

## PUBLIC HEALTH IN CAROLINA

### SOME HEALTH ACTIVITIES

The State Board of Health of North Carolina has, because of its achievements and innovations, won both national and international recognition. It is a commonplace that we have one of the best state health departments in the Union and several state commissions have visited us to see just how it is done so they can put our scheme into practice. Missions have recently come from foreign countries to inspect our health work. We are known abroad as a state with a health system that is state-wide in its scope, that has big plans afoot and in view, and that is succeeding with its state health program. And the credit is due to the able director who has remained on the job in spite of big offers elsewhere, to the body of able men and women that he has picked to enable him to carry out the program, and to the members of the Board who are all far-sighted in their visions. In this issue of the News Letter, alongside of the plan of organization of the State Board of Health, we are featuring just a few of its many activities.

### Free Clinical Service

Beginning early in 1915 the State Board of Health through what is now its Bureau of Medical Inspection of Schools commenced a thorough survey of several thousand children enrolled in the schools of different counties in widely separated sections of the State of North Carolina with a view of ascertaining the actual physical condition of all classes and ages of school children. These efforts established the appalling fact that from 75 to 80 of every 100 school children were suffering from decayed teeth, or, what is worse, not over 5 per cent of them had ever visited a dentist for preventive or reparative work. There seemed to be no difference with reference to localities in which these children lived, the teeth of children from cities, small towns, and country alike being bad. These facts were well borne out by the first draft figures. For example, in one county where the examining physician made careful records of the teeth of each man examined, he found that out of 700 young men between the ages of 20 and 30 years, who were examined in 1917, supposedly the best physical specimens in that county, only 22 out of the 700 had retained all of their teeth, old men, nearly all of them, before 30! As it is an impossibility for an individual to enjoy perfect health without good teeth, the question naturally is a big one from a public health standpoint. These surveys also indicated that of smaller school children there could not be less than 40,000 or 50,000 suffering from the very common affliction of diseased tonsils and adenoids. For the worst of these little sufferers, especially those having bad heredity to go on without being treated means ill health, poor school progress and an altogether unhappy outlook for life.

### Why the Defects

In its efforts to get back of these conditions and ascertain the causes of such conditions, the State Board of Health concluded that this state-wide neglect of common every-day physical defects in practically all classes of the children was due to several causes. In the order of their importance the causes may be stated as follows: (1) poverty; (2) the morbid fear of the words hospital, operation, dentist; (3) ignorance of the consequences of neglect and indifference; (4) a lack of specific instruction in the public school curriculum along these lines, and especially a lack of proper attention to teaching these subjects to future teachers, especially in the state institutions making a specialty of teaching teachers; (5) the undesirability of the average child as a patient, especially from the standpoint of the dentist.

For several years past there have been sporadic efforts made in medical inspection of school children, presumably for the purpose of locating defects and at the same time trying to teach a little personal hygiene. The whole system, however, has been in the state almost a total failure, on account of the fact that no follow-up work was undertaken by responsible agencies. The parents or guardians of defective children were simply sent notices stating that such and such a child had such and such

a defect and recommending that the child be taken to a dentist or a specialist or the family doctor, as the case might be. Very little attention was paid to this by the majority of the people, the children invariably suffering the consequences of further neglect.

### An Innovation

When the present department of Medical Inspection of the State Board of Health was organized, about 1917, the director of the department determined that some effort at getting children treated should be undertaken or he would recommend the dissolution of the department. As a result of this determination, early in 1918, two specific lines of endeavor were undertaken. One was the employment by the department, on a whole-time salary basis, of a number of young dentists. These men were sent out into the schools, in the country districts especially, and, up to the first of August of this year, nearly 60 counties have had the privileges of service by the dentists. Their services have been rendered only to school children and the ages have been from 6 to 12, because that is just when most good can be done, and also when work is needed. The work has been totally free to the people and is the first effort of its kind in the United States providing service of this class wholly at public expense on an extensive scale as a business proposition, entirely apart from the realm of philanthropy and charity. To August 1, nearly 45,000 children have been actually treated and at the same time have been personally and specifically instructed in the rudiments of mouth hygiene and care of their teeth. Private dentists in the state as a result of this movement have reported many thousands of children having further treatment. Each dentist is equipped with a portable outfit and some permanent reparative work, of course, is done, but the main stress is laid on prophylaxis. Several permanent dental infirmaries have been opened in the state as a result of the move, the most successful of these being the ones at Durham, Winston-Salem and Salisbury.

### Tonsil and Adenoid Clinics

The matter of getting surgical operations done for children in remote sections was a great deal more difficult problem; but, beginning in the same year, namely, 1918, experiments were made through the grouping up in clubs of several children needing these operations badly and a specialist from a nearby city was requested to go and hold the clinic. A school building, a new courthouse, sometimes a local hospital or any suitable place was equipped as an emergency hospital. Nurses employed by the department were placed in charge and every care possible has been placed about these children. The plan has proved immensely popular, has been successful in the fullest measure. To August 1, more than 3,000 school children have had operations done with only one death, a record that has never been surpassed in any hospital of the United States, with the single exception of Rochester, New York, Tonsil and Adenoid Clinic, modeled after our own plan. The children who are operated on in these clinics have repeated examinations beginning with teachers on through to nurses, frequently the family physician's examination, and winding up with the assistant physician in the clinic and the specialist who does the operating. An emergency hospital equipment is provided with every facility that it is possible to provide for the safety of the children. Clinics have been held to date in more than 40 counties, from Cherokee in the west to Gates in the east. Every class of people has been interested in the clinic, and has been reached through this method. More than 700 of the operations have been done totally free of charge. Others have paid a small fee toward helping defray the actual cost of the work. The dental work has been totally free. The one motto of the whole organization at all times has been to leave no effort untried to reach neglected children, the children on the mountain side, in the caves, and at the head of the creeks, the children who otherwise could not have a chance.

### A Big Success

That the efforts of the department have been successful in that respect may be

## TOWN AND COUNTY CONFERENCE, CHAPEL HILL, SEPTEMBER 19, 20, 21

The program for the first regional National Conference on Town and County Administration is about complete and will be announced in the press next week. From present indications the conference will be a good one, continuing in cross section from the work begun two years ago in the State and County Council.

Among the speakers announced are: Governor Cameron Morrison, Hon. E. C. Brooks, Dr. W. S. Rankin, Mrs. Clarence Johnson, Hon. Baxter Durham, Gallatin Roberts, C. W. Roberts, T. B. Patten, T. B. Eldridge, James Cowan, James Hines, Lionel Weil, J. W. Walker, T. C. Painter, Dr. B. W. Kilgore, W. C. Jones, W. A. McGirt, E. W. Knight, E. C. Branson, Lindsay Warren, and many other North Carolinians.

From outside of the state there will be the Hon. Arthur Pierson of New Jersey, author of the New Jersey Municipal Finance Acts; Mr. H. W. Dodds, secretary of the National Municipal League, Mr. Morris Knowles, City Planner from Pittsburgh; Mr. G. C. Grinalds, City Planner from Baltimore, and others.

Greetings will be read from Hon. Herbert Hoover, Hon. Newton D. Baker, and others interpreting the need for the study and practical working out of problems of local government.

Look for the program in full next week.

illustrated by a quotation taken from the Harnett County News of last June, written by a committee of citizens after a clinic had been held in Harnett county, each of whom had children in the clinic. The resolution states in part:

"Those who accepted the state's offer have received more than a saving in the expense of operation. It was an education. Children of lawyers, school superintendents, manufacturers and every trade lay together, received the same careful attention and hospitality. Every father and mother felt the joy of finding new neighbors to serve and share with. It is the essence of true democracy. Such work should and will receive the heartiest endorsement of every thinking man who sees with his own eyes. To those sections of the state which are yet to be visited by this institution we are offering in behalf of the clinic our unqualified endorsement."

### Tangible Results

The officials and directors in this work down to the last clerk, including the nurses, the dentist, and everybody concerned, have labored long and faithfully in order to iron out the difficulties and to actually reach these children. The whole plan is simply follow-up work for the medical inspection of school children. Instead of being content to follow the routine, the director of the work, as stated in the beginning, has made an honest effort to do something about it, and for the children who need the service all over the state. It would have been much easier to have followed the usual plan and specialize in advice and harp on the intangible educational value, but, as in the past, little could have come of it all. Like any other mighty human agency that ameliorates the conditions of mankind this work has aroused some antagonism on the part of special and private interests, but the great mass of the people of the state have heartily endorsed the work and, by their cooperation, have made it a pronounced success.

### How To Secure It

Any county can get this service by getting (1) the county superintendent of schools and the teachers of the majority of the schools and the county physician or, better, the whole-time health officer interested in really doing something for the children and getting the above named agencies to cooperate with the Bureau of Medical Inspection of Schools of the State Board of Health. It is a work of wonderful possibilities for the children of the coming generation and if carried on to the logical conclusion another draft ten years from to-day would show an entirely different type of young men upon whose shoulders the defense of the country would rest.

## THE STATE BOARD OF HEALTH

### ORGANIZATION

Secretary State Board of Health and State Health Officer.  
Director Public Health Education.  
Superintendent State Sanatorium and Chief Bureau of Tuberculosis.  
Director State Laboratory of Hygiene.  
Deputy State Registrar.  
Chief of Bureau of Medical Inspection of Schools.  
Chief of Bureau of Engineering and Inspection.  
Chief of Bureau of Venereal Diseases.  
Chief of Bureau of Public Health Nursing and Infant Hygiene.  
Director of County Health Work.  
Chief of Bureau of Epidemiology.  
County Health Officers.  
Sanitary Inspectors.  
Public Health Nurses.  
Clinic Surgeons and Dentists.  
Clinic Nurses.  
Public School Teachers.  
Midwives.

### Functions

To maintain an office at the capital.  
To look after the general health interests of the people and be health advisor to the government.  
To advise the government in regard to location, sanitary construction, and management of state institutions.  
To inspect such institutions, report condition, and advise trustees.  
To have direct charge in case of certain epidemics.  
To make diagnostic examinations of certain bacilli.  
To make periodic analysis of water from sources of public supply, and from mineral springs whose water is offered for sale.  
To make microscopic examinations for tuberculosis, and certain other diseases.  
To manufacture and distribute typhoid, diphtheria and other vaccines.  
To maintain a bureau of tuberculosis.  
To enforce the sanitation laws of the state.  
To keep a record of vital statistics and to enforce the vital statistics law.  
To enforce laws for control of contagious diseases, and for the prevention of blindness in infants.  
To administer the law for the prevention of venereal disease.  
To superintend public health nursing in the state, and to give information in the pre- and post-natal care of infants.  
To supervise county health officers in counties cooperating with State Board of Health.  
To direct the physical examination of the school children of the state, and provide clinics for the treatment of diseased tonsils and teeth.  
To publish a monthly bulletin and other educational literature, and to make such reports as may be required by law.

### COUNTY HEALTH WORK

County health work with a whole-time county health officer is a unique department of our state health organization. We have been leading all the states of the Union in this feature of health work for several years. The work began nearly a decade ago with three counties employing whole-time doctors whose business it was to look after the public health, sanitation, and disease prevention in these counties. The experiment proved a success from the beginning, and the State Board of Health, desiring to have more such officers, inaugurated a cooperative scheme between the state and counties in 1917.

Under the new system the state employs a superintendent of county health work with headquarters in Raleigh. At the present time he has working directly under him 23 whole-time county health officers while four counties have whole-time health officers independent of the State Board of Health. Thus we have at present 27 whole-time county health officers in North Carolina.

But there are seventy-three counties in the state which have failed to catch the new vision of disease prevention, or if they have caught it they are not willing to invest their dollars. It is very much to be desired that these 73 counties, which at present have nothing but a quarantine officer, who as a rule does practically no health work, will soon begin a campaign to employ a full-time doctor to look after health conditions and disease prevention.

### How They Can Do It

Although the county health officers in 23 counties are cooperating with the State Board of Health, as a matter of fact they work practically as if there were no supervision. The cooperative feature is mainly financial. For instance if a county wishes to employ a full-time doctor, it can appoint whomever it chooses and secure a flat one thousand dollar supplement from the state. If the county chooses wisely, that is, if it hires an efficient officer, it may get an additional fifteen hundred supplement, a total of \$2,500.

The State Health Board risks its first \$1,000. It has worked out a unit cost plan and if a doctor is fully on the job and turns in enough work above a minimum he can secure the full \$1,500 supplement to the county treasury. The county is paid its pro rata share of the extra \$1,500 solely on the efficiency of the health officer. The state has nothing to say as to whom the county shall employ but it does reward a county which makes a wise choice. Not only that, but the new plan makes it possible for any county, however poor or small, to employ a county health officer, if it only has the desire for such an officer.

### Disease Prevention

The old idea of a doctor's business was to cure sick people. The new idea in medicine is to prevent disease by eliminating the cause. The work of a county health physician is not with sick people so much as it is with preventing people from getting sick and preventing the spreading of contagious diseases. Where they have tended a few cases of sickness they have kept thousands well and able to pursue their daily tasks. A county doctor is an investment that pays big dividends and those counties that see it that way are the ones which are paid.

### What They Are Doing

A county physician's work is largely seasonal. For instance at present all the 27 county officers are busy vaccinating against typhoid fever. In the winter months they are busy with smallpox and diphtheria prevention and at all times they are sentinels on the lookout for every symptom of seasonal and non-seasonal diseases and using scientific methods to prevent both their occurrence and spread. Their work covers the field of communicable disease control such as the control of measles, smallpox, diphtheria, typhoid, scarlet fever, chicken-pox, venereal diseases and tuberculosis. One of their important tasks is to teach people simple ideas about sanitation around the house, the lack of which is the main cause of our sickness. They are busy in infant and maternal hygiene work, school hygiene, adult and home hygiene and care of the sick. In addition they do a great deal of microscopic work in their laboratories, making tests of all kinds as occasion demands. The public health officer is beyond doubt one of the busiest men in the county.

The director of the county health work states that the average county doctor in the typhoid season will vaccinate 2,500 people. During the winter months he will vaccinate upon an average 1,000 people against smallpox and a goodly number against diphtheria and a score of other preventable diseases for which vaccines have recently been discovered.

Only a short time ago the county officer for Sampson county left Clinton at one o'clock in the afternoon, traveled 63 miles and was back at eight o'clock. In the meantime he had vaccinated 901 patients against typhoid. If this is not a record, it is a good afternoon's work and we are betting that Sampson gets her full \$2,500 from the state treasurer. And every county in the state has the same chance. The county officer has proven his value. He is here to stay. If you haven't employed one it is time to begin looking for a good one for he is probably the best investment any county can make.—S. H. H., Jr.