Work was begun in January, 1923, in Cattaraugus County, a typical rural district in the western part of New York State with a population of about 72,000, and in March, 1923, in the City of Syracuse, which has a population of about 190,000. Organization of a demonstration in the City of New York and funds for its support have been authorized by the Fund's Board of Directors. This at present awaits the completion of satisfactory co-operative arrangements between several local, public and private agencies in the Greater City.

The following account of progress in the Cattaraugus County and Syracuse Demonstrations is summarized from reports submitted by the State Charities Aid Association.

### THE RURAL HEALTH DEMONSTRATION

Cattaraugus County was selected as an area for the Rural Health Demonstration in November, 1922. Its demonstration program, which on January 1, 1923, existed only on paper, called for the establishment there of what was to be the first county department of health in the State of New York. The beginning of the year 1924 found the Cattaraugus County Board of Health an established fact, with quarters, equipment and personnel—a material factor in health promotion in the entire county. Dr. Leverett D. Bristol, former Commissioner of Health of the State of Maine, is the County Health Officer, occupying the first position of its kind created in the state.

### The Cattaraugus County Board of Health

The Cattaraugus County Board of Health, with headquarters in Olean, has developed its facilities to serve effectively six administrative districts into which the county has

been divided. Each district station of the Board consists of at least three attractive and well-equipped rooms, one of which serves as the office of the public health nurses of the district, one as a general meeting or waiting room, and one as an examination or clinic room. The use of these quarters is donated by, or the rental largely paid by, the communities in which they are located. Various regularly scheduled diagnostic clinics are held at the stations, and they are centers for other neighborhood health activities. Instruction in child hygiene is given in them, for example, and meetings of mothers' health clubs are held there.

A generalized public health nursing program is being conducted in the county, the nursing staff consisting of one supervisor of nurses, six district head nurses and two assistant nurses. In addition to these staff nurses, seven other public health nurses employed by the Red Cross, local boards of health and school authorities, are co-operating closely with the County Board of Health in the demonstration.

It should be noted that the work of the Cattaraugus County Demonstration is not limited to the activities primarily under the direction of the County Board of Health, but includes or will include those of all of the important agencies engaged in some form of health promotion. In close co-operation with the work of the Department is the county school service, an important unit of the demonstration. Equally noteworthy is the activity of the Cattaraugus County Tuberculosis and Public Health Association, which is carrying out a county-wide program in the prevention and control of tuberculosis, the extension of popular health education, the discovery and treatment of crippled children, and in other ways. The activities of the County Health Board are administered largely through five bureaus.

### Bureaus of the Cattaraugus County Board of Health

Bureau of Records and Reports at Olean, New York. Responsible for collecting, recording, tabulating and interpreting statistical information about the general health conditions in Cattaraugus County and for keeping a record of the development of the demonstration in the county. Mr. Fred L. Thompson, Chief of Bureau.

Laboratory Bureau (Cattaraugus County, Diagnostic Laboratory) at Olean, New York. A general diagnostic laboratory service with chemical and bacteriologic examinations of water, milk and food; bacteriologic investigations of various infectious diseases, including routine diagnosis of cultures; and experimental work in bacteriology and clinical pathology. Dr. J. P. Garen, Director of Laboratory.

Bureau of Tuberculosis at Olean, New York. Diagnostic and consultation service for diseases of the lungs. Visiting nursing service and consultation clinics at district stations. Dr. Stephen A. Douglas, the Director, is also Superintendent of the County Sanatorium.

Bureau of Maternity, Infancy and Child Hygiene being organized at Olean, New York, by a trained public health nurse loaned by the Division of Maternity, Infancy and Child Hygiene of the New York State Department of Health. To organize and supervise pre-natal and child health clinics.

Bureau of Health Education and Publicity at Salamanca, New York. Responsible for the popular dissemination of information intended to further personal health, hygiene and sanitation, and to promote the general health conditions in the county. The Director of this Bureau, Mr. John Armstrong, serves also as executive secretary of the County Tuberculosis and Public Health Association.

#### Tuberculosis Clinics

At the end of February, 1924, the records of the County Department of Health showed 114 known cases of tuberculosis in Cattaraugus County. The total number of cases in the county has been estimated at between 500 and 600. It is evident that there is still a large number of cases of undiscovered tuberculosis in the county, the discovery, treatment and supervision of which is the task of the clinics.

Although inclement winter weather made travel in the county difficult at times. the Health Department has continued to hold tuberculosis clinics in the district stations. During January, ten such clinics were held: five in Olean, one in Ellicottville, two in Salamanca, one in Franklinville, and one in Cattaraugus. Of the 291 patients examined during January and February, forty-two, approximately 14 per cent, were diagnosed as tuberculous and forty-two as suspects of the disease. The persons attending the clinics had in the majority of instances been referred there by their physicians or others who either knew them to be, or suspected them of being, sufferers with tuberculosis. The large percentage of positive cases found among those examined does not, of course, in any sense reflect conditions in the population of the county as a whole.

An effective, though limited, public health nursing service has been furnished to practically the entire county, during the winter. In spite of the difficulties of travel, the nurses made 595 visits to patients during January, and 606 during February, a total of 1,201 for the two months. Twentyfive per cent. of these visits were made to patients suffering with tuberculosis and persons in contact with them, and 22 per cent of the visits were to cases involving maternity care and child hygiene. Their activities in helping to carry out the school hygiene program consumed about 15 per cent of the nurses' time during these two months.

## Pre-natal Care and Child Hygiene

The assignment of a special nurse from the State Department of Health has made it possible recently to prosecute a more effective program in maternity, infancy and child hygiene. With the co-operation of the city authorities and the local Community Chest, two child health clinics were

established in Olean in January, 1924. During the following month, February, 11 child health consultations were held: two in Olean, two in Salamanca, one at each of the other four district stations, and three at other places in the county. At these consultations, a total of 363 children of pre-school age were examined and found to be apparently well. The interest of the general population in this health work is already apparent.

## Typhoid Fever and Other Communicable Diseases

Communicable diseases are usually more prevalent in the winter months, and conditions in Cattaraugus County have proven no exception to the rule. There were 287 cases of infectious diseases reported there during January, 1924, and 179 in February. Of the total cases reported during the two months, 155, or approximately one-third, were afflicted with whooping cough. There were fifty-five cases of scarlet fever and six of diphtheria.

The district public health nurses of the County Department of Health assist the local health officers in the control of communicable diseases. They make inspections, assist in carrying out quarantine regulations, and instruct parents and others (in attendance upon patients in the homes), in the care of those suffering from these diseases. A diagnostic consultation service is furnished by Dr. Leverett D. Bristol, County Health Officer.

There were reported during the two months, however, eighteen cases of typhoid fever. Eleven of these were in the town of Ischua, where there has been, considering the small population of the town (656 in 1920), a rather sharp epidemic. In reporting on this condition Dr. Bristol said, "After looking into conditions myself and talking over the various features involved in the outbreak with the State

District Health Officer. the County Board of Health nurse in that district, and with the local health officer of Ischua, I felt quite certain that suspicion points definitely to a known chronic typhoid carrier living in Ischua as a probable source of the outbreak." Investigation of the typhoid epidemic showed that X, a known typhoid carrier, had been a regular visitor at the home of Y, a resident of Ischua. and that on November 18, 1923, two relatives visited the home of Y, and there had ample opportunity to contract infection. Shortly after this visit both of these members of the Y family became ill with chronic fever, which at the time was not diagnosed. Examination of their blood after recovery, however, showed in the case of one a positive Widal reaction. Investigation of the two Ischua cases first reported as having typhoid fever, showed that the source of their water supply had been contaminated by surface drainage from an open privy. Additional cases followed apparently from direct contact or from water infection secondary to these. The last case of typhoid fever was reported on January 16th and at the end of February it appeared that the outbreak was fully under control. There had been only one death.

## School Hygiene

At the beginning of the fall school term of 1923, it was decided to carry on a campagn for the physical examination of all school children in Cattaraugus County. Because the road travel is usually more difficult in February and March, it was planned to complete the examinations in the rural schools before taking up the work in the cities. By the end of January, 1924, the pupils of 258 rural schools had been examined, a total of 6,859 children. With the rural examinations practically completed, examination of

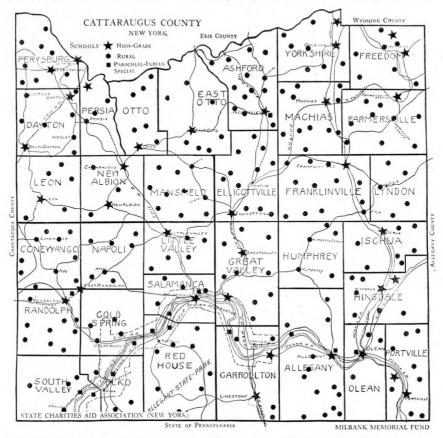
the children in the schools of Olean and Salamanca was begun in February and continued through April.

In instances where examination of the pupils revealed physical defects, the School Health Supervisor continues to bring to the attention of parents, usually by letter, the necessity of securing medical or surgical treatment for the children, suggesting in many instances what care is necessary and how it may be secured. Urgent cases have been followed up by the public health nurses at the district stations, and a complete follow-up of all children noted as having physical defects is planned.

Studies are being made by the director of the county school hygiene program, of the incidence of physical defects among the school children of the county, and charts have been prepared showing the number of major defects found among the rural school children examined. Records of the school health examinations are kept in the office of the county Director of School Hygiene in Olean. They are very valuable either in planning medical care for any individual child who may require it, or in outlining any special efforts which might be warranted by conditions general to certain districts.

As has been pointed out elsewhere, through the office of its unofficial county superintendent of school health, the Cattaraugus County Rural Health Demonstration has here developed for the first time in the State of New York a really effective county-wide harmonious administration of the health of school children. Carried out here on a voluntary basis, the plan has been so readily organized and administered and so apparently worthy of further trial, that the state educational authorities in Albany are considering it for adoption in other counties of New York State, and a

law has already been proposed which would make possible the support of such a county program from county funds.



A physical examination of all school children in Cattaraugus County is being made in connection with the rural demonstration in New York. This map shows the location of schools in the county

### Health Education

As the rural demonstration develops, the program of popular health education begun in 1923 is being extended throughout the county by the County Tuberculosis and Public Health Association. Weekly popular health letters con-

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veying important information about the health of the individual and of the community are addressed to residents of Cattaraugus County through their local newspapers. These letters are signed by the County Health Officer. In January, 1924, alone, 129 such "news releases" were issued to newspapers in the county. These covered a variety of subiects, those on tuberculosis, for example, bearing such titles as: "The Individual Fight Against Tuberculosis," "Tuberculosis Catechism," "Tuberculosis in Childhood" and "Reducing Death from Tuberculosis." It is worthy of note that a number of these articles have been copied by newspapers elsewhere in New York State and outside of the state, a fact which evidences a quickened interest on the part of the general public in the subject of health and in these demonstrations. The plan provides for popular lectures on health and hygiene, and also for the presentation of health films in the schools, churches and motion picture houses of the county. A film, "Working for Dear Life," originally planned for distribution for the period of one month, has created so much interest where shown that it has been kept in use for a period of three months.

## Automobile Costs for Rural Health Work

For rural health work, the automobile is indispensable. The physicians and nurses of the Cattaraugus County Board of Health are using nine machines in carrying on their activities in the county. The demonstration authorities are keeping a cost record of the operation of these cars. Seven Ford coupés, one Ford sedan, and one Dodge sedan are in use. During 1923, the average cost of operating these automobiles, not including depreciation, was five cents a mile. As should be expected, the winter difficulties of travel brought the average mileage cost of maintaining these machines up to 6.3 cents in January and to 8.8 cents

in February. It is anticipated that these records will provide a reliable index to the current cost of automobile operation in a rural county with travel conditions similar to those in Cattaraugus County. The authorities are convinced that mileage costs tend to be considerably higher for inexperienced drivers, and for cars which have previously experienced too long and too hard usage. They believe it more economical to substitute new cars for old ones on which the upkeep is unduly high.

### Migration from Farming Districts

Incidental to the statistical studies which are being made in connection with the New York Health Demonstrations of the Milbank Memorial Fund, interesting material has recently come to notice of the migration in Cattaraugus County from the farming districts to the smaller cities. That the rural population of the United States has been migrating to larger and more congested communities, has been shown for years by the Federal census. In the analysis of the census schedules, however, there has not been so much attention paid to the movements of strictly rural populations to smaller cities.

By special arrangement with the United States Census Bureau, a reclassification by age groupings of the 1910 and 1920 census population schedules for Cattaraugus County, was prepared during 1923. This has made available for Cattaraugus County information not usually prepared by the Bureau. Among other things, this shows that there has been a trend from the rural sections to the villages and small cities of the county. The total population of Cattaraugus County, which is a rural county, decreased from 72,756 in 1915 (when the New York State census was made) to 71,167 in 1920, at the time of the Federal census. Between 1910 and 1920, the Federal figures showed an increase of

over 5,000 in the population of the county. This growth confined itself entirely to the cities. In fact, there was in the rural sections a total decrease of 3,843; while in Olean, for example, there was an increase of 5,763, and in Salamanca, an addition of 3,482.

The age groupings show that the greatest migration has been by persons between five and twenty-four years of age by young men and young women, individually, and by families the majority of whose members were young. The rural population of this age group decreased 12 per cent from 1910 to 1920, a tendency which is noted to be common to all age groups, though not to such a degree. A study of the combined figures for Olean and Salamanca show that these two Cattaraugus County cities have increased by 40 per cent their populations between the ages of five and twenty-four, and here again an increase is noted in all of the age groups.

That more work in maternity and child hygiene must be done in the cities than in the rural sections, is indicated by the fact that more children under five are reported by the Federal census to be living in the cities. In both the 1910 and 1920 records, urban children of all ages up to five outnumber those living in the rural districts.

### THE SYRACUSE HEALTH DEMONSTRATION

During the first quarter of 1924, the Syracuse Department of Health has taken special measures for the control of contagious diseases reported in the city. There have occurred unusually large outbreaks of measles and of scarlet and typhoid fevers, in the checking of which the Department has had the assistance of additional demonstration personnel. The scarlet fever cases, though extensive, have been exceptionally mild. During January, there were 255 cases