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INTRODUCTORY NOTE.

By the Secretary of the Association.

On the 18th of April, 1872, an informal conference of a number of gentlemen, who for several years had been in some degree coworkers in the studies of Preventive Medicine and in duties of public sanitary service, was held in the city of New York, with the design to secure concerted effort, and establish some adequate plans in the cultivation of hygienic knowledge, and procuring more effective applications of sanitary principles and laws. The committee which was appointed at that conference submitted a plan of organization at a subsequent meeting, held on the 12th and 13th of September, 1872.

At the first conference there were present several representatives of the public health service, with other contributors to sanitary improvement, from five cities and as many States. Harmonious and definite views of duty prevailed. At the meeting for considering the report of the committee, in September, there were members from three additional States and as many cities; thus the conference for organization represented active promoters of sanitary work in New York, Pennsylvania, the National Capital, Louisiana, Rhode Island, Connecticut, Ohio, and Illinois; while from numerous other States aid and counsel from members not in attendance were also received. The plan of organization then adopted with entire unanimity was slightly modified in some minor particulars at the Annual Meeting held in November, 1873, in New York. The Constitution, as printed in this volume, shows what the Association is, and what it proposes to do. The reasons for making it a strictly voluntary organization whose autonomy shall not be ever fluctuating or be annually changed and even lost by any system of merely nominal or delegate membership, will be obvious to all coworkers in the fields of scientific inquiry and organized permanent plans of unofficial and yet public coöperation. The membership of the Association, as provided by its Constitution, in Article III., is secured upon the basis of personal devotion to sanitary studies and their practical applications. The greatly increased interest in sanitary knowledge and its manifold applications, with an enlarged spirit of scientific inquiry which has begun to apply itself to the economical and social interests of mankind, already insure a numerous membership and the harmonious working of the Association. Independence of official and governmental relationships the better secures for this body and its beneficent objects the membership and counsel of the chief promoters of sanitary works and of the ablest contributors to practical knowledge in the leading boards of health.

With such membership and means to pursue comprehensive and definite lines of sanitary inquiry, this body has now nearly completed its second year without attempting to enlist for its work and purpose any other support than has spontaneously resulted from this harmonious alliance of earnest men in a voluntary system of organized inquiry and conference. The first meetings of the Association have resulted in the cheerful contribution of reports and papers upon important sanitary questions, rather than in voluble debates; the rich fruit of careful observation and study, comprehensive surveys relating to epidemics and other diseases, and logically studied truths which are required for the basis and structure of true sanitary science and for the most effective methods and proceedings in public health administration. This manifestation of cheerful willingness to observe, to study, to glean facts in vast fields, and to report and compare all such results, is characteristic of the true physician and the assiduous student of the kinds of useful knowledge by which all the higher interests of society are promoted. These voluntary and painstaking inquiries by a great number of scientific gentlemen in the midst of arduous professional labors, the latest and best fruits in the fields of science reviewed in discourses like those pronounced at the meeting in New York by Dr. F. A. P. Barnard, and Hon. A. D. White, the respective Presidents of two universities, and the elaborate and suggestive discourse of General Walker, the Superintendent of the Ninth Census, upon some of the relations of nationality to the death-rates, and the reports upon united personal and official inquiries respecting the chief epidemics of the year 1873, are the first offerings to the Association.

In this volume of selected contributions to sanitary knowledge, will be found a fund of useful and trustworthy facts and conclusions which possess permanent value. It is the chief object of this publication to exemplify and emphasize the practical uses of methodically and voluntarily garnered elements of sanitary truths and common knowledge which most concern mankind. In this timely and unselfish work the best of physicians and the most earnest and philosophical of public teachers, leaders of thought and useful public action, cultivators of special branches of physical knowledge and of the arts that affect the social and sanitary state, have heartily united. No limitations of the

guilds of special vocations, no fear of professional apathy in any one of the skilled professions, no timidity to espouse the cause of the helpless, the ignorant, and the poor, classes whom pestilences destroy whenever they arise, whose unhealthful homes are hunted out by every epidemic, and who need the safeguards of hygiene, — the common blessings of fresh air, wholesome food, and pure water, — no indifference of local governments, and no fatalism of the common people or their teachers, will deter such advocates of sanitary improvement from pressing forward the work they have undertaken.

The golden maxim of Franklin that "Public Health is Public Wealth," is obviously true in all communities, but the same maxim now finds a higher significance in the ascertained relationship of sound and vigorous health to the social and moral interests of individuals, families, and nations.

The chief problems of civilization and humanity now demand their solution upon a basis of most exact and comprehensive knowledge of facts reduced to the deductions and formulas of science, and it is not arrogating unreasonable functions for the principles and the public applications of sanitary science, to say that the physiological health of the people so far underlies soundness and sufficiency of mental culture that hygiene will have to be recognized as a fundamental element of success in common education and in the higher culture, as well as in the practical solution of the great social and moral problems of our times. Not only is the old doctrine of the "Mens sana in corpore sano," an axiomatic truth, but it is equally true that the circumstances, habits, daily duties and observances that secure personal and public health, are in themselves powerful means of mental and moral training, and of mental and moral health, which may not be disregarded without infinite harm to individuals, to families, and to society at large.

Whether, therefore, the humane physician, the moralist, the educator, or the public economist and statesman estimate the practical bearing and value of hygiene and the applications of sanitary science, the motto of the astute Mr. Disraeli, "Sanitas sanitatum, omnia sanitas," finds a world-wide and cogent application. Even in the most advanced view of the relations of hygiene to education and social culture, the moral and religious consequences of a faithful performance of sanitary duties conspicuously appear, for, in the well chosen words of President White, whose discourse is published in this volume, "The only wholesome fear is not that fear based on mystic dread of tyranny, but fear to violate those great laws by which the Divine Power which maintains and regulates this universe, governs all. That is the fear which lies at the beginning of wisdom, and among those studies calculated to impress upon us the existence of laws, the violation of which is followed by penalties strictly im-

posed, stand foremost those to which this Association is now so worthily devoting its attention — studies which help to make this earth more beautiful, and mankind more reverent and noble."

In this volume of Sanitary Papers the records of two deadly epidemics, — the fatal strides of cholera in the great valley west of the Alleghanies, and the invasion of Shreveport and Memphis by yellow fever when those cities were utterly defenseless, unguarded, and unpoliced, — the description and exemplification of successful methods of preventing the progress of pestilences by stamping them out, the mapping out of the course of epidemics, and the demonstrated progress of science which is destined to grapple successfully with the combined factors of epidemic and other preventable diseases, show how great are the tasks and the triumphs which Preventive Medicine has Though these separate contributions to the Association's fund of information are spontaneous offerings, the opinion of all who read these Papers must be that the time is near when neither the State nor National authority and support will be justifiably withheld from local and general inquiries and from the devising and maintenance of measures for the general defenses of life and health, which localities, classes, and particular occasions demand. In this view State Medicine is not a chimera, and State interference would not be inconsistent with the most liberal and just government of a free people. But the progress of knowledge and the development of sanitary science have not waited for the aid and direction which the State might The sacredness of human life, the value of health, the claims of humanity, and the requirements of the beneficent laws of nature have incited a great number of educated and public-spirited men in the different walks of life to give attention to sanitary knowledge and to aid in applying it. In this way physicians and medical officers in numerous cities and large towns have received the cordial cooperation of members of every skilled profession.

Sanitary officers and boards of health have to perform their duties under laws which, in most of the States, are not worthy of an enlightened people. A sanitary system worthy the present state of the physical sciences and of hygiene hardly has existence in any of the States. But in eight States a central Board of Health has begun its work of inquiry and the framing of a project of public health laws, a parliamentary commission in the Dominion of Canada is at present devising a sanitary code, and in nearly half of the States of our Union efforts to secure good laws and a sanitary system have commenced. Certainly it is not in vain that the American Public Health Association pursues its voluntary inquiries and now presents these contributions to a great cause in which philanthropists and statesmen are enlisted as co-workers with medical and sanitary authorities.

CONSTITUTION

OF THE

AMERICAN PUBLIC HEALTH ASSOCIATION.

TITLE.

I. This Association shall be called "THE AMERICAN PUBLIC HEALTH ASSOCIATION."

OBJECT.

II. The objects of this Association shall be the advancement of sanitary science and the promotion of organizations and measures for the practical application of public hygiene.

MEMBERS.

III. The members shall be selected with special reference to their acknowledged interest in, or devotion to, sanitary studies and allied sciences, and to the practical applications of the same. They shall be elected as follows:—

Each candidate for membership shall first be proposed to the Executive Committee in writing (which may be done at any time), with a statement of the business or profession, and special qualifications of the person so proposed: on recommendation of a majority of the Committee, and on receiving a vote of two thirds of the members present at a regular meeting, the candidate shall be declared duly elected a member of the Association. The annual fee of membership shall be five dollars.

OFFICERS.

IV. The officers shall be a President, a First and a Second Vice-President, a Secretary and a Treasurer.

All the officers shall be elected by ballot, annually, except the Secretary, who shall be elected for a term of three years.

PRESIDING OFFICER.

V. The President, or, in his absence, one of the Vice-Presidents, or, in their absence, a Chairman *pro tempore*, shall preside at all meetings of the Association. He shall preserve order, and shall decide all questions of order, subject to appeal to the Association. He shall also appoint all Committees authorized by the Association, unless otherwise specially ordered.

SECRETARY.

VI. The Secretary shall have charge of the Correspondence and Records of the Association; and he shall also perform the duties of Librarian. He, together with the presiding officer, shall certify all acts of the Association. He shall, under the direction of the Executive Committee, give due notice of the time and

place of all meetings of the Association, and attend the same. He shall keep fair and accurate records of all the proceedings and orders of the Association; and shall give notice to the several officers, and to the Executive and other Committees, of all votes, orders, resolves, and proceedings of the Association, affecting them or appertaining to their respective duties.

TREASURER.

VII. The Treasurer shall collect and take charge of the funds and securities of the Association. Out of these funds he shall pay such sums only as may be ordered by the Association, or by the Executive Committee. He shall keep a true account of his receipts and payments; and, at each annual meeting, render the same to the Association, when a Committee shall be appointed to audit his accounts. If from the annual report of the Treasurer there shall appear to be a balance against the treasury, no appropriation of money shall be made for any object but the necessary current expenses of the Association, until such balance shall be paid.

COMMITTEES.

VIII. There shall be a standing Committee, to be known as "the Executive Committee," which shall consist of the President, the First Vice-President, Secretary, and Treasurer, and six members annually elected by ballot.

All Committees, and all members preparing scientific reports or papers to be laid before the Association, at its annual meetings, must give, in writing, the title of such reports or papers, the time to be occupied in reading them, and an abstract of their contents, to the Executive Committee, at least six weeks preceding the date of such meeting, to secure their announcement in the order of business.

EXECUTIVE COMMITTEE.

IX. It shall be the duty of the Executive Committee to consider and recommend plans for promoting the objects of the Association; to authorize the disbursement and expenditure of unappropriated moneys in the treasury for the payment of current expenses; to consider all applications for membership, and, at the regular meetings, report the names of such candidates as a majority shall approve; and, generally, to superintend the interests of the Association, and execute all such duties as may, from time to time, be committed to them by the Association. At least one month preceding the annual meeting of the Association, the Executive Committee shall cause to be issued to members a notice of such meeting, and they are authorized to publish the same in medical, scientific, and other periodicals, but without expense to the Association; such notice shall contain the order of business to be followed at said meeting, and briefly, the subjects to be presented, and the special points of discussion.

MEETINGS.

X. The time and place of each annual meeting shall be fixed at the preceding annual meeting, but may be changed by the Executive Committee for reasons that shall be specified in the announcement of the meeting. Special meetings may be called, at any time or place, by concurrence of two thirds of the Executive Committee. There shall be no election of officers, or change of By-laws, or appropriation of money to exceed the amount at that time in the treasury, at such special meeting, except by a vote of a majority of all the members of the Association. Whenever a special meeting is to be held, at least one month's notice shall, if possible, be given, by circular, to all the members, together with the order of business.

QUORUM.

XI. At the annual meeting nine members shall constitute a quorum for the election of officers, a change of the Constitution, the election of members, and the appropriation of moneys.

ORDER OF BUSINESS.

XII. The order of business at all meetings of the Association shall be fixed by the Executive Committee, and such order must be completed before any other business is introduced, except such order of business is suspended by a vote of four fifths present.

ALTERATION OF CONSTITUTION.

XIII. No alteration in the Constitution of the Association shall be made except at an annual meeting, and unless such alteration shall have been proposed at a previous meeting, and entered on the minutes with the name of the member proposing the same, and shall be adopted by a vote of two thirds of the members present.

OFFICERS AND MEMBERS OF EXECUTIVE COMMITTEE.

[Elected September 13, 1872.]

STEPHEN SMITH, M. D., President. EDWIN M. SNOW, M. D.,

First Vice-President.

C. B. WHITE, M. D.

Second Vice-President.

JOHN H. RAUCH, M. D., Treasurer.

ELISHA HARRIS, M. D., Secretary.

CHRISTOPHER C. COX, M. D. HENRY HARTSHORNE, M. D. WILLIAM CLENDENIN, M. D. FRANCIS BACON, M. D. MOREAU MORRIS, M. D. JOHN M. WOODWORTH, M. D.

OFFICERS.

[Elected November 13, 1873, under the Amended Constitution.]

President, STEPHEN SMITH, M. D., New York.

First Vice-President, EDWIN M. SNOW, M. D., Rhode Island.

Second Vice-President, C. B. WHITE, M. D., Louisiana.

Secretary, ELISHA HARRIS, M. D., New York.

Treasurer, JOHN H. RAUCH, M. D., Illinois.

EXECUTIVE COMMITTEE:

ELECTED MEMBERS.

EDWARD JARVIS, M. D., Mass. MOREAU MORRIS, M. D., N. Y. J. J. WOODWARD, M. D., U. S. A. S. O. VAN DER POEL, M. D., N. J. M. TONER, M. D., D. C. A. N. BELL, M. D., N. Y.