

reason to believe that values adopted now will be satisfactory for a generation at least without change. The European delegates have brought with them, from their own laboratories, a quantity of apparatus and chemicals in order that they may reproduce work done in their own laboratories at the Bureau of Standards, as accurately as possible. Standard cells will be set up by the representatives of each of the four institutions, and accurately compared and tested. In the same way different forms of silver voltameters will be operated in series with one another, and the quantity of silver deposited in each determined with very great accuracy. The Bureau of Standards has provided every facility for carrying on this work expeditiously and with the highest precision.

The three European delegates arrived from Europe recently, and proceeded to Washington after a short stay in New York, in time to begin their work at the appointed time, April 1. It is not known how long the work will continue, but it is hoped to complete it in two months.

EDWARD B. ROSA

FEDERAL EXPENDITURES FOR THE CONSERVATION OF THE NATIONAL HEALTH

CERTAIN contributors to *American Health* (the official organ of the American Health League, published by the Committee of One Hundred) have expressed the opinion, that while the care and health of animals is a matter of extreme importance to the federal government, the health of human beings, on the other hand, is a matter of indifference. At least, this is what one would infer from the following quotations taken from *American Health*:

John Pease Norton, Ph.D., *American Health*, March, 1908, page 12:

We look with horror on the black plague of the middle ages. The black waste was but a passing cloud compared with the white waste visitation. Of the people living to-day over eight millions will die of tuberculosis, and the federal government does not raise a hand to help them.

THE DEPARTMENT OF AGRICULTURE PROTECTS ANIMALS

The Department of Agriculture spends seven million dollars on plant health and animal health every year, but, with the exception of the splendid work done by Doctors Wiley, Atwater and Benedict, Congress does not directly appropriate one cent for promoting the physical well-being of babies. Thousands have been expended in stamping out cholera among swine, but not one dollar was ever voted for eradicating pneumonia among human beings.

Mrs. Gibson Arnoldi, Bulletin of the Committee of One Hundred on National Health, September, 1909, page 8:

The national government of the United States spends \$7,000,000 on plant and animal health every year, and hundreds of thousands fighting beetles and potato bugs, but not one cent to aid the six million babies that will die under two years of age during the next census period while mothers sit by and watch in utter helplessness. This number could probably be decreased by as much as one half. Why is nothing done? . . .

Bulletin No. 33 of the Committee of One Hundred on National Health, October 1909:

At a meeting held in Denver in August an interesting paper on meat inspection was read by Miss Lakey, chairman of the food committee of the National Consumers' League. Resolutions were adopted recommending that states and cities should provide more sanitary slaughter houses. Miss Lakey showed that the federal inspection is inadequate.

To those who are more familiar with the health work now being carried on by the federal government here at Washington and in its branch laboratories, these statements, while correct as to certain details, are objectionable because of their implications. The above quotation from Bulletin 33, for example, was so placed as to carry (to the writer at least) the impression that the federal inspection was being criticized, not alone as to the quantity of meat inspected, but also as to the quality of the inspection. The writer has been corrected by one who attended the Denver meeting of the Association of State and National Food and Dairy Departments, and informed that the federal meat inspection service was held up by Miss Lakey as a good

example to be aggressively followed by state and municipal health boards. Inefficiency was not implied.

The object of this article is not to criticize these contributors or the Committee of One Hundred, but rather to point out that, far from being a matter of indifference, the national health is a matter of the gravest concern.

For what purpose is the health work now being carried on in the following federal departments?

First: The Bureau of Chemistry. The work of this bureau (involving an annual expenditure of approximately \$750,000), particularly in the enforcement of the food and drugs act, is too well known to need description here. Even the babies have not been forgotten; the composition and digestibility of baby foods have been studied; a more detailed and thorough study of the subject has been planned and will probably be in progress in the near future. Considerable work is being done upon "soothing syrups" manufactured and sold in violation of the food and drugs act.

Second: The Hygienic Laboratory of the Public Health and Marine Hospital Service. This laboratory has made investigations along several lines. Certain parasitic diseases in man (*e. g.*, hook-worm disease) have been studied; milk and its relation to the public health has been a subject of both extensive and intensive research. Investigations of the dissemination of tuberculosis and typhoid fever through interstate traffic are in progress. The Marine Hospital Service maintains the federal quarantine (appropriation—\$400,000 for the fiscal year ending June 30, 1909). For the same year congress appropriated \$700,000 to be used by the Public Health and Marine Hospital Service "in case of threatened or actual epidemic of cholera, typhus fever . . . in aid of state and local boards . . . in preventing and suppressing the spread of same. . . ."

Third: The investigations on the food and nutrition of man now being carried on through the Office of Experiment Stations.

Likewise, of undoubted value is the work of the Surgeon General of the United States Army. The work done by that office in pointing out the relation between the mosquito and the spread of yellow fever is obviously of vital importance.

Fourth: The Bureau of Animal Industry. In this bureau the federal health work is being carried on through several of its divisions. The Meat Inspection Division (for which congress appropriates \$3,000,000 per year) inspects the inter-state traffic in meat, thus assuring the country a clean meat supply. Hook worm in man was first suspected through the work that has been done with this parasite in animals.

To certain criticisms of the federal inspection a very interesting reply by the Bureau of Animal Industry is to be found in the Twenty-third Annual Report of that bureau for 1906, page 443, *et seq.*

The Dairy Division is making every effort to cleanse and purify and improve the milk and dairy products of the country. The proper construction, care and ventilation of the barn, as well as improved methods of making cheese, are subjects of investigation. For the inspection of butter-renovating factories \$10,000 are expended annually. For investigations on methods of improving the quality and quantity of dairy products, \$30,000 are expended annually.

If the amount of money expended by the federal government through these several bureaus (considerably over \$4,000,000 per annum) may be taken as a correct measure of the interest taken in their work, it follows that the national health is a matter of something more than incidental interest to the federal authorities. The above-mentioned amounts, however, do not by any means represent the total amount expended through channels making for the national health. If the eating of certain abnormal varieties of corn in certain localities induces seriously diseased conditions in the people eating it, is the expenditure in studying the biology of the corn any less useful than that in studying the disease in man?

The relations of some of the branches of federal activity to the public health are very direct and obvious. Some of the investigations of the Hygienic Laboratory of the Public Health and Marine Hospital Service, for example, resulting in the tracing of typhoid fever to contaminated milk, are evidently made for the immediate protection of the public. The work of the Meat Inspection Division in preventing the sale of the meat of diseased animals is just as immediate in its purpose. It is evident that a plentiful supply of wholesome food is as essential to the health of a people as any other measure for the prevention or eradication of disease. Well-nourished bodies may resist disease where impoverished ones succumb.

But the bearings of other branches of federal activity upon the public health may not be so obvious to the superficial or casual observer. To such an observer the study of the proper construction and ventilation of a barn may not be as close to the public health as the study of the properties of an antitoxic serum. But in these days of preventive medicine we are willing not alone to be cured of disease, but even to prevent it in almost any way whatsoever—for example, by using only clean milk, from clean, healthy cows, and which obviously can only be kept clean and healthy in barns of sanitary construction and ventilation. The enemy (the pathogenic microorganism in this case) will enter through any gate. All of them must be closed.

The figures quoted above have been taken from Document No. 1,031, House of Representatives (Treasury Department Document No. 2,516), Estimates of Appropriations for the fiscal year ending June 30, 1910; also, Treasury Department Document No. 2,533, Statements of Balances, Appropriations and Disbursements of the Government for the fiscal year ended June 30, 1908. Both of these publications are easily obtainable by those interested, at the Library of the U. S. Department of Agriculture.

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A DEPARTMENT OF PUBLIC HEALTH

SENATOR OWEN has introduced in the senate a bill establishing a Department of Public Health, which has been read twice and referred to the Committee on Public Health and National Quarantine. The principle of this bill has been approved by the committee of one hundred of the American Association for the Advancement of Science, and members of the Association are urged to make efforts to secure the passage of the bill, more especially by writing letters to members of congress endorsing the *principle* of the bill and in favor of a wide extension of the present health work of the national government.

President Taft, in his public addresses, as in his first annual message to congress, both the great political parties in their platforms, the National Grange, the American Federation of Labor, the American Medical Association, the Committee of One Hundred, and others, have put themselves on record as in favor of a broad reform of the existing situation. It is important to impress upon congress that there is a thoughtful and widespread demand in this country for comprehensive reform at this time.

THE AMERICAN CHEMICAL SOCIETY

THE summer meeting of the American Chemical Society, to be held in San Francisco, July 12-15, 1910, promises to be one of the pleasantest outings ever enjoyed by the members of the society.

A special train made up of the Santa Fe's finest equipment will leave Chicago on the evening of July 4, arriving at Colorado Springs on the morning of July 6. About six hours will be allowed for a trip to Manitou, the Garden of the Gods or to the top of Pikes Peak. Leaving about one o'clock the train will reach Adamana on July 7 and a half day will be spent in a visit to the Petrified Forests, two of which and possibly three may be examined. Leaving Adamana that night the party will arrive at the Grand Canyon of the Colorado on the morning of July 8 where the day will be spent. Leaving the Grand Canyon that evening the train will arrive at Redlands