way lit up by the sun of intellect. Passions, angers, indignations, need the balance-wheel of logic to make them keep the world's true time. We gladly acknowledge and fervently contend that, once for all, the sentiment of kindness to animals is an acquirement of modern civilization most profoundly precious and destined to grow brighter, clearer, and more practiced with every step of

humanity's advance. Whoever disallows, or derides, or even ignores it is doomed. Let his name, in the name of science and humanity, be anathema!

But there are perhaps ten or twenty million barns in the United States with cracks everywhere through which one may put the hand. Has any vivisection society organized itself to protect the millions of shivering animals who suffer long bitter nights for long winter months after laboring all day for their careless owners? I would like to join such a society. There are billions of fish and crustacean animals that are killed with slow tortures dragged out for days. Who has protected them from unkindness? In one shipment of cattle from their free, breezy western homes to Eastern or English markets, there is a thousandfold more awful agony than ever was in all the laboratories of all the world. What about the wretched hunting and gaming business? What about the slaughter houses? Is death in them preferable to death in a laboratory? No sensible man, good friends, objects to your objection against cruelty in laboratories. Sensible people will aid you to stop laboratory cruelty, but sensible people will ask you to extend the realm of your activity to other and to all places where cruelty exists, and to expend your main force where it is most needed. At present you are open to the charge that you care for but one kind of cruelty and that a small order. Do you want to educate the world in kindness? Then by all odds do so by going to the millions who are ignorantly and continuously unkind, not only to the few dozen whom you have selected. Is it cruelty you protest against, or is it only the cruelty of a certain small class of men?

Another crying error of antivivisectionists is calling death vivisection. Some time ago a most sensational account, with roaring headlines and awful pictures, was published in a New York newspaper of the vivisection atrocities carried on in the Physiological Department of Cornell University. To call the cutting up of meat in a butcher shop vivisection, and to have aroused indignation against the poor butcher by headlines and pictures, would have been just as honest and true. For the truth is that in the University there has not been a single vivisection experi-

ment for many years. Perhaps five hundred dead animals are there annually dissected, but only after a most humane and painless death. Now this instance is only illustrative of the general habit of antivivisectionists of charging those who kill animals for scientific purposes with cruelty and "vivisection." At the same time against death in slaughter-houses, by fish-dealers, hunters, etc., there is no charge made and no blame is laid upon them. This is an unfortunate condition of mind. Scientific men may justly claim that to those who ruthlessly hunt animals for sport and thus produce directly and indirectly a terrible amount of suffering, should at least be meted out a hatred and denunciation as fervid as against those who use them unselfishly in the service of humanity and science. Not to have done this, to have been guilty of this blind injustice, will ever remain the shame and weakness of the antivivisection movement. I have yet to learn that indignation against one kind of cruelty rightly absolves a just conscience from the obligation of truthfulness and sincerity.

Indeed this principle deserves extension; until antivivisectionists become practical vegetarians, they are at present occupying a shameful and stultifying position. By "the total prohibition of vivisection" they mean and represent among other things the abolition of death in the laboratory. But of course simple death in the laboratory and that in the slaughter-house or fish-boat must alike be justified by the objects and methods of the death. In the one case it is for the good of science, the conquering of disease, and the life of humanity. In the other it is to feed the single body of the eater of meat. The illogic and ludicrous position of the meat-eating prohibitional vivisectionist is thus worthy of the limitless contempt of rational beings.

It thus becomes clear that the problem of the whole controversy widens itself out into the greater problem of the use of the animal world as food. When the prohibitionist becomes a vegetarian he is worthy of respect as a logical person, but while he still eats meat, utterly indifferent to the death or kind of death his animal endured, and passionately indignant against vivisectionists, he becomes a very silly butt of ridicule. The antivivisectionist must therefore straighten out this tangle and make

theory and practice tally, before he is worth the consideration of reasonable people.

In order to be clear and not to evade any issue, I may add that personally I object to doing my own butchering. I would rather be a vegetarian, although I am not so silly as to seek to avoid my moral responsibility for the death I order with my cutlet. Butchering for mere sport's sake, called "hunting," seems to me to touch a lower depth of degradation, to which I trust never to fall. Trap-shooting and senatorial gunning are of course unspeakably low. Indeed, the practice of vegetarianism would seem to be defeative of the very object it has in view. I think we eat too much meat, that we are too indifferent to the animal-right, careless of the manner of death, etc., etc., but total prohibition here would not only slow down the march of humanity's progress, but it would be sadly detrimental to animalian progress. As a matter of fact it has not been human hunger or appetite that in an appalling manner is exterminating whole species and genera of animals from the face of the earth, but it is the outrageous fury of the hunter and of female vanity. Under proper restrictions and laws the use of animals as food has served, and may still further serve to perfect and beautify the animal-world. Death alone, uncruel death, for a useful purpose, least of all that in the laboratory, threatens no animal genus with extinction, and in all our facing of the question, we need only to keep in mind the object, the extent, and the method, of our death-dealing. But while we have a ray of reason or a line of logic in our minds, we must protest against the antivivisectionist confusion, illogicality, and even misrepresentation, that stigmatizes laboratory-killing as vivisection, whilst innocently dining upon the products of the slaughter-house; that would prohibit painless laboratory-experiment, and laboratory-killing, while obliviously passing a restaurant-window, or a train of stock-cars.¹

Again, antivivisectionists weaken their own cause, lessen the number of their sensible adherents, and do violence to their own sense of truth by their intolerable denial of any least good what-

¹ See a series of excellent articles by J. Lawrence-Hamilton, M. R. C. S., on Torturing and Starving Fish, Catching and "Crimping" Fish, etc., in *The Lancet* of August 17, August 31, et seq, 1889.

soever gained by and through vivisection. Now even in a good cause untruth does not pay. I regret that I have not the space and time at present to adduce a few examples out of hundreds that might easily be given to show how erroneous is this dogmatism. The proofs have often been gathered and it is unnecessary to repeat the time-worn story. Thousands of children, for example, are to-day growing to manhood and womanhood who would have died without the diphtheria-antitoxin. (But both sides to the controversy forget that the negative results, the showings that, except to the dispassionate investigator, are never shown, are quite as important in a scientific sense as the positive rewards of experimental medicine.) In reading these tiresome reiterations of dogmatism and denial, in witnessing the repetitions year in and out of this eyeless prejudice, one feels like despairing of the sincerity and sanity of the human mind. I perfectly agree that vivisection-experimentation has often been resultless, and worse than resultless,—the great men of science, the great vivisectors themselves freely admit it—but to contend that every such experiment has led either to resultlessness or even to error,—this only could a heated controversialist bring himself to say. The least investigation of the facts, and the least impartiality of judgment would insure against such blundering.

Yet another way in which the antivivisectionists should intellectualize their emotions consists in their neglected duty to be just to the laboratory-men. Almost every line they indite, or word they utter, betrays a deep vindictiveness, a bitterness of suspicion and hatred, that is,—well, let us say pitiable! But what is the truth? Are these men seeking selfish aims? Are they brutish in their social or family life? Are they liars about other things (than this controversial one)? Is the medical profession the most selfish, or in truth the most unselfish, aye, the most ludicrously charitable, of all the professions? Are men who devote themselves to humanitarian, impersonal, and scientific ends in other callings as well as in this, likely to be fiendish and cruel? I frankly admit that some vivisectionists are selfish, scheming, despicable fellows—but are they *all* so? Are not some of the antis also baddish folk? Is it truthful or judical to

condemn all men of a party or class? To your shame we ask, Who carry on, payless, the terrible labors of the hospitals of the world? Who has reduced the death-rate of your civilization, and increased the average length of human life by some years? In whose hands to-day is lodged the hope of ultimate freedom from disease, and its thousand resultant ills? Who or what class of men in all the weary world is bending its heroic endeavors so zealously and so fearlessly to lessening the world's miseries? Who in fact and finally is doing as much to lessen disease and suffering in the animals you blindly love, as these same physicians who know as you do not know, that disease in animal and man is the same? To your everlasting shame it is that you hate and oppose them instead of aiding them. Love your lovable animals wisely, not childishly, love them *more*, and you will work with us and not against us! If you can't enlarge your intellect, at least enlarge your heart, and learn of vivisectionists how to make your animals healthy! Who "crop" your dog's ears and "worm" his tail, and "cadoganize," bit, and blinker, your horse? Is it the laboratory-man? Ah no! It is Fashion, which you are all too careful not to antagonize, and which delights to do its charity very vicariously!

All of which leads to a linked corollary,—the question whether, by pushing a truth to its most reckless extreme, you are not allying yourself with the forces that are antagonistic to civilization? I have admitted that the unity of all life, and by implication the care by human intelligence of all lower life, is a fundamental principle that must henceforth guide all true biologic progress. I have admitted that yours is the great honor of having, at least in part, recognized this, and of having set yourselves to its practical realization. But the criticism has swiftly and necessarily followed, that you have taken your duty too narrowly. To love one dog or one horse, to the exclusion or to the indifference of all other dogs and horses; to love animals rather than the animal kingdom, and to love the animal kingdom rather than humanity,—what shall we call this but childishness?

Or is it something else not so innocent as childishness?

Have you ever calmly asked yourself how much of the anti-vivisection-cry is but the concealed expression of Science-hatred?

I am not quite sure but that the "cry" is often the masked growl of defeated bigotry and superstition filled with hereditary hatred of clear-eyed and conquering science, swiftly marching from victory to victory and ejecting from the last hiding place of obstinate and backward-looking minds their beloved errors, their cherished ignorances, and their pleasant selfishness. Without some such an explanation, it is otherwise difficult to account for the bitterness, the misrepresentation, the amazing celerity with which any club is grabbed, and the blind fury with which it is wielded. A too passionate partizanship argues the existence of unconfessed motives. If pure pity of suffering animals were the sole sentiment inspiring some of these pamphlets, it could hardly so unmindful of the awful suffering endured elsewhere than in laboratories. But this is an unpleasant and gruesome aspect ; let us pass on to consider the other side of the question.

The Views and Strength of the Vivisectionist Cause, as all scientific men know, lies in the application of inductive methods of research to the solution of the mysteries of normal and morbid physiology. To those who are untroubled by these mysteries, to those careless of the awful burden of disease, its expense to biologic evolution and civilization, to those also who are either ignorant of or opposed to the inductive method of research, to all such, of course, all experimental investigation is valueless. But every mind which has once realized the tremendous importance of science to humanity, recognizes with ever-growing gladness, the profound usefulness of induction in bringing light into the intolerable mystery of our life here. Induction, as we all know, is reasoning from facts to principles and laws. For thousands of years the sense of the mystery surrounding us, in us, and of us, has with the common people found satisfaction in faith or religion, which, scientifically speaking, is often the voice of despair, and is always the cry of renunciation of intellectual solution. During the same cycles the educated or more original minds sought the solution of the mystery of being in deduction, *i. e.*, metaphysics and speculation. They never looked inquiringly at the causes and realities of the motions of the planets, sun, and stars. They never observed the stratified

rocks on which they walked. They never asked the cause of glandular action, never sought the origin of disease. The awful pageantry of the biologic process swept on before their eyes like a dream, and they were utterly oblivious of the strange mystery of themselves, of their bodies, instincts, sensations, and minds. They spent their lives in vain quibbles as to matter, mind, free will, God, angels, nominalism, realism,—in everlasting delving and in discussion about things in the abstract. Finally, one man after another appeared who said: Let us for once observe things in the concrete, let us observe facts closely and accurately and by linked logic proceed from single facts to groups, and to ever-inclusive groupings and classifications, until finally in this way law gleamed upon the eyes of mankind, order arose out of chaos, and with her splendid certainties and clearness was born Modern Science! Almost any single page of a recent text-book on chemistry, physiology, or therapeutics, is worth to humanity the entire inclusive product of metaphysics, and theology, and philosophy, from Plato to Hegel.

It will, I think, appear, that I am by no means blind to the errors and hypertrophies and limitations of the method of induction, but in the minds of all awakened men, that it is the most potent instrument in the discovery of truth, there is no sort of doubt whatever. Now so far as physiology and medicine are concerned, the inductive method based in part on vivisection is one of the more,—mind I do not even say *the most*—but one of the more important conditions of scientific accuracy and progress. Reasoning from facts is impossible until the facts are known, and in the exceptional difficulty of learning the facts of normal and morbid bodily functions, vivisection constitutes an important method of procedure. There is no blinking this truth, and the opponents of justifiable or proper vivisection must not only acknowledge it or else take their places as opponents of science and of humanitarian progress. Every person who without prejudice has looked into the matter must well know that without vivisection a large part of the great body of physiologic and therapeutic truth of which we are now in possession would not have existed, the death-rate would have been far higher than it now is, and our civilization would not have been nearly so far

advanced as it is. It is useless for me to catalogue the facts upon which this assertion rests. They who deny either the assertion or the facts do not know whereof they speak, or they do not wish to know.

Just here, parenthetically, is suggested a strong condemnatory criticism of the prohibitional antivivisectionist,—a criticism that shows him (or her!) to be *de facto*, a deductionist, and not an inductionist. Not one of them has ever spent ten hours in a laboratory, not one has made a scientific discovery. In other words, he (or she) has opinions of a very pronounced sort, about matters without inquiry and study and without first-hand observation of the facts. Like the Scotch judge, having heard one side, he has made up his mind, and does not wish to become prejudiced by hearing the defendant's attorney. No more convincing proof is necessary of the vice of deductive reasoning!

I could enumerate a number of other facts to the credit of the experimental school of medicine, but the single one mentioned is sufficient to place it infallibly upon the right side in humanity's long warfare against ignorance and disease. It will be more instructive therefore if we proceed at once to note :

The Limitations and Errors of the Vivisectionists.—The first that strikes one is an exaggeration of the importance and extent of the vivisection-method. As valuable an aid as it is, it is not the only, and perhaps it is not the chief method of ascertaining medical truth. It has without doubt often been used when other methods would have been productive of more certain results. This has arisen from what a large and broad culture of the human mind perceives to flow from a recent and rather silly hypertrophy of the scientific method, and a limitation of that method to altogether too material or physical aspects of the problem. It may be true that so far as we see every mental or biologic fact has its material counterpart. More than this may be admitted. It is the special province of Science to make sure of this physical aspect. But over against these admissions must be placed the unscientific bigotry, the unwarrantable dogmatism of the prejudice,—nay, of the untruth, that the *life* or *psyche* is wholly and absolutely explainable in terms of matter

and mechanics.¹ Truly scientific men have not been guilty of this wretched travesty of truth, but certain plebificators of science who have caught the public ear have harped upon it until they have almost made the judge of us all—enlightened public opinion—believe this is the genuine attitude of Science. It is a fatuous and bitter error, and the best scientific minds, having suffered by the misrepresentation are making haste to disallow the impertinents, and to set the world right as to the true status of the matter. It has been the habit of some to sneer at the so-called “vitalists,” asserting with reckless derision that thought is a secretion of the brain, and life a property of matter. Except from a few we have probably heard the last of such teaching. It may be a truth, but until it is so proved scientific minds will not assert it. So long as spontaneous generation is a foolish untruth, so long as *omne vivum ex vivo* is disproved by no single fact in the world, so long must the ranters and dogmatists at least keep silence in the presence of logical and educated minds.

But, as I have said, the influence of the dogmatists have been too much in evidence in science and especially in vivisection-practice. “It is,” says Professor Mosso, the biographer of the great Ludwig, “an error, to believe that experiments can be performed upon an animal that feels. The perturbation induced by pain in the functions of the organism is so profound as to render useless the experimenter’s study. It was Ludwig

¹ *An Argument for Human Vivisection.*—A writer in a Western journal makes a vigorous plea that criminals condemned to death should first be used for vivisection purposes, and especially in the study of cerebral localization and function. One argument adduced is exquisitely humorous, the humor being heightened by the innocent unconsciousness of the quality. The earnest writer thus argues :

“Those who would be unfavorably impressed with this method of investigation should take kindly to the information that experiments of this kind on the brain are no more unpleasant to the subject than like impressions aroused during the sojourn of perfect liberty. There is every reason to believe that the stimulus in a large number of instances would be highly pleasing. If, for example, our subject experimented upon was a person who had been repeatedly animated by the ludicrous, upon touching the seat of such impressions the whole circumstance would be reproduced, attended with the same vivacity as the original experience. Painful sensations would not be reproduced unless a certain nucleus of cells was stimulated, and this could be avoided after its exact location was ascertained. To secure cooperation and carry out the operation successfully, the condemned would be instructed with the nature of the work.”

The childlike conviction that “the ludicrous” and that “pain” have definitely localizable centers, and that all one would have to do in order to spend a life in laughter would be to tickle the ludicrous center with a galvanic needle, is itself one of the most painfully ludicrous conceptions of pseudo-science that we have ever met.—*Med. News*, December 16, 1893.

who uttered the celebrated *mot*, that some physiologists, to study the nervous system, act like one who fires a pistol into a watch to see how the chronometer works. Suffering should be entirely eliminated from physiologic experiment, because the instruments we employ to-day are so delicate that they become inservicable the moment the animal is agitated or moves."

This admirable quotation perhaps leaves out of the count certain experiments that require more or less long-continued suffering, and in which anesthesia would be impossible, but in the main it is a truth that has been too much neglected on the part of vivisectors.

I need not weary you with other similar errors, but pass to another exaggeration, the over-emphasis of vivisection experiment and the neglect of clinical and pathologic results. The pathologic fact is a vivisection-experiment of the very best kind and admirably conducted by nature. We should trust it whenever possible, and not only the far more bunglesome and uncertain one of artifice. Among very many examples that might be cited, I shall give but one. Dr. Seguin, of New York, it will hardly be disputed, is a competent judge in the matter alluded to in the following quotation :

"Horsely appears to assume that our progress in cerebral localization has been mainly dependent upon experimentation. Here again we must differ from him. Clinical observation and pathologic data come first (Broca for speech center, Hughlings-Jackson for a hand center and general doctrine), the animal experiments with detailed proofs by Hitzig, Ferrier, and others long after ; and the solid facts upon which we make our daily localization diagnoses have been patiently accumulated by pathologists, and would stand to-day supporting the doctrine of cerebral localization if not one animal's brain had been touched. Besides, in the case of the visual half-center, human pathologic facts have overthrown the result of experimentation (Ferrier's angular gyrus center), and have made us, for practical purposes, indifferent to the contradictory results of Munk and Goltz. It is safe to say that every one of the so-called 'centers' in the human brain have been determined empirically by postmortem proofs, independently of experimental data. What animal ex-

periments would have led us, for example, to locate the half-center for ordinary vision in the cuneus, the center for the leg in the paracentral lobule, and that for audited language in the left first temporal gyrus? In this department of pathology medical science has been strictly inductive and sufficient unto itself, though receiving confirmatory evidence from the physiologist. The first (speech) and the last (visual) centers have been discovered by clinical and pathologic studies.¹

Almost every point over which the controversy has raged most fiercely has been in relation to one or all of the three or four questions :

1. What is a vivisection experiment ?
2. By whom should it be performed ?
3. For what purpose should it be performed ?
4. By what method should it be carried out ?

In reference to all these questions, scientific men should unite and establish a common set of principles or answers. In my judgment their failure to do so at all, and besides this, their frequent exaggeration of logical limits and just claims, has been one of the unfortunate causes of useless and wasteful wrangling.

1. They have not taught their opponents or the community ;
 1. What a vivisection experiment is ; 2. How very little of such experimentation there is ; 3. How little pain or suffering there

¹ That this is not a solitary opinion may be gathered from the following (unverified) quotations I have found. I do not assent to them either as true or complete statements of the facts, and especially of later and properly conducted experimentation. I quote only to show that there are two sides to the question, and the doubtful value of improperly chosen or improperly conducted experimentation :

"In surgery I am not aware of any of these experiments on the lower animals having led to the mitigation of pain or to improvement as regards surgical details."—[Sir William Fergusson.]

"No single operation in surgery has been initiated by the performance of something like it on the lower animals."—[Sir William Fergusson.]

"All systems based on vivisection are false and 'illusory.'"—Nélaton.]

"Vivisection has done more to perpetuate error than to enforce the just views taken from anatomy and the natural sciences."—[Sir Charles Bell.]

"Vivisection has not only not helped the surgeon one bit, but has often led him astray."—[Lawson Tait.]

"The teachings of vivisection on the functions of the brain are a tissue of error, and can only be corrected by clinical observations."—[Brown-Séquard.]

"Confusion is the scourge of science, and it is the most striking result of vivisection."—[Sir Charles Bell.]

Majendie said "No physician would think of calling to his bedside a doctor who derived his knowledge from a source so liable to error as vivisection."

is attendant upon properly chosen and properly conducted experimentation. They have, for example, allowed the roar of controversial anger to go unrebuked that confuses death and vivisection. Dissection of dead animals is not vivisection, of course, and at that one stroke there falls to the ground at least three-fourths of the present antagonism and prejudice. The vast majority of all animals now used in experimental study are dead animals. Again, if death at once follow experimentation that has been painless, another large cause of unjust censure falls pointless. Once more, if anesthesia prevents all the pain of what would otherwise be painful experiment, sensible people cannot object to that, and thus another large excision is taken from the few remaining cases. As we all know, but little painfulness or suffering attends the vastly great majority of so-called vivisections. When experiment upon a dead animal is meant, do not let us permit the word vivisection to be used. It is simply dissection or mortisection, if you please. If butchers are not to be prosecuted or martyred, certainly scientific men may be permitted to carry out studies upon the dead animal. For the rest, why not adopt Professor Wilder's words: *callisection* when painless vivisection is meant, and *sentisection*, when it is painful?

2. I believe scientific men have made a grave mistake in opposing the limitation of vivisection (*not* mortisection) experimentation to those fitted by education and position to properly choose, and properly execute such experiments. No harm can come, and I believe much good would come from our perfect readiness to accede to, nay, to advocate the antivivisection-desire to limit all experimentation to chartered institutions, or to such private investigators as might be selected by a properly chosen authority. This limitation, of course, should be conditioned upon the absolute freedom of (comparatively) painless killing by whoever may please to kill, or else the hunters, fishers, slaughter house men, and a hundred other killers of bed-bugs, grasshoppers, etc., would have to be included, and then the world would roar its laughter! Mayn't we vivisect tape-worms and pediculi?

At present the greatest harm is done true science by men who

conduct experiments without preliminary knowledge to choose, without judgment to carry out, without true scientific training or method, only in the interest of vanity. It takes a deal of true science and patience to neutralize with good and to wash out of the memory the sickening, goading sense of shame that follows the knowledge that in the name of science a man could from a height of twenty-five feet drop 125 dogs upon the nates (the spine forming a perpendicular line to this point), and for from 41 to 100 days observe the results until slow death ended the animals' misery. While we have such things to answer for our withers are surely not unwrung, and in the interest of science, if not from other motives, we have a right to decide who shall be privileged to do them.

I have adduced this single American experiment, but purposely refrain from even mentioning the horrors of European laboratories. This is not because I would avoid putting blame where it belongs, but because such things are peculiarly prone to arouse violent language and passion, clouding the intellect and making almost impossible a desirable judicial attitude of mind. The Teutonic race is to be congratulated that it is guilty of at least but few examples of the atrocities that have stained the history of Latin vivisection, and before which, as before the record of Roman Conquest and Slavery, or of the "Holy Inquisition," one shudders at the possibilities of mental action, in beings that bore the human form and feature. Shaler contends that it was the domestication of animals that enabled the Aryan and Teuton to conquer his adversary, and that has since civilized the conqueror. Thus long friendship with animals has given us a freedom from guilt that is fortunate for Teutonic people and science.

Vivisection is out of place in the public schools. In the interests of pedagogy, as well for the benefit of the pupil's morality as for the promotion of true science, scientific men should oppose with a common voice any such caricature and subversion of their aims and methods. Children should *not*, of all things in the world, "be familiarized with the sight of blood, etc."¹

¹ *Antivivisection for Children.*—It strikes us that of all men physicians should be foremost and most emphatic in their denunciation of vivisection in the public schools or in

3. The true object, the principal if not the only one, of vivisection, should be the eliciting of new truth. To this end also, any one may sacrifice by painless death as many animals as he pleases, so long—a most remote possibility—as the extermination of no species is threatened. Shall it not be as right to kill rabbits for scientific purposes, as for sport, or to rid the harassed Australian farmer of the pests? We must ever insist on this distinction between use of the dead animal and true vivisection. One may painlessly kill animals also in order by further experiment to acquire manipulative or surgical skill, and for didactic purposes, in medical or scientific schools. Death of plenteous and prolific animals, is *per se* no evil, and cannot be legislated against or morally forbidden; and the same rule will hold as regards all callisection, or painless vivisection. But I believe that the most enlightened judgment and feeling of the world will not justify much or any severe sentisection (painful vivisection) for didactic purposes or for the acquirement of operative technic. In the interests of science, again, as well as of morality, scientific men should set their faces sternly against such things.

any schools except those for adults and those especially devoting themselves to medical or biologic science. The matter would hardly seem to need argumentation. Every right-minded person must know, and doubtless must painfully remember in his own case, how callous children are to suffering and even how verily diabolic they often are as tormentors of animals over which they have power. It would also seem perfectly plain that the practice of vivisection before or by such highly imitative beings would have one certain effect: to increase enormously the already thoughtlessly or consciously cruel tendencies of their natures. "Appetite grows by eating." In medieval times the great gala days were the days of *auto da fe*. Gay cavaliers and gay ladies flirted and laughed for hours before men slowly being burned to death. They were no more intentionally or really cruel than boys to-day who pour coal oil over dogs and burn them to death.

Would vivisection in public schools have other effects more than compensatory for the evil? Clearly and decidedly not. In the first place, dissection and anatomy and the advanced physiology to be gained by vivisection are not fit studies for the child-mind, but are plainly adapted and adaptable only to a maturer age, and for those preparing to become physicians or specialists. The child-mind is not by its very nature analytic, and any attempt to force it into analytic studies before a riper season is squarely contrary to pedagogic science. It is not only against the child's nature and bound to prove unsuccessful, but, if possible, it would not be desirable. We need to teach the young mind the beauty of life, not the analysis of death. In educational methods we are at last fairly emerging from the barbarism of the study of dead things by dead methods and by dead-alive teachers. Do not let us encourage any such reversion to the barbarism of medievalism, as turning the kindergarten, that divine promise of a future civilization, into a miniature dissection room or laboratory for experimental physiology. Moreover, in the interests of physiology, of medicine, and of science itself, we should protest against such physiology as would be taught in the public schools by the present day (or promised) school teacher.—[*Med. News*, Aug. 17, 1895.]

4. The proper method of using animals for experimental purposes should combine scientific seriousness and rigor with the tenderest kindness to the animals. There is a subtle and beautiful law of psychology that only the unity of right object and careful method is productive of good results. Matter and manner must go hand in hand. Morality is a part of intellect, and a large part. When you see a vivisector pretending to be scientific, but whose every act and word indicates brutality to his fellow men, the politician, the selfish schemer, vulgarity of mind and banality of manner, rest assured his laboratory-experiment is vitiated with falsehood and error, and scientifically is utterly valueless. To jeer at and deride "sentimentality" while pretending to be working for the good of humanity (a sentiment, if ever there was one!) is hypocritical and flagrant self-contradiction. This attitude of mine on the part of a few men does more to arouse the indignation of opponents than any cruelty itself. Scientific men should root out of their ranks such poor representatives. They are enemies in the scientific household. Dr. Klein, a physiologist, before the Royal Commission testified that he had no regard at all for the sufferings of the animals he used, and never used anesthetics except for didactic purposes, unless necessary for his own convenience, and that he had no time for thinking what the animal would feel or suffer. It may be denied, but I am certain a few American experimenters feel the same way and act in accordance with their feelings. But they are not by any means the majority, and they must not only be silenced, but their useless and unscientific work should be stopped. They are a disgrace both to science and humanity. Over against Klein and those of his way of feeling, let us set the example of the great Ludwig, he who has done more for physiology than a thousand Kleins, he whose influence for scientific truth has been the greatest of any physiologist in Europe.

"No physiologist," says his biographer, "has ever sought with greater frankness than Ludwig to impose just limits on vivisection. The gates of his institute were ever open to all who wished to assure themselves that, in the midst of his experiments, he knew how to spare suffering. The vivisector's art attained such perfection in his hands that, having to sacrifice an

animal, he did not let it feel that it was even being tied. He would apply the muzzle and instantly proceed to the exhibition of ether or chloroform, which, in a few seconds, in a dog, for example, made it insensible."

In America we have one great anatomist the circles of whose scientific beneficence are ever widening and deepening, who acts as did Ludwig. No man ever had a more sympathetic and tender regard for all lower life than he. His cat-home is a marvel of ingenuity and kind carefulness, over which hangs the motto—

"Snugly housed and fully fed,
Happy living and useful dead."

By this man not a single painful-experiment is found necessary to illustrate his physiologic teachings, although some five hundred or more animals are annually killed with perfect painlessness. His laboratories and homes of animals are always open to inspection, gladly, proudly exhibited, and if you want a pet he will give you your choice out of an extensive collection.

And this brings me to what I can but conceive as a grave and profound mistake on the part of the experimentalists,—their secrecy. I well know that bigotry and prejudice may misrepresent. The whole history of the cycle-long struggle of the medical profession to obtain human dissection-material in the study of anatomy shows that the public mind has been hard to win over from its repugnance to the use of the dead human body for education in anatomy. But that day is now nearly or quite past, and the policy of secrecy is to be replaced by one of the most complete frankness and openness. In his recent presidential address, Dr. Thomas Dwight of the Harvard Medical School said :

"From careful observations I am convinced that the policy which will lead to the most satisfactory results is one of complete openness; that above all, we should avoid a timidity which shirks discussion of this topic. When we shall show so clearly as to carry conviction, that we have nothing to conceal, a great step will have been taken. I like to boast that the anatomical department of the Harvard Medical School is ready to give an account of every body it receives. If there be aught in the

management of dissecting rooms that calls for criticism, I would not have reform forced upon us from without. Let us be the first to anticipate every reasonable demand."

It is precisely in this spirit that the experimental school of medicine should meet the antivivisectionists and the world. A truly scientific man is necessarily a humane man, and there will be no need to conceal from the public gaze anything that goes on in his laboratory. It is a mistake to think our work cannot bear the criticism of such enlightened public sentiment as exists here and now; if there is necessary secrecy there is wrong. People generally are not such poor judges as all that. The openness will at one stroke eliminate the pseudoscientists and greatly calm the overwrought and erroneous public apprehension. I would even go further: Every laboratory should publish an annual statement setting forth plainly the number and kind of experiments, the objects aimed at, and most definitely the methods of conducting them. At present the public somewhat ludicrously but sincerely enough grossly exaggerates the amount and the character of this work, and by our foolish secrecy we feed the flame of their passionate error. An organized, systematic and absolute frankness, besides self-benefit, would at once, as it were, take the wind out of our opponent's sails. Do not also let us have "reform forced upon us from without," in this contention, but by going more than half way to meet them, by the sincerest publicity, show that as well as scientists and lovers of men we are also genuine lovers of animals. Faith, hope and love,—these three! To faith in knowledge, to hope of lessening human evil, we add love—love of men, and of the beautiful living mechanisms of animal-bodies placed in our care. He who unnecessarily hurts one of these, is a disgrace to science and to humanity.

As it appears to me this most unfortunate controversy, filled with bitterness, misrepresentation, and exaggeration, is utterly unnecessary. Both of the sharply divided hate-filled parties are at heart, if they but knew it, agreed upon essentials, and furiously warring over nonessentials and errors. I frankly confess that one side is about as much at fault as the other, and that the whole wretched business is a sad commentary upon the poverty of common charity and good sense. There has been far more

passion, shrieking, grunting, and growling than becomes rational beings. The only comforting thing in it all is the righteous conviction of everybody concerned that at heart it is an awfully serious and important concern. But this hardly justifies either hysteric falsetto or leonine roaring. When good women call good men devils, and good men retort Liars!—it commences to get disgusting or ludicrously opera bouffe. Cannot we ignore the ranters and extremists of both parties, behave like decent folk, get together, strike a balance sheet of our common follies and common excellencies, and find that at last we are very much alike, and indeed, have no real quarrel? Of course scientists can have nothing to do with those who cry no quarter! But the advocate of the total prohibition of vivisection can be brought to see the error of his (or her) ways, or can be cheerfully allowed to go those ways with the amused pity of all sensible people. For the rest there is by no means an infinite and unbridgeable chasm separating the two parties. Every good scientist is as much interested in promoting kindness to animals as the most devoted member of S. P. C. A., and I would add that it is his duty to join such organizations and help to carry on their proper work. Possibly he may serve to intellectualize that work somewhat and make it more effective. Pardon me for again alluding to Ludwig, the great scientist, the greatest of vivisectors, and one of the greatest lovers of animals. It will doubtless surprise some extremists to be told that a vivisector can be as great a protector of animals from cruelty as the best of them, and the sting of the surprise and incredulity comes from the sad confession that it is much of it our own fault. But "Ludwig was President of the Leipzig Society for the Protection of Animals, and remained to the last one of its most active members. Germany owes it to him that her horses and beasts of burden are now humanely treated. To him is due that awakening of the true humanitarian spirit toward the brute creation that culminated in the "Verband der Thierschutz-verein des Deutschen Reichs," (Union of German Societies for the Protection of Animals). It was mainly from her sense of the gentler attitude to be encouraged toward animals on the part of the rising generation that Leipzig made him an honorary citizen on the fiftieth

anniversary of his graduation in medicine." Can we not, shall we not, rise to the easily attained height of a similar dignity and magnanimity? Let us have peace!

Perhaps it may not be possible to unite the two parties in a common cause. The earlier sins and mistakes of a good man are likely to cling to him like a Nessus-shirt, and bar his later progress. Most men would rather be consistent than to be right. If it is really impossible to get the experimentalists and the antivivisectionists to cancel their mutual errors and exaggerations—the things wherein they disagree—and unite in a common propagandism of their mutual truths and beliefs,—if this desirable and right ideal is impossible, then it is time to form a new order or society aiming to correct the errors of both parties, generalize and systemize the essential purposes of both, and—more important still—to extend its field of labor beyond the present narrow confines and limited range.

I wish there might be an International Biologic League formed for the general protection and safeguarding of animals and plants from cruelty and destruction. Human progress and civilization have united at last to put into our hands the care and destiny of all lower forms of life upon the globe. The ingenuity, prolificity, and restlessness of humanity have at last brought man into destructive contact with every order of lower life, and with a more than savage stupidity he has begun a suicidal and impious extermination of many types. Once gone these are forever gone, and a large culture can only feel genuine anguish at such a terrible end as seems threatened. It is time some such organization of biologists should undertake to extend theegis of human care over the fate of our cosmic life, and secure from all governments such laws as shall prevent the ruinous destruction of infinitely beautiful and valuable types. Already many species of birds have disappeared in historic times, and our barbaric milliners and their thoughtless customers are still furiously at their frightful work. One dealer last year sold 2,000,000 bird skins. The world's most wonderful and intelligent animal, the elephant, is doomed, 100,000 a year being slaughtered to provide billiard balls, every pound of ivory costing also a human life. Our buffaloes and moose are about gone, and the

seals are soon to go, with many wonderful inhabitants of the earth's waters. Future scientists will look back at us of to-day aghast at our blindness and heedlessness. Some gleams and hints of prudence exist, as for example, the forbidding of hunting in our national parks, our Government Fish Commission, etc., but how far is all this from a generalized and international system, that should prepare universal laws and plans for biologic retreats and sanctuaries, that should protect the head-waters of our rivers from deforestation, and prevent them from being made foul sewers, that should guard against upsetting the delicate balance between animal and vegetable life, imminently threatened by the thoughtlessness, brutality, and avarice of destructive man. Before such an ideal how contemptibly pretty are the unseemly bickerings of the whole vivisection-controversy.

SECRETARY'S TABLE.

The abundance and excellence of the papers presented at the Atlanta meetings have made it difficult to plan the order of publishing in the various numbers of the BULLETIN. The following scheme has been adopted as the best possible when all circumstances are taken into consideration.

In this, the June number, will be found the minutes of the three Associations using the BULLETIN as their official publication. This brings the executive sessions promptly to the notice of those who were not able to attend. Then, because the resolutions adopted by the Academy regarding vivisection can not be fully understood unless the paper calling forth these resolutions can be read; because the subject is one at the present time engaging the public attention; and because, the author desires to put on the market a volume of essays which includes this one, and wishes the Academy to adhere to its rule, this paper is included in this number. As the attempt made last year to publish all the papers read before the Academy in the June number, while accomplished, only demonstrated that there is not time enough for the proper revision of the proof by the authors of the various papers, the experiment is not repeated this year.

The papers presented can be readily divided into two classes: those pertaining to the methods of medical education, and those relating to sociologic problems, other than educational. It is thought that the papers can be presented to better advantage by publishing each class separately. As the greatest interest was shown in the educational papers, they will appear in the August number of the BULLETIN, the remaining papers following in the next number. It will thus be seen that all of the papers will be published much more promptly than is usual with the published proceedings of medical societies, and while the Secretary regrets that obstacles, thus far insurmountable, make it impracticable to issue all of the papers at once, he has a plan to obviate this, probably next year, if the subscription list increases in the future in the same ratio that it has in the past.

American Academy of Medicine.

OFFICERS 1896-'97.

President—James C Wilson, Philadelphia.

Vice Presidents—J. T. Searcy, Tuscaloosa, Ala.. Elmer Lee, Chicago; Everitt Flood, Baldwinsville, Mass; J. W. Grosvenor, Buffalo.

Secretary and Treasurer—Charles McIntire, Easton, Pa

Assistant Secretary—E. M. Green, Easton, Pa.

Committee on Program—

Committee on Arrangement—

Next Meeting, Philadelphia, May 29th and 31st, 1897

The August number of the Bulletin of the American Academy of Medicine will contain the valuable series of papers on

Methods of Medical Education

presented at Atlanta.

The Bulletin will be greatly enlarged to present all the papers in a single issue. The price of this number alone will be ONE DOLLAR, but subscriptions for a year may begin with this number. Yearly subscription, six numbers, Three Dollars.

Address all communications to the Secretary,

CHARLES MCINTIRE,

EASTON, PA.

Make checks payable to the American Academy of Medicine.

W. H. C. Z. A. 17
1897
Philadelphia

TRANSACTIONS

—OF THE—

Association of American Medical Colleges.

—HELD AT—

PHILADELPHIA, PA., MAY 31,

1897.



[Faint, illegible handwritten notes or signatures]

5th

ASSOCIATION AMERICAN MEDICAL COLLEGES.

TRANSACTIONS.

PHILADELPHIA, PA., May 31, 1897.

Pursuant to a call issued April 27, the Association of American Medical Colleges met in the Hotel Walton at 10, A. M., Dr. J. M. Bodine, President, in the Chair. 34 colleges were registered. On motion of Dr. Lorn^abee, the Association resolved to adjourn to meet at the College of Physicians at 4.30 P. M., Tuesday, and thus secure the attendance of delegates known to be on the "Journal train." On motion of Dr. H. O. Walker a committee of three was appointed to consider the report of the Committee on the Codification of the Constitution. The Chair appointed Dr. J. M. Holland of Philadelphia, Dr. C. W. Kelly of Louisville, and Dr. John Heffron of Syracuse on this committee. After some informal discussion the Association adjourned.

On Tuesday afternoon the Association met in the lower lecture room of the College of Physicians. 23 colleges were represented with the President Dr. J. M. Bodine in the Chair. The minutes of the Atlanta meeting were read and approved.

The President's Address was then read and, on motion of John B. Roberts, ordered printed.

The Committee on the Amendments to the Constitution then reported by its Chairman Dr. J. M. Holland. After receiving the report each article of the constitution was taken up separately and then adopted as a whole as follows:

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 col-

lege 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 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 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.

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 al-

lowed 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.—Colleges, 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.

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. Distinguished teachers in medicine and surgery may be elected to *honorary membership*.

Sec. 2.—Only duly delegated and accredited active members in actual attendance whose annual dues are paid shall have *voting power*, but associate and honorary members may participate in all other proceedings and duties and may be elected to any office.

ARTICLE 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 successor.

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 thirty days previous to a stated meeting, and by a vote of two-thirds of all the active members present at such meeting.

The By-laws were unamended.

After some discussion, on motion of Dr. John B. Roberts, it was declared the sense of the Association that this constitution was in force for this time forward.

The Secretary's report was then read and approved.

Dr. J. P. Lord moved that suitable resolutions on the death of Dr. Perry Millard be prepared and spread on the records of the Association. The President appointed a committee for that purpose consisting of Dr. J. P. Lord, Dr. C. W. Kelly, and the Secretary. This committee afterwards reported as follows :

WHEREAS, We are reminded by the absence to-day of one who had been among our most active members—Dr. Perry H. Millard; one who was untiring in his devotion to the interests of this Association and the cause which it represents. In his death the Association has sustained the loss

of its best friend, most earnest and faithful worker, and wise counselor; the profession a true friend and exemplar; and this Association deploras his untimely death; therefore—

Resolved, that we make this sentiment of our regard for him a matter of record; that it be placed among the minutes of our proceedings, and that a copy be furnished his family.

The report of the committee on course of study was read by title and ordered printed.

The recommendations and report of the Judicial Council were then read and approved.

The Medical Department of the University of Niagara was elected to membership.

The following named officers were elected for the ensuing year.

President—Dr. J. ~~V~~ Holland, of Philadelphia.

Senior Vice-President—Dr. H. O. Walker, of Detroit.

Junior Vice-President—Dr. Thomas Opie, of Baltimore.

Secretary and Treasurer—Dr. Bayard Holmes, of Chicago.

Vacancies in the Judicial Council were filled by reelection.

(Signed)

BAYARD HOLMES, Secretary.

