PUBLIC HEALTH REPORTS

VOL. 30 JUNE 18, 1915

No. 25

TUBERCULOSIS.

THE MUNICIPAL CARE AND SUPERVISION OF THE TUBERCULOUS.

[A report made to the Monday Evening Club of Washington by its committee on the municipal care and supervision of the tuberculous, May 17, 1915.]

The Monday Evening Club is an organization for the discussion of social welfare questions. The members of its committee on the "Municipal care and supervision of the tuberculous" were John W. Trask, William C. Woodward, George M. Kober, Emile Berliner, and William H. Baldwin. The report of the committee, made May 17, 1915, was as follows:

The purpose of the municipal care and supervision of the tuberculous is twofold:

- 1. To alleviate the sufferings of the sick and to see that they have comfortable surroundings and proper care.
- 2. To prevent the spread of the disease and to protect the well from infection.

The municipality may be looked upon as a group of families and each family as a group of individuals. As the well and competent members of a family should care for the sick and incompetent members, so should the well and competent households of the municipality care for the sick and incompetent households when they can not properly care for themselves. The responsibilities of the municipality to the sick and incompetent are no less than the responsibilities of the family. This is the underlying thought which prompts the community to care for its sick and to see that they are provided for.

To see that the sick have proper care and attention, it is necessary that their existence be known and that some means of ascertaining their needs be provided. The occurrence of cases can be ascertained only by having practicing physicians report the cases in their practice to the health department. Having secured information of the tuberculous in the community through the reports of physicians, their needs can be ascertained by having a competent person visit each case for the purpose.

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The Care of the Sick.

Having ascertained from physicians' reports the tuberculous individuals in the community, the care of patients whose financial resources are such that they are unable to advantageously and properly care for themselves requires the following:

- 1. A sanatorium for the care of both the advanced and early cases.
- 2. Dispensaries where persons who are not feeling well can go and be physically examined or where they can go and be examined periodically whether they are feeling well or not. Tuberculous persons whom it is not desirable or practicable to send to the sanatorium can be properly cared for through the medium of these dispensaries.

In connection with the dispensaries, there should be a medical staff which could visit the infected households and give medical supervision to the sick who, for one reason or another, are not cared for at the sanatorium or the dispensary. This could be done in cooperation with the nursing staff.

- 3. A corps of nurses to work in conjunction with the dispensaries, to do follow-up work on cases, and to carry on educational work in infected households.
 - 4. Centralized open-air schools for tuberculous children.

At this point one is apt to ask, if the open-air school will do so much for the child that is tuberculous, is it not equally desirable for the physically sound child? The only logical answer is that all schools should be open-air schools, that it is entirely illogical to give only the sick the advantages of a suitable environment.

In connection with open-air schools, children who go to school insufficiently fed and clothed should be given necessary food and suitable clothing.

- 5. In connection with the tuberculous attending the open-air schools and also those treated by the dispensaries, the municipality should furnish to these pupils of the schools and patients of the dispensaries suitable sleeping arrangements, such as adjustable sleeping porches or sleeping hoods, or other means to carry on during the hours of sleep the benefits of an outdoor life, whenever the families of the patients are unable to provide them.
- 6. There should be a special person or group of persons whose duty it is to investigate the circumstances of the patients, to ascertain their economic condition and needs, to find suitable work for those who are able to work and need to work, and to see that proper assistance is provided to correct faulty home conditions.

The Protection of the Well.

It is fully as much the duty of the municipality to protect the well from disease as it is to care for the sick. This is especially so as it relates to those diseases which are communicable and which the individual is liable to contract because of his direct or indirect association with other individuals in the community. The individual can not protect himself from diseases of this character. The danger of infection from the sick of whose existence one does not know is frequently far greater than the danger of infection from the sick of whom one knows in his own household or among his associates. The individual can protect himself from the communicable diseases of the sick of whom he knows, but is in large measure helpless to protect himself from the sick of whose existence he is unaware. The latter is the function and responsibility of the community.

Studies of the spread of tuberculosis through the medium of milk have conclusively shown that tuberculosis in children is frequently caused by the use of milk from infected cows or infected herds. In these instances the infecting organism is usually of the bovine type and the infection in the child usually of the glands. The spread of infection in this manner is sufficiently common and serious in its consequences to indicate the necessity of preventing the spread of the disease by this route.

The only safe milk is milk from tuberculin tested dairy herds. As a further precaution, however, such milk should be heated to destroy chance infection. For a municipality it should be pasteurized under competent supervision. By "tuberculin tested herd" is not meant a herd which at one time was subjected to the tuberculin test, but a herd which is periodically (once a year, for example) subjected to the test and to which no additions are made except of cows proving negative to the tuberculin test.

Common drinking cups should be prohibited in public places.

Summary.

In a municipality provision should be made for the following institutions and work in connection with the care and supervision of the tuberculous:

- 1. Practicing physicians should report to the health department all cases of tuberculosis, or of suspected tuberculosis, found by them among their patients. Others should also be encouraged to report suspected cases in their families.
 - 2. A sanatorium for the care of advanced and early cases.
- 3. Dispensaries for the making of physical examinations and diagnoses, and for the treatment of those cases of tuberculosis suitable for dispensary treatment.

- 4. A corps of nurses to work in conjunction with the dispensaries, to carry on educational work in the homes, and to supervise the care of patients in the homes.
 - 5. Open-air schools for tuberculous children.
- 6. In the instance of patients not taken care of in the sanatorium, the community should furnish suitable food, clothing, and sleeping arrangements when families of the patients are unable to supply them.
- 7. Some person should be provided whose duty shall be to investigate the economic condition and needs of all tuberculous persons.
- 8. The condition and status of tuberculous persons should at all times be known to the health department. The place and kind of work of those occupied should be known.

Cognizance should be taken of the physical condition of all members of infected households, especial attention being paid to signs and symptoms of infection in members other than the subject of the central case. Record should be made of the spread of infection in households.

- 9. The relationship of the municipality to the tuberculous should be one of helpfulness and consideration. The individual infected with tuberculosis should look with a feeling of confidence to the health department as a source from which help and advice can be obtained.
- 10. To prevent the spread of tuberculosis through milk, all milk sold in a municipality should be from tuberculin tested herds and pasteurized.

INTERSTATE MIGRATION OF TUBERCULOUS PERSONS.

ITS BEARING ON THE PUBLIC HEALTH, WITH SPECIAL REFERENCE TO THE STATES OF ARIZONA AND COLORADO.

By A. J. LANZA, Passed Assistant Surgeon, United States Public Health Service.

The following report forms part of an investigation carried on by the United States Public Health Service regarding the interstate migration of tuberculous persons. The report is based upon studies and observations made in the States of Arizona and Colorado, covering a period of eight months from June, 1914.

The migration of tuberculous persons to certain States in the southwest United States is one of the most interesting and complex public health problems. This phenomenon has assumed a status of vital importance to both the migrators and the communities receiving them, presenting as it does medical, humanitarian, and sociological features.

While migratory health seekers are more or less scattered over the two States, the effects of their migration are most evident in rather

sharply defined areas, namely, Denver and Colorado Springs in Colorado, and Phoenix, Tucson, and Yuma in Arizona. Remedial measures designed to meet adverse conditions produced by such migration, are confined to these areas. However, aside from a limited moral influence that can be exerted in a few specific cases only, these southwest communities are helpless to control the migration itself. What might be termed a negative legal status is responsible for the present inability of these places to cope with the difficulties that confront them. An understanding of this phase of the tuberculosis situation is necessary to an adequate comprehension of the situation.

In this report only those features of the matter in hand are considered which have a definite bearing on the public health and have given rise to certain unfavorable conditions that demand attention and relief. No one familiar with the southwest can fail to realize the vast debt it owes to the health seeker. Lawyers, physicians, merchants, and men in all trades and professions, who have become prominent in their own line or who, as successful and useful citizens, have built up the cities and towns of Arizona and Colorado and are still contributing their good influence, are included among the health The thousands of men and women who have found health and material success in the southwest have been, and are still, a potent force in its development. It is not with these that this report deals, but rather with those who, in their desire to emulate the example of the fortunate ones, have met misfortune and defeat. The endeavor to help these latter calls forth the efforts of not only the physician but the sociologist. It is doubtful whether the needs of the poor or indigent consumptive do not lie rather within the field of the sociologist than that of the physician. At least, the physician unappreciative of, or not in sympathy with, the sociological side of the subject, will work blindly when he comes in contact with it.

Motives and Causes for the Migration of Consumptives.

The motives or causes that lead consumptives to the Southwest in search of health may be grouped under three heads: First, the instinct to move; second, the fame of Colorado and Arizona as health resorts; and third, definite advice to migrate.

There is an instinctive desire on the part of most consumptives to move—to get away from the place where they believe their disease was contracted. They feel that if they can only get to the mountains or "out West where the air is pure," they will recover. To go to some place other than the one he is in is often the main desire of the consumptive, especially when he has but recently learned of his affliction, or feels himself going downhill. Naturally, he tends to travel to those places most advertised and renowned as being favor-

able to the cure of consumption. Colorado and Arizona receive a large portion, if not the majority, of migrating consumptives, being especially well known as having an ideal climate and affording the example of thousands of persons who have regained health in those States, many of whom have returned to their homes to testify to the value of the Southwest as a health resort. Denver has an added popularity owing to the prevailing impression regarding the value of altitudes. Many communities in the Southwest, in the effort to "boost" their localities and attract industrial enterprises, have extensively advertised their advantages of climate and location, with the result of bringing to them consumptives, both rich and poor.

Over and above these first two causes is the definite advice of physicians or others to whom the consumptive may turn for help while still at home. Laymen who venture to advise friends or relatives to "go out West" do so with that well-meaning ignorance that produces so much trouble wherever manifested. Physicians who advise their patients to go to Colorado or Arizona do so because they consider only the medical points at issue, and fail, largely or entirely, to appreciate the sociological features in each case—the patient's finances, the opportunities for him to earn his living in Colorado or Arizona at the same profession or trade which he practices in his own community, what he can do to earn his living at some other occupation if necessary, and what will become of him if his physical condition becomes worse. Unappreciative also of the facilities for the care of tuberculous patients that may be found in their own community or State, and yielding to the desires of the patient himself, many physicians advise a consumptive patient to go "out West." Unmindful of all these considerations himself, generally in a state of terror and apprehension when the diagnosis is first announced to him, and with this advice of physician, relative, or friend ringing in his ears, the consumptive hurries to some southwest town, sacrificing business, financial interests, means of livelihood, anything that will delay his departure for the country where, as he firmly believes, a few months in the bracing climate and "pure air" will put him on his feet again.

Where his financial resources are ample, there is no reason why the consumptive patient should not migrate, but no lack of adequate financial resource, no hindrance of family or ignorance of the method of livelihood in the future can restrain him from speeding to a western health resort when once the idea seizes him and he can secure sufficient money to pay traveling expenses. The fact that he may have but a few dollars and a dependent family does not deter him. In a short time he will be well again and able to earn his living; his physician and friends told him so, and he has known all his life that consumptives who would have died at home get well in the

West. Why then should he risk his life by staying at home? These are the ideas and opinions that are continually quoted by consumptives when questioned as to the reasons that brought them west. Probably a fair number of health seekers coming to Colorado and Arizona without adequate funds do manage to find work and to prosper physically and materially. They and the people who go west provided with sufficient means to support them in their search for health may be compared to the lucky ones in a gold rush. They stand out more or less conspicuously and overshadow the less fortunate, who are forgotten.

Few consumptives, when first acquainted with the nature of their disease, realize the length of time that must be spent in "chasing the cure" before they will be able to resume their occupations. They do not know that from a year to two years of proper living and care are necessary before a person having an active case of pulmonary tuberculosis is justified in again taking up the battle of life. Failure to realize this also means failure to realize the disadvantages of migration and is chiefly responsible for the distress that overtakes so many migrating consumptives.

Colorado or Arizona offers the consumptive a delightful climate, justly considered as most advantageous in aiding in the recovery of tuberculous cases. Denver and Colorado Springs combine climate with the comforts of the larger cities. Climate is the advantage these two States have to offer. This advantage is purely relative. It exists for the person only who is financially able to enjoy it. It does not exist for the consumptive who can obtain it only at the cost of peace of mind and constant worry as to how he will support himself and his family. When climate is purchased at the cost of three meals a day, a decent place to sleep, or exposure of wife and children in unsuitable living quarters, it ceases to be an asset.

The consumptive of moderate means, the salaried man or wage earner without outside resources, perhaps encumbered with a family, when he migrates, say, to Denver, is first of all a stranger in a strange land. He must secure a decent place to live, where his chances of recovery are good as far as cleanliness and ventilation are concerned. There must be to wife and children no risk of exposure, if he has brought them with him. He and his family must be properly fed and clothed, especially himself, and from time to time he will probably need medical attention. There may be emergency expenses, such as may arise from a hemorrhage. Unless his savings are adequate to meet such expenses for at least a year, the consumptive has to contend with worry, which is as harmful in these cases as the disease itself. If he worries about the welfare of himself and his family, it is almost certain that he will resume work before he should do so, and he faces an early breakdown. In any event, when he does

resume work he may find that his earning power has been impaired, and, if his occupation lies along ordinary lines, he may be months in getting work. Furthermore, in Denver he is in a large and prosperous city, it is true, but not a city offering many opportunities for employment in industrial or manufacturing lines. It is a city without many chances for the consumptive employee in any line.

These are the conditions if he progresses favorably, but suppose he does not, how much must all these disadvantages be intensified? Unless the health seeker is so situated that his finances are sufficient to reasonably provide against these obstacles, he has absolutely no right to leave home. Against these obstacles he can balance but one asset-climate. There are certain psychic advantages in travel and change of location, but they do not amount to much for the man who is wondering what he will do when his money is gone. To be sure, most of the disadvantages above enumerated exist everywhere, except as pertains to the opportunities for employment, but no reasonable person will maintain that, having burned his bridges behind him, the migratory health seeker is better fitted to encounter these disadvantages away from home, and where, if misfortune overtakes him, he has no friends to turn to and no just claim upon the community. And when he must finally appeal for help he faces the return to his home of himself and his family as the wards of some charitable organization, with his money and his prospects gone, and his health, and perhaps his self-respect, permanently injured.

Classification of Migratory Consumptives.

The migratory consumptives may be divided, for purposes of study, into four classes. First, consumptives of wealth or ample means, who are a financial and otherwise valuable asset to the community. Second, consumptives of moderate means, who may become valuable to the community if they do well and recover sufficiently to resume work and take an active interest in local affairs before their money is exhausted. Third, indigent consumptives, including those who arrive as indigents and those who become such after arrival. Fourth, the tuberculous tramp.

In the first two classes are included those who have materially aided in the progress and building up of the southwest. The third and fourth classes comprise those consumptives whose care and protection now furnish such serious problems to the communities of Colorado and Arizona. Each of these classes may be subdivided into cases hopeless on arrival, favorable cases, and the doubtful cases that will do well if not confronted by an untoward emergency or misfortune. It is along the general lines of this division into four classes that all effort for the relief of present conditions must be directed, the division being a sociological rather than a medical one. The

situation that confronts the authorities in their efforts to help the consumptive who needs assistance is more often not what shall we do for this person, but who will bear the cost of doing it and where can it best be done?

The consumptive of the first class furnishes little or no material for study. Naturally, he will get good medical attention, and living under first-class conditions he will not be a menace to his fellow man. If he improves and does not return home, he will be an important addition to the community where he settles.

The second class of consumptives furnishes problems peculiar to itself. In this class are included all grades, both social and financial. In general, it may be stated to include those whose migration in search of health implies a certain amount of sacrifice and financial risk. This class, after migrating, while far from being in want or any immediate danger of want is yet never free from a certain definite hazard of failure, not only physical but financial. Comprising as it does the better elements of society, this second class has most to lose and runs the greatest risk in migrating. For example, an insurance agent, a bank clerk, or a skilled mechanic, finding he has moderately advanced tuberculosis and advised to go west, arrives in Denver with his wife and, say, two children. He has turned his available assets into cash, including probably his life insurance, and has anywhere from \$800 to \$1,200, more or less. He finds a place to live, a little more crowded and not so comfortable as at home because he feels that he has to economize. After eight or ten months, when his money begins to run low, he may be able to go to work, and if he is successful in finding it, may prosper. If his health does not improve sufficiently and he has a breakdown, his money dwindles, privations come, and his wife has to turn to and help support the family. Once this stage is reached, things go from bad to worse, because the family circumstances are no longer favorable for the improvement of a tuberculous member. Friends and relatives at home are called upon, with poor results after the first one or two occasions. These people have too much pride and independence to seek charitable help from either the municipality or other organized body until they are absolutely driven to it, and by that time any help that is given them is merely palliative as far as the consumptive is concerned.

Not many of this second class are enrolled on the books of the charitable organizations. More often, when they are at the end of their resources, they manage to get together enough money to get home and die there, leaving behind an impoverished and usually infected family. If they die away from home the family is dependent upon a municipality upon which it has little or no claim.

This example can be multiplied indefinitely for every kind of salaried worker or wage earner; many get well; many do not.

The factors that work against their recovery are often within their control did they but realize it. They lack, mostly, a proper knowledge of the nature of their disease and proper medical supervision. The first deficiency is the fault of the physician or physicians who treated them at the beginning of their illness; the second is often due to motives of economy. During this investigation, a thing that was very noticeable was the vast ignorance of tuberculosis displayed by the people afflicted with it, although otherwise intelligent and educated. Not merely were they ignorant of what they should do, but they had acquired a number of vicious ideas which they endeavored to put into practice. This lack of knowledge and this false knowledge are chiefly responsible for the misery and suffering of those people who have migrated and who should have stayed at home. The blame for this must, in part at least, be charged against the medical profession.

Some of the second class of consumptives drift into the indigent class, and are considered under that head.

Extent of Migration.

The extent of the migration of consumptives is almost entirely a matter of conjecture, owing to the large number who never figure in any sort of official statistics. More than any other community in the southwest, Denver has become the Mecca of the health seeker. Its location, size, and other attractive features found only in large cities, have all contributed to make it the center for the traveling consumptive. Also, on account of its size, in no other city in Arizona or Colorado are the untoward effects of health migration so evident. For these reasons Denver was chosen as the field for a special study of the question at issue in addition to the general consideration of the subject in the two States.

The records of the board of health of Denver show that in 1905 there were 698 deaths from tuberculosis in all its forms. In 46 of these fatal cases the disease was reported to have developed in the State. In 1906 there were 704 deaths from tuberculosis, 84 of which were in cases reported to have developed in the State. In 1907 there were 695 deaths from tuberculosis, and in 95 of the cases the disease was contracted in the State. In 1908 the figures were 729, and 95 respectively; in 1909, they were 754 and 130; and in 1910, 690 and 90. In 1911 there were 656 deaths from tuberculosis all told, and in 1912, 662; 1913 showed 560 deaths from imported tuberculosis and 73 in cases native to the State.

During 1914 there were 566 deaths from tuberculosis, 74 of which were due to disease contracted in the State, and 388 to disease contracted out of the State; in 104 the origin of the disease was unknown. Previous to 1905, before record was made as to the origin of tuber-

culosis in persons dying of the disease, the number slowly increased from 435 deaths in 1893 to 667 in 1904. The population of Denver in 1910 was 214,973, and it has increased since then by about 8,000 annually, to 245,523 in 1914.

Effects of Travel on Tuberculous Persons.

The effects of travel upon the consumptive himself range from practically none to a severe setback, depending on his condition and the amount of comfort with which he can travel. Travel for considerable distances is, at its best, a severe tax on the advanced consumptive. Where the consumptive has no fever and does not need waiting on, travel for a day or so will exert little influence on his disease. The advanced case, with fever and evident symptoms, should never travel unless it is imperative, and then he should have some one to take care of him.

Changes of altitude, especially where there is an ascent from sea level to a height of five or six thousand feet, are not devoid of risk. Such changes, when sudden, may throw a strain on the respiratory or circulatory system that will overcome the balance of safety. All cases of active tuberculosis should rest for several days when they first arrive at a high altitude until they have become accustomed to the change. It is not uncommon on examining a patient recently arrived in Denver to find an exacerbation of his condition, as compared with records of examinations made just before he started on The danger of extending the area of infection is a real his journey. one, and threatens most those who from ignorance or necessity fail to take proper rest on arrival. This was evident in various patients examined at the Municipal Dispensary in Denver, who had arrived shortly before and who had been walking the streets looking for employment. They showed sudden increase in the amount of involvement and in the severity of their symptoms.

The Indigent Tuberculous.

Those migrating consumptives who arrive in the Southwest as indigents, or become such soon after arrival, have so far furnished all the medico-sociological problems that have engaged the attention of the authorities. Relief for members of the second class is still a matter of uncertainty or sporadic effort, but the indigents by their number and the urgency of their needs have compelled a putting forth of strenuous effort both by municipal and private charities.

By indigents we mean those people who migrate for their health and arrive at their destination practically without funds, or with so little money that it is merely a matter of time before the community has to provide for them. Some of the cases in class 2 who become

¹ This report on indigents is based on a study of the subject in Denver.

unfortunate and do not return home get into the indigent class eventually. The poorer classes of wage earners comprise the greater part of the indigents, people who, misled by ignorance and false hopes, believe that once in Denver their health will speedily return and the problem of making a living will be easily solved. For them there are absolutely no advantages in migration. The disadvantages are emphasized at every turn, and their effects are sure and speedy. These persons arrive singly or with their families with from a few dollars to a hundred dollars, and look for work when they should be at rest. If they find work, a short time spent at it usually disables them completely, and, with money gone, they turn to the city for help.

In Denver, the municipal dispensary furnishes medical aid and advice to the poor consumptive, and those needing hospital treatment are sent to the City and County Hospital and later, perhaps, to the poor farm. Material help is furnished by several agencies that have a working agreement between them. The municipal department of charities and correction provides for those who are legally entitled to assistance and also to single men regardless of legal restrictions. The United Charities of Denver takes care of families not entitled to municipal relief. The Jewish Social Service Federation takes care of the Jewish cases, regardless of legal status, with some exceptions. When the Associated Charities once assumes the care of a family, they continue to hold it even after that family acquires a settlement ' in Denver.

Relief was furnished indigent consumptives during 1914 by various agencies as follows:

Number of individuals assisted.

Municipal dispensary	342
Associated charities	
Department of charities and corrections	189
The Craig Colony	165
The Visiting Nurse Association	
City and County Hospital	285
Total	1 149

Eliminating duplication in the above, there are left something over 900 indigents who were helped by the community at large, not including those receiving help from the Jewish Social Service Federation. This is indeed a formidable showing. Unfortunately, records for previous years can not be given for some of the above, so there is no possibility of comparison in that regard. Having consulted every available source of information, the writer has concluded that the annual migration of indigent consumptives to Denver is about 400.

^{1 &}quot;Settlement—A residence under such circumstances as to entitle a person to support or assistance in case of becoming a pauper."—Bouvier's Law Dict.

The migration of other consumptives, on a very conservative estimate, will reach at least 2,000, but the actual number is probably far in excess of this.

Before the work of these organizations is considered, some of the legal difficulties and restrictions that surround the relief of the indigent tuberculous should be understood.

Laws of settlement.—A settlement law is effective only within the boundaries of the State which enacts it. The tuberculous indigent who acquires a settlement in Colorado, even though he be a burden on the community during his entire stay, loses his settlement in his home State. The cases in the appendix show some of the difficulties encountered in dealing with indigent persons who go from one State to another in search of health. Although such a person has been a burden upon the city of Denver since his arrival, from a cause well defined and in operation long before such arrival, Denver must continue to support him, and he has no claim on his native town or State after acquiring a settlement in Colorado.

Transportation agreements.—Most of the organized charitable societies throughout the country have signed the "transportation agreement"; that is, they agree not to ship or pass on an indigent to some other town or city without first notifying, and gaining the consent of, the organization that will have to assume responsibility for the indigent when he arrives. Municipal departments of charity are also signing this agreement though there are still a good many that have not done so. Most of the poor consumptives arriving in Denver come on their own initiative or with the aid of friends, relatives, their lodges or church societies, and occasionally of the authorities of some of the smaller towns. The transportation agreement, therefore, binds the Denver authorities, while it does not adequately protect them.

It would seem, therefore, that the fundamental needs are proper settlement laws and protection from the indiscriminate transportation of tuberculous indigents.

Denver and other southwest communities are receiving constantly an influx of poor consumptives. These add nothing to their new abiding places, gain nothing for themselves by migrating, and in the course of such migration lessen their own chances for recovery, contribute constantly to the tuberculous population by infecting their families and those with whom they come into intimate contact, and, aside from the fact that they are imposing an unfair load on new and growing communities, add continually to the burden of tuberculosis and consequent poverty that the country as a whole has to bear. To alleviate this unfavorable condition aid must be sought from the law, but the present legal restrictions tend to favor such migration rather than to prevent it.

First. As a preface to the two points at issue—settlement laws and transportation of indigents—the handling of tuberculous indigents and the relief of tuberculous poor, either medical or material, are essentially municipal functions and should never be left to private individuals or organizations. In these cases we are dealing with persons afflicted with a serious disease, potentially able to spread infection and especially dangerous to those in immediate contact with them. Their supervision and control demand official authority, and other agencies can not successfully control them. It so happens that the lack of a progressive spirit on the part of city officials has forced private individuals and societies to assume, in part or in whole, the responsibilities that properly belong to the municipality, but this is not an ideal condition by any means. When this work is done in a sound and official manner, we will have a definite and competent basis on which to conduct further improvements. This is not in any way a criticism of the fine and worthy work that is being done by the charitable organizations of Colorado and Arizona, but the fact remains that this work should not be left to them, and they themselves often feel the lack of proper authority.

Second. When it becomes necessary to furnish relief, medical or material, to a consumptive who has migrated to Denver (or elsewhere) in search of health, after having established the legal residence of that consumptive prior to such migration, the municipality of Denver should be in a position to charge against his own State the expenses of such relief regardless of the length of time over which it extends. This repayment should also include railroad fare when it is necessary or advisable to return the consumptive or his family to their home. It is possible that when this question has received the consideration that it demands, it may appear just legally to compel the return of an indigent consumptive, provided the trip may be taken without injury to the patient.

Over and above these considerations, which pertain to the relief of migratory and indigent consumptives from a purely local point of view, it must be remembered that such migration from other States into Colorado and Arizona is essentially an interstate matter.

The statement is not infrequently made in Colorado and Arizona that after all, these States owe their progress, wealth, and development to the health seeker, and that the least return the citizens of these States can make is to contribute to their charities, municipal and private, sufficient money to relieve tuberculous indigents who have been attracted to them. There might be some reason in this if the receiving of charitable aid under such circumstances were for the good of the consumptive, but no reasonable person can maintain that it is better for a consumptive to be "down and out" in a strange place, burdened perhaps with the care of a family for whom he can

no longer provide, than it is to be at home where the need for relief may not occur and where he is eligible for treatment in a State sanatorium, toward the upkeep of which he has probably contributed in the way of taxes.

Relief of Tuberculous Indigents in Denver.

The Municipal Dispensary was opened in March, 1914. From that time to December 31, 342 patients were treated there, 268 males and 74 females. Their length of stay in the State previous to applying for assistance, was as follows:

In Colorado over one year	114
Six months to one year	47
Three months to six months	
One month to three months.	22
One week to one month	21
Less than one week.	16

One hundred and fourteen patients had been in Colorado more than a year, though all had come with tuberculosis, and many had been dependent on outside aid for a considerable time previous. One hundred and twenty-eight cases in all had been in the city and State less than a year. There were 50 more cases in which there was no record of stay, but all were imported. Old inhabitants, miners, homesteaders, and the like numbered but 30, and 5 out of the total number were born in Colorado, including 1 child. About 50 were sent to the City and County Hospital. Thus, of the total 342, 282 were clearly imported, 30 were doubtful, and 30 had apparently contracted the disease in the State.

The City and County Hospital, during the year 1914, treated 285 cases. About 50 of these are included in the above enumeration, leaving 235, nearly all of which were imported cases and also indigent.

The Craig Colony, so called, had during the year 1913, 126 admissions, and during the year 1914, 165 admissions, with an average age of 36. Practically all were migratory health seekers; all were men, and according to the rules of the institution, no one on entering could be possessed of more than \$25. Not more than 3 had been in the City and County Hospital, and, as far as is known, there is no further duplication in these figures.

The Associated Charities, in 1911, assisted 195 tuberculous cases, including transient men (in later years taken care of by the Department of Charities and Correction). These were 13.56 per cent of all cases and they cost \$315, not including clothes, shoes, and other help.

In 1912 there were 122 new tuberculous cases and 27 recurrent, including transient men. The tuberculous numbered 10.15 per cent

of all cases, and \$391 were expended on them, besides clothing and other help.

In 1913 there were 47 new cases and 20 recurrent, a total of 67, transient men no longer included. This was 10.21 per cent of all cases and cost \$419, exclusive of other help.

During 1914 there were 58 cases assisted, of which 47 were new; 10.28 per cent of all the cases were tuberculous, and the cash expenditure for their care was \$314. The work of this association during 1913 and 1914 was confined to families, so the number of tuberculous cases represented about one-third the actual number to whom relief was given on that account, nor was the cash expenditure by any means all the help given.

The Visiting Nurse Association in 1911 attended 110 tuberculous cases; in 1912, 241 tuberculous cases; in 1913, 85 tuberculous cases; and in 1914, 110 tuberculous cases. This association estimates that about one-half their cases are original and one-half referred by other charities. To be sure, not all these cases are indigent, but they have all reached the point where they require assistance from the community.

During the year 1914 the Department of Charities and Correction handled 189 cases of tuberculosis, involving 470 individuals. There were 93 men without families and 8 women who were alone. The remaining 88 cases were in families having together 369 individuals. Of the total number of cases, 58 had been in Denver less than one year and 78 between one and five years. Eighteen of the remainder had also come from other States. Fifty-three were in addition treated at the City and County Hospital or the poor farm, or both. On these consumptives and their families there was expended by this department \$3,800.40, which does not include their care at the hospital or the poor farm.

While it is difficult to form a comparison with previous years, the general opinion of the various charitable agencies was that the burden of indigent tuberculosis was increasing yearly, or, at least, was more apparent and gave them more trouble than formerly.

The Tuberculous Tramp.

Tuberculous tramps are usually young men who wander from one place to the other in the southwest, working when they are able and can get a job. When not working they are a burden on the particular locality they happen to be in. At any time their ability to work is below par, and as the work they can get is usually such as requires considerable bodily strength, they are not able to support themselves continuously. They appeared to be more prominent in Arizona communities, whither they flock in the winter

time, leaving by passing freight trains bound for Colorado or California when the hot weather comes on. In Denver they blend more readily with the other indigents and are not so easy to determine. The attending physician of the Craig Colony in Denver thinks that not more than 10 per cent of the men there could be classed as tuberculous tramps, and out of the 342 patients at the Municipal Dispensary only 8 could be so defined from the information they themselves gave.

The extent of the wanderings of the tuberculous tramps is often remarkable, as is the length of time they can keep going before they are finally disabled. As in the case of other indigents, when they apply at the office of any organized charity an effort is made to get in touch with their relatives and seek assistance from their homes, but by the time an answer is received, the tuberculous tramp is generally on his way elsewhere. From motives of shame he is apt to travel under a false name, and as long as he is able to keep on his feet the main reason for his applying to the organized charities is to secure transportation to some other town. The smaller communities are often glad to get rid of him at this price, but where the transportation agreement is in operation such assistance is refused, whereupon he frequently sinks out of sight. These tuberculous tramps are a pitiable and miserable class, always looking for some other place where they feel sure they will improve. When in Denver they think they can get a light job in El Paso; when in El Paso, Phoenix or Tucson offers most hope, and thus they circle around until they land at some county hospital for their final illness. Some get a little money from home occasionally, but on the whole their maintenance is always at the expense of the community through which they are passing. It would be to the interest of all concerned if it were possible to place these men in a sanatorium, but lack both of a suitable place and money to keep them would prevent any such action on the part of county health officers even were there legal justification for their restraint. They wander from place to place, continually impairing their chances for ultimate recovery and continually contributing their quota to the spread of tuberculous infection. should be unlawful to pass these men from one place to another,1 and the method of caring for them should be the same as outlined for other indigents.

Arizona.

There is no State institution for consumptives in Arizona, and but one county tuberculosis hospital, that of Maricopa County (Phoenix). The private hospitals throughout the State constantly do charitable work by taking in needy consumptives, but it was not possible to make an estimate of the amount of such charity.

During the year ended June 30, 1910, there were 430 deaths from all forms of tuberculosis in the State recorded as being in imported cases and 57 deaths recorded as of native whites of the State; 261 deaths from tuberculosis occurred in Maricopa County.

During the year ended June 30, 1911, there were 432 deaths from imported cases of tuberculosis and 63 recorded as of native whites; 255 deaths from tuberculosis occurred in Maricopa County.

During the calendar year 1912 there were 461 deaths from imported tuberculosis and 46 among native whites, with 287 deaths from tuberculosis in Maricopa County.

During the calendar year 1913 there were 502 deaths in imported cases of tuberculosis and 116 deaths from tuberculosis recorded as in native whites, showing a slight increase in both imported cases and native whites from year to year.

The Maricopa County tuberculosis hospital, during the last three months of 1911, took care of 42 patients; during 1912, of 92 patients, at a cost of \$7,745; and during 1913, of 101 patients at a cost of \$5,704. In 1912 there was 1 and in 1913 there were 4 Mexican inmates; all other cases were imported. During 1913 there was expended in railroad fares \$1,534, making a total of \$7,238 expended in county funds on indigent and migratory consumptives.

The Associated Charities of Phoenix, during the year from April 1, 1913, to April 1, 1914, received 690 applications for relief from indigent consumptives, expending on these about \$4,000 (about 30 per cent of their total available funds). Railroad fare home took about one-fifth of this sum. The Phoenix authorities estimate the annual migration of consumptives to Phoenix at about 1,200, including all classes. Their experience led them to believe that most of the indigents did not become such until after six months' stay.

The Sisters' Hospital in Phoenix does considerable relief work among poor consumptives requiring hospital care, and St. Luke's Home (a private institution) also takes in some free patients.

There is a very apparent necessity, in Phoenix, for a free municipal dispensary for consumptives, but the city authorities and physicians who were questioned were opposed to the idea on the ground that it would attract so many indigent consumptives to their city as to swamp their resources. As it is, the physicians and the hospitals seem to be ever ready to extend their services at the request of the Associated Charities. The financial burden imposed by migratory and indigent health seekers would appear to be heavier in Phoenix than elsewhere, and it is not surprising that that city should endeavor to discourage such migration as much as possible by withholding aid. The population of Phoenix, in 1910, was 11,134.

No provision is made for indigent consumptives in Pima County (Tucson) except admission to the Sisters' Hospital on contract with

the county, and this is done only where it can not possibly be avoided. The general plan of both the county authorities and the Associated Charities is to discourage, and refrain from assisting, these people as much as possible. Near Tucson is a tent colony, called Tentville, which in summer time shelters about 500 people, estimated to be about one-third of the number of health seekers that come to Tucson annually. Of the inhabitants of Tentville 99 per cent are tuberculous and 95 per cent are indigent (estimate of the Associated Charities). The sanitary conditions in Tentville are wretched. and while the Associated Charities have done what they can, limited financial resources have prevented them from furnishing more than milk and clothes to these unfortunates; they are endeavoring (June, 1914) to secure the services of a visiting nurse for Tentville for the winter of 1914-15. The mayor and the head of the Associated Charities both estimated that Pima County expended from \$9,000 to \$10,000 a year, mostly in the form of public charities, for the relief of indigent consumptives. As in Phoenix, and for the same reason, there was a strong sentiment against any dispensary or municipal institution for tuberculosis, unless it was to be financed by the State. The physicians are at the call of the Associated Charities. The population of Tucson, census 1910, was 13,193.

Spread of Infection During Travel and After.

The spread of infection by migratory consumptives on railroad trains is probably inconsequential. The care that is taken to keep sleeping cars in a clean and sanitary condition probably eliminates them as sources of tuberculous infection. The common drinking cup and the common towel are things of the past on trains.

Hotels may act as spreaders of infection having its source in the passing guest, according to their cleanliness, but the average hotel furnishes comparatively little chance for such spread. The cheap lodging house, where men are crowded together in large rooms and where there is more or less promiscuous spitting, is much more liable to spread infection, especially in the instance of men weakened by exposure and lack of proper food. Much is heard in Denver and Phoenix and elsewhere of the vast amount of infection that is spread all over the town and which is a constant menace to the population. The greater part of this talk has no real foundation. In the light of our present knowledge of tuberculosis, the "open" consumptive is most dangerous to his immediate family and others with whom he may be thrown into intimate contact. Tuberculosis does not seem to be contracted through a single or limited exposure, as is smallpox or scarlet fever. Were it otherwise, every occasion that brought us into contact with our fellowman would be fraught with danger; a meal in a café, a ride in the street car, a visit to the picture show or the

theater, a drink at the soda fountain—any of these in a tuberculosis health resort would probably be sufficient to produce the disease.

Members of the household, and especially the children, of the consumptive who has come to the end of his resources in the southwest, and who is living in crowded and unclean rooms and often sleeping in the same room with other members of the family, can hardly hope to escape infection, and that they do not escape is the experience of observers in the Southwest. While this is true everywhere, and can not be charged entirely to migration, certainly such migration, with its consequent impoverishment, has not improved or bettered the children's chances.

A number of times in Colorado and Arizona towns the writer has seen advanced consumptives at soda fountains, and these places are a rendezvous for children. Soda-fountain attendants are particularly likely to be careless in handling glasses, cups, spoons, etc., and the writer has observed more than once an advanced consumptive put down his glass and spoon, which were then carelessly rinsed in standing water and placed on the shelf for the next customer. Soda-fountain utensils are common eating and drinking devices in the most vicious sense of the word, and the danger to children under these circumstances is most apparent. Several of the Arizona drug stores have substituted waxed paper cups and containers that are used but once. This precaution, together with the proper cleansing of spoons, makes these soda fountains free from danger.

In hotels, cafés, and other eating places the tableware is generally cleaned in machines, or at least hot water and soap are necessarily used to remove the grease. Dirty eating places are potentially a source of infection, but it is doubtful whether even in these the tableware receives only the careless rinsing that suffices for soda fountains.

Migratory consumptives may become dangerous to the community in which they locate by securing employment in places where milk or other foodstuffs are handled. This is a matter for the regulation of the local health authorities.

Conclusion.

The statistics contained in this report and the observations based on them are sufficient to show that the migration of tuberculous persons into Colorado and Arizona has resulted in a variety of unfavorable conditions. These conditions affect both the migratory consumptive and the communities to which he migrates. Moreover there is no evidence to warrant the belief that these conditions will tend to improve of their own accord, or respond to any but vigorous action. The fundamental causes of these unfavorable conditions are certain defects or omissions in our laws, which permit the indiscriminate transportation of diseased indigents and which tend to make

impossible any satisfactory adjustment of the claims which the Southwestern States may justly be considered to have against the communities furnishing the migrants.

Appendix.

The following typical cases are quoted from the records of the Denver Department of Charities and Correction:

- De C., a bookbinder, 17 years' residence in Chicago. In Cook County Hospital January to October, 1914. Arrived Denver, October, 1914, with signed chart from physician in Chicago advising him to go there. Had secured money to travel on from the secretary of the ——— Church. After arrival in Denver he begged for help from door to door, and applied to the city December 1, 1914, anxious to return to Cook County Hospital. After correspondence with the aforementioned secretary, the latter realized his responsibility for this man and advanced \$26 to pay his way back to Chicago.
- D. Z., Italian barber, owned his own business in Chicago for 11 years. July, 1912, sold his business and came to private sanatorium in Denver, very ill with tuberculosis. In September, 1912, his wife and five children, ages 10 years to 3 months, followed him. In January, 1913, they were in need, and applied to the Federated Charities. This organization tried to induce them to return home, but they refused to go. They still had some savings and lived on the neighbors, with occasional help from the man's lodge and his church. In September, 1913, having lost his "settlement" in Chicago, it was no longer possible to return him, so his church, his lodge, and the city department formed an agreement to support him. He died in November, 1914, having cost the department \$639. The family are now living on his insurance, which will be exhausted before the children come of working age. They will again become dependent upon the city.
- L. L. Three days in Denver, from Philadelphia, applied for help. Very sick, though not far advanced. Beat his way out, having lost his money before he started. Was unwilling his family should know of his plight, but was finally persuaded that they should know. Was sent to hospital pending reply from Philadelphia. The relatives replied generously and placed him in a private sanatorium, where his disease was arrested.
- C. M. Marble polisher, who lived in Philadelphia all his life until 1911. Then began wandering through Pennsylvania, Maryland, Ohio, out to California, back to Illinois, Missouri, Iowa, Nebraska, Wyoming, Idaho, Utah, Nevada, and back to California, staying a few weeks or months in each place. From California, beat his way to Denver, arriving October 27, 1914. Applied for aid November 4, was sent to the hospital, and died 15 days later.
- S. B. Unskilled laborer, arrived in United States 1904 and in Denver 1907, having migrated there for tuberculosis, accompanied by his wife and four children, eldest 11. After lingering for 5 years, during which time the family received more or less help from individuals, he died. A year ago the city began pensioning the mother at \$40 a month and must continue the pension for two years more; then at a reduced rate for four years more, until the second child reaches working age.
- S. A Jewish community in the east sent to Denver a tuberculous tailor, his wife, and four children, the man being received as a patient in the National Jewish Sanitarium. Two years later he died. The society that sent him admitted its responsibility and sent relief, which, however, was not sufficient. The widow is now applying for a mother's pension in Colorado. All four children are now tuberculous.
- B. Dying consumptive, wife and three children, 11 to 3, sent to Denver by church in Tampa, Fla., with letter of introduction recommending them to all charitably

inclined people. Went direct from depot to department office. They refuse to leave Denver. There is no power of deportation and no recourse against the community that sent them. The neighbors are now supporting them, the organized charities having refused any help other than transportation home. When this man dies, the city will have to support his wife and children, and his wife will doubtless apply for a mother's pension.

- F. L. A railroad brakeman, 24 years old, just arrived in Denver, very sick and an advanced case. Sent from dispensary to hospital. He gave false address and it took some time to locate his mother. Then came a telegram from the mother asking for news, followed by a letter containing money with promise to support him in sanatorium. He had left the hospital after 12 days' stay and his whereabouts were unknown. He was advertised for in the papers throughout the country, and three weeks later the mother wrote he had been located in care of the Associated Charities of Phoenix.
- T. L. Said he was a painter, but also admitted he was a gambler, from Buffalo. Said he had been in Denver one year and wanted transportation to El Paso, where he claimed to have a brother who would care for him after arrival. The department paid for his board and lodging, while El Paso charities endeavored to locate brother, who did not exist. Patient was then sent to poor farm and, finding his stories did not help him, admitted he was still a legal resident of Buffalo. This having been verified, he was returned to Buffalo, a brother and sister there promising to look after him. He was in Denver 11 months all told and cost the city \$85.86.

For permission to quote these cases the writer is indebted to the courtesy of Miss Vaile of the Department of Charities and Correction.

The following interesting case is taken from the records of the Associated Charities, through the kindness of Mrs. Williams, of that organization:

C. became disabled from tuberculosis in Chicago in 1910. The Swedish society there raised a fund of \$300 for him, and sent him to a sanatorium in Denver, he having no means of his own. This was in February, 1910. In May, 1910, he came out of the sanatorium, rented a cottage, and in spite of the opposition of the local charities, Chicago forwarded his wife and four children. They planned to take in boarders and live on the remainder of the \$300 fund, which was sent them at the rate of \$8 per week through the charities there. C. did odd jobs, his wife did sewing, but there never was a time when they were not receiving aid from the neighbors, charitable individuals, and some churches. With all this they lived very comfortably; and three of the children were triplets, who were exploited at a considerable pecuniary profit. In July, 1911, they moved to Golden, where some kind person gave them a shack, rent free, and C. worked in a truck patch. This did not suit, so six months later they were back in Denver. C. went downhill steadily, and in July, 1914, he died and was buried free by a charitable undertaker. The fund which had helped support them was exhausted in the latter part of 1912, after which they were maintained entirely at the expense of the community of Denver. The wife did bundle washing, but has been failing in health continually and is presumably tuberculous. In January, 1915, the effort was made to return the widow and four children to Chicago. This was objected to by the Chicago charities, on the ground that it would now take three years' residence in Cook County before Mrs. C. would be eligible for a mother's pension, during which time they would have to support her. Mrs. C. may apply for a mother's pension in Colorado, though there never was a time since the family came to Colorado that they were independent. This case is unusual in that they did receive some assistance from the people that sent them to Denver, for two years.

PLAGUE-PREVENTION WORK.

CALIFORNIA.

The following report of plague-prevention work in California for the week ended May 29, 1915, was received from Passed Asst. Surg. Hurley, of the United States Public Health Service, in temporary charge of the work:

San Francisco, Cal.

RAT PROOFING.		I RAT PROOFING	-continued		
RAT PROOFING. New buildings: Inspections of work under construction. Basements concreted (square feet, 37,219). Floors concreted (square feet, 134,325). Yards, passageways, etc. (square feet, 36,262). Total area of concrete laid (square feet, 207,806). Class A, B, and C (fireproof) buildings: Inspections made Roof and basement ventilators, etc., screened Wire screening used (square feet, 27,648).	246 47 40 84 220 5,593	Old buildings—Continued Cubic feet new foun stalled	l. dation wall. led (square l. (square rays, etc., 9,894)	s in- 1 feet, Con- feet,	1,837 82 34 70 9 36 722 467
Openings around pipes, etc., closed with cement	8, 872 3, 000	OPERATIONS ON TH	E WATER FR	ONT.	19
Inspections made	682 77 10	Reinspections made on ver New rat guards procured. Defective rat guards repair Vessel on which cargo was	ed	••••	25 4 3 1
Amount of cargo inspected and	descri	otion of same.	Condition.	Rat e	
Steamer Admiral Schley from Seattle: 70 cases milk and household goods 400 sacks flour, wheat, and bran			0. K 0. K	None. None. None.	
Rats trapped on wharves and water front. 23 Rats trapped on vessels. 18 Traps set on wharves and water front. 171 Traps set on vessels. 42 Vessels trapped on. 10 Poisons placed on water front. pieces. 3,600 Poisons placed within Panama-Pacific International Exposition grounds. pieces. 7,200 Bait used on water front and vessels, bacon. pounds. 6 Amount of bread used in poisoning water front. loaves. 12 Pounds of poison used on water front. 6					
RATS COLLECTED AND EXAMINED FOR PLAGU Cellected	239 181	Mus norvegicus Mus rattus Mus alexandrinus		• • • • • •	118 36 50

Squirrels collected and examined for plague. Contra Costa County. San Benito County. Alameda County. San Joaquin County. Merced County. Santa Clara County.

705

270

179

136

96

66

153

Stanislaus County	60
Total collected 1	512
Total examined	
Found infected.	

Ranches inspected and hunted over.

Contra Costa County	53
San Benito County	30
Alameda County	
Merced County.	
San Joaquin County	
Stanislaus County	
Santa Clara County	
Daniel Child Country	

Record of plague infection.

Places in California.	Date of last case of human plague.	Date of last case of rat plague.	Date of last case of squirrel plague.	Total number rodents found infected since May, 1907.
Cities: San Francisco. Oakland Berkeley Los Angeles. Counties: Alameda (exclusive of Oakland and Berkeley). Contra Costa. Fresno. Merced. Monterey. San Benito. San Joaquin. San Luis Obispo. Santa Clara. Santa Cruz. Stanislaus.	Jan. 30,1908 Aug. 9, 1911 Aug. 23, 1907 Aug. 11, 1908 Sept. 24, 1909 May 17, 1914 (1) (1) June 4, 1913 Sept. 18, 1911 (1) Aug. 31, 1910 (1) (1)	Oct. 23, 1908 Dec. 1, 1908 (1) (1) Oct. 17, 1909.2 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	398 rats. 126 rats. Nome. 1 squirrel. 286 squirrels, 1 wood rat. 1,567 squirrels. 1 squirrels. 6 squirrels. 37 squirrels. 18 squirrels. 18 squirrels. 25 squirrels. 3 squirrels. 3 squirrels. 3 squirrels. 3 squirrels.

1 None.

2 Wood rat.

The work is being carried on in the following-named counties: Alameda, Contra Costa, San Francisco, Merced, San Joaquin, Santa Cruz, Stanislaus, San Benito, Santa Clara, and San Mateo.

LOUISIANA-NEW ORLEANS-PLAGUE ERADICATION.

The following reports of plague-eradication work at New Orleans were received from Surg. Creel, of the United States Public Health Service, in temporary charge of the work:

WEEK ENDED MAY 29, 1915.

OUTGOING QUARANTINE.		FIELD OPERATIONS.	
Vessels fumigated with sulphur	20	Rats trapped	4,952
Vessels fumigated with carbon monoxide.	12	Premises inspected	12,852
Pounds of sulphur used	4,482	Notices served	1,473
Coke consumed in carbon monoxide fumi- gation (pounds)	20,300	BUILDINGS RAT PROOFED.	
Clean bills of health issued	41	By elevation	169
Foul bills of health issued	8	By marginal concrete wall	300

BUILDINGS RAT PROOFED—continu	ed.	LABORATORY OPERATIONS—continu	æd.
By concrete floor and wall	. 385	Musk rats.	. 83
By minor repairs			
Square yards of concrete laid			. 31
Buildings rat proofed	1,397	Plague rats confirmed	. 0
Buildings rat proofed to date	. 37,769	Last case of human plague, Oct. 4, 1914.	
Abatements		Last case of rodent plague, May 17, 1915.	
Abatements to date	25,050	Rodents captured to May 29	. 355, 833
LABORATORY OPERATIONS.		Rodents examined to May 29	253, 499
Rodents examined	0.504	Cases of rodent plague to May 29, by	,
Mus norvegicus	-,	species:	
Mus rattus.		Mus musculus	. 4
Mus alexandrinus		Mus rattus	. 16
Mus musculus.		Mus norvegicus	
Wood rats		Mus alexandrinus	. 8
Putrid		Total rodent cases to May 29, 1915	242
WEE	K ENDE	D JUNE 5, 1915.	
OUTGOING QUARANTINE.		BUILDINGS BAT PROOFED—continue	ed.
Vessels fumigated with sulphur	20	Total buildings rat proofed to date	39,041
Vessels fumigated with carbon monoxide	11	Abatements	
Vessels fumigated with hydrocyanic gas	1	Abatements to date	25, 199
Pounds of sulphur used Pounds coke consumed in carbon-monox-	4, 474	LABORATORY OPERATIONS.	•
ide fumigation	17,900		
Pounds of potassium cyanide used in	17,500	Rodents examined	2,642
hydrocyanic-gas fumigation	102}	Mus norvegicus.	1,981
Pounds of sodium carbonate used in	1023	Mus rattus	81
hydrocyanic-gas fumigation	120	Mus alexandrinus	103
Pounds of sulphuric acid used in hydro-	110	Mus musculus	3,349
cyanic-gas fumigation	104	Wood rats	50
Clean bills of health issued.	28	Putrid	118
Foul bills of health issued	7	Musk rats.	53
	•	Total rodents received at laboratory	5,600
FIELD OPERATIONS.		Suspicious rats	9
Rats trapped	5, 657	Plague rats confirmed	0
Premises inspected	11,786	Last case of human plague, Oct. 4, 1914.	
Notices served.	1,046	Last case of rodent plague, May 17, 1915.	201 400
Trotacos sor ved	1,010	Rodents captured to June 5 Rodents examined to June 5	361,490
BUILDINGS RAT PROOFED.	.	· · · · · · · · · · · · · · · · · · ·	256, 141
By elevation	204	Cases of rodent plague to June 5, by species:	
By marginal concrete wall	187	Mus musculus	4
By concrete floor and wall	345	Mus rattus	16
By minor repairs.	536	Mus norvegicus	214
Square yards of concrete laid	14,445	Mus alexandrinus	8
Buildings rat proofed	1,272	Total rodent cases to June 5, 1915	242
		-PLAGUE ERADICATION	210
WASPIING INC. SK	44 I I I I I I . II		

WASHINGTON—SEATTLE—PLAGUE ERADICATION.

The following report of plague-eradication work at Seattle for the week ended May 29, 1915, was received from Surg. Lloyd, of the United States Public Health Service, in charge of the work:

RAT PROOFING.	RAT PROOFING—continued.	
New buildings nspected	New buildings elevated New premises rat proofed, concrete Old buildings inspected Premises rat proofed, concrete, old buildings. Floors concreted, old buildings (s juare feet, 3,275) Rat holes cemented, old buildings Wooden floors removed, old buildings	7 18 4 2 2 18
feet)	Buildings razed	3

LABORATORY AND RODENT OPERATIONS.	MISCELLANEOUS WORK.
Dead rodents received 4	Rat proofing notices sent to contractors 18
Rodents trapped and killed 350	
Rodents recovered after fumigation	
Total	
Rodents examined for plague infection 288	RODENTS EXAMINED IN EVERETT.
Rodents proven plague infected) \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Poison distributed, pounds 33	Mus norvegicus trapped
Bodies examined for plague infection	Mus norvegicus found dead 3
Bodies found plague infected	
CLASSIFICATION OF BODENTS.	Total
CLASSIFICATION OF RODENTS.	Rodents examined for plague infection 37
Mus rattus 18	Rodents proven plague infected 0
Mus alexandrinus 63	
Mus norvegicus. 249	BAT-PROOFING OPERATIONS IN EVERETT.
Mus musculus	1
****	New buildings inspected 6
WATERFRONT.	New buildings, concrete foundations 5
Vessels inspected and histories recorded	New buildings elevated 18 inches 1
Vessels fumigated	New buildings, basements concreted (square
Sulphur used, pounds 900	feet 600)
New rat guards installed 5	New buildings, floors concreted (square feet,
Defective rat guards repaired 9	2,800)
Fumigation certificates issued 1	New buildings, yards concreted (square feet,
Port sanitary statements issued 34	204)
The usual day and night patrol was maintained	Total concrete laid, new structures (square
to enforce rat guarding and fending.	feet)
	• • •

HAWAII-PLAGUE PREVENTION.

The following reports of plague-prevention work in Hawaii were received from Surg. Trotter, of the United States Public Health Service:

Honolulu.

WEEK ENDED MAY 22, 1915.

Total rats and mongoose taken	435	Average number of traps set daily 1,085
Rats trapped	422	Cost per rat destroyedcents 192
Mongoose trapped	5	Last case rat plague, Aiea, 9 miles from Honolulu,
Rats killed by sulphur dioxide	8	Apr. 12, 1910.
Examined microscopically	361	Last case human plague, Honolulu, July 12, 1910.
Showing plague infection	0	Last case rat plague, Kalopa stable, Paauhau,
Classification of rats trapped:		Hawaii, Aug. 29, 1914.
Mus alexandrinus	229	Last case human plague, Paauhau Landing,
Mus musculus	131	Hawaii, Aug. 17, 1914.
Mus norvegicus	40	
Mus rattus	22	
Classification of rats killed by sulphur dioxide:		
Mus alexandrinus	7	
Mus rattus	1	•

Hilo.

WEEK ENDED MAY 16, 1915.

Rats trapped	2,559
Rats found dead	1
Mongoose taken	42
Rats and mongoose examined microscopic-	
ally	2,602
Rats and mongoose plague infected	0
Classification of rats trapped and found dead:	
Mus norvegicus	616
Mus alexandrinus	356

Classification dead—Con			trap	ped	and	found	
Mus ratt							781
Mus mus	culu	s					807
Last case o	f rat	plagu	e, Pas	uha	u Su	gar Co.,	Aug
9, 1914.							

Last case of human plague, Pasuhau Sugar Co. Aug. 16, 1914.

PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

IN CERTAIN STATES AND CITIES.

CEREBROSPINAL MENINGITIS.

City Reports for Week Ended May 29, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Buffalo, N. Y. Chicago, Ill. Cincinnati, Ohio. Cleveland, Ohio Detroit, Mich. Kansas City, Kans. Los Angeles, Cal.	1 1	1	Newark, N. J. New Bedford, Mass. Philadelphia, Pa. St. Louis, Mo. Springfield, Mass. Worcester, Mass.	1 1 1	2 1

DIPHTHERIA.

California-San Francisco.

Passed Asst. Surg. Hurley reported by telegraph that during the week ended June 12, 1915, 29 new cases of diphtheria, with 1 death, were notified in San Francisco, Cal.

See also Diphtheria, measles, scarlet fever, and tuberculosis, p. 1835.

ERYSIPELAS.

City Reports for Week Ended May 29, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Baltimore, Md. Binghamton, N. Y Bridgeport, Conn. Brockton, Mass. Buffalo, N. Y Chicago, Ill. Cincinnati, Ohio. Cleveland, Ohio. Cumberland, Md. Detroit, Mich. Duluth, Minn. Erie, Pa. Hartford, Conn. Jersey City, N. J. Lancaster, Pa. Lawrence, Mass.	2 1 2 13 4 7 1 2 2 2 1	1 2 2	Oakland, Cal Passaic, N. J Philadelphia, Pa. Pittsburgh, Pa. Portland, Oreg. Reading, Pa. Rochester, N. Y St. Louis, Mo. San Francisco, Cal. Seattle, Wash. Somerville, Mass.	1 2 18 8 1 2 1 12 1 1 2	2 4 1

MALARIA.

City Reports for Week Ended May 29, 1915.

During the week ended May 29, 1915, malaria was reported by cities as follows: Cairo, Ill., 1 death; Jersey City, N. J., 2 cases; Montclair, N. J., 2 cases; Newton, Mass., 1 case; Stockton, Cal., 1 case.

MEASLES.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1835.

PELLAGRA. City Reports for Week Ended May 29, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Baltimore, Md. Charleston, S. C. El Paso, Tex. Galveston, Tex. Mobile, Ala.		1	Nashville, Tenn Norfolk, Va. Portland, Oreg. Wilmington, N. C.	9	1 1 1 1

PLAGUE.

Louisiana-New Orleans-Plague-Infected Rat Found.

Surg. Creel reported, by telegraph, June 10, 1915, that a plague-infected rat had been found at the intersection of Clouet and Rampart Streets, New Orleans, La.

PNEUMONIA. City Reports for Week Ended May 29, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Binghamton, N. Y. Chicago, Ill	107 16 3 5 4 1 1 6 1	37 8 7 5 2	Norfolk, Va. Philadelphia, Pa. Pittsburgh, Pa. Reading, Pa. Rochestor, N. Y. Sacramento, Cal. Salt Lake City, Utah. San Francisco, Cal. Schenectady, N. Y. South Omaha, Nebr. Stockton, Cal.	30 35 5 2 1 2 2	3 20 20 1 1 1 1

POLIOMYELITIS (INFANTILE PARALYSIS).

City Reports for Week Ended May 29, 1915.

During the week ended May 29, 1915, poliomyelitis was notified by cities as follows: Cleveland, Ohio, 1 case; Milwaukee, Wis., 1 death; Worcester, Mass., 1 case.

RABIES.

City Report for Week Ended May 29, 1915.

During the week ended May 29, 1915, one death from rabies was reported in Charleston, S. C.

SCARLET FEVER.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1835.

SMALLPOX.

California-Imperial County.

Acting Asst. Surg. Richter reported by telegraph that during the week ended June 12, 1915, 8 new cases of smallpox were notified in Imperial County, Cal.

Kansas.

Collaborating Epidemiologist Crumbine reported by telegraph that during the week ended June 12, 1915, cases of smallpox were notified in counties of Kansas as follows: Cherokee, 1; Crawford, 8; Dickinson, 3; Douglas, 1; Ford, 1; Jefferson, 2; Kingman, 5; Lane, 1; Sedgwick, 8; Smith, 8; Rawlins, 3; Rush, 1; Wabaunsee, 2; Wyandotte, 5.

Massachusetts-New Bedford-Virulent Smallpox.

Acting Asst. Surg. Cody reported by telegraph June 14, 1915, that 2 new cases of smallpox, with 1 death, had been notified in New Bedford, Mass., making a total of 12 cases, with 4 deaths, reported since May 15, 1915.

Minnesota.

Collaborating Epidemiologist Bracken reported by telegraph that during the week ended June 12, 1915, several new foci of smallpox infection were reported in Minnesota, cases of the disease having been notified as follows: Bigstone County, Clinton, 1; Crow Wing County, Roosevelt Township, 1; Faribault County, Prescott Township, 1; Martin County, Fairmont, 1; Norman County, Waukon Township, 1; Pope County, Barsness Township, 18; Rock County, Denver Township, 1; Todd County, Fawn Lake Township, 1; Grey Eagle Township, 1; Washington County, Stillwater, 1.

SMALLPOX—Continued.

City Reports for Week Ended May 29, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Baltimore, Md	3 1 7 3 2 6 18 5 1		Milwaukee, Wis	1 7 2 3 1 1 1 5 3 1	

TETANUS.

City Reports for Week Ended May 29, 1915.

During the week ended May 29, 1915, tetanus was reported by cities as follows: Brockton, Mass., 1 death; Chicago, Ill., 1 case; Detroit, Mich., 1 case; Harrison, N. J., 1 case; Philadelphia, Pa., 1 case and 1 death.

TUBERCULOSIS.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1835.

TYPHOID FEVER. City Reports for Week Ended May 29, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths
kron, Ohio	. 1	1	Nashville, Tenn	9	
lameda, Cal	1		Newark, N. J	1	
Saltimore, Md	15		New Bedford, Mass	1	
Berkeley, Cal	1		New Haven, Conn		
Boston, Mass	5	1	New London, Conn	1	l
Brocktón, Mass	1	ļ	New Orleans, La	5	1
Buffalo, N. Y	2		Newton, Mass	1	J
ambridge, Mass harleston, S. C	3		Norfolk, Va	3	1
harleston, S. C	2		Oakland, Cal	6	l
ticago, Ill	8	1 2	Ogden, Útah	1	l
incinnati, Ohio	1		Philadelphia, Pa	7	l
leveland, Ohio	3	1 2	Pittsburgh, Pa	5	ł
olumbus, Ohio	2		Portland. Me	6	l
Danville, Ill		1	Portland, Oreg		i
Petroit, Mich	4		Portland, Oreg Providence, R. I	2	
Crie. Pa	2	1	Racine. Wis		
all River, Mass	2		Reading, Pa	1	
rand Rapids, Mich	5		Saginaw, Mich	2	
larrisburg, Pa	1		St Louis Mo	4	
laverhill. Mass	2	1	Salt Lake City, Utah	2	
ersey City, N. J	ī	ī	Schenectady, N. Y	3	
alamazoo, Mich	ī		Somerville, Mass	ž	
ima, Ohio	2		Steubenville, Ohio	ī	
os Angeles, Cal			Toledo, Ohio		
owell, Mass	i		Toledo, Ohió Trenton, N. J	-i	
ynchburg, Va			Washington, D. C.	5	l
ilwaukee, Wis	2			•	

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS. City Reports for Week Ended May 29, 1915.

	Population as of July 1, 1915 (esti-	Total deaths	th	iph- eria.	Me	ısles.		rlet er.		ber- osis.
Cities.	mated by United States Census Bureau).	from all causes.		Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants: Baltimore, Md. Boston, Mass. Chicago, Ill. Cleveland, Ohio. Detroit, Mich. Philadelphia, Pa. Pittsburgh, Pa. St. Louis, Mo. From 300,000 to 500,000 inhabitants.	584, 605 745, 139 2, 447, 045 656, 975 554, 717 1, 683, 664 571, 934 745, 988	166 2222 570 160 151 471 162 154	11 74 104 19 26 49 20 49	9 12 3 4 10 2 1	59 225 782 261 13 852 212 290	2 13 6 2 7 2 4	27 117 68 24 16 26 26 15	1 2 1 2 3 2 1	43 78 288 33 14 142 32 53	14 22 81 17 13 51 24 21
Buffalo, N. Y Cincinnati, Ohio Jersey City, N. J Los Angeles, Cal Milwankee, Wis. Newark, N. J New Orleans, La. San Francisco, Cal Seattle, Wash. Washington, D. C. From 200,000 to 300,000 inhabit-	461, 335 406, 706 300, 133 465, 367 428, 062 399, 000 366, 484 1 416, 912 330, 834 358, 679	113 82 110 93 142 125 31 97	17 10 26 10 10 19 16 36 5	1 1 3 3 2	98 55 185 257 13 17 6 2 16 106	2 3	20 2 24 7 17 6 5 7 18	2	34 30 23 53 28 37 34 12 12	12 19 5 21 10 13 21 17 3 16
ants: Columbus, Ohio Portland, Oreg Providence, R. I Rochester, N. Y.	209, 722 272, 833 250, 025 250, 747	69 54 81 46	1 7 1	1 2 2	21 11 5 19	i	10 8 22 3	1	12 1 2	5 2 11 3
ants: Bridgeport, Conn Cambridge, Mass. Camden, N. J. Fall River, Mass. Grand Rapids, Mich Hartford, Conn. Lowell, Mass. Lynn, Mass. Lynn, Mass. Nashville, Tenn. New Bedford, Mass. New Haven, Conn. Oakland, Cal. Reading, Pa. Richmond, Va. Salt Lake City, Utah. Springfield, Mass. Tacoma, Wash. Toledo, Ohio. Trenton, N. J. Worcester, Mass. From 50,000 to 100,000 inhabit	118, 434 111, 669 104, 349 122, 904 125, 759 108, 969 112, 124 100, 316 115, 978 114, 694 147, 005 190, 803 105, 094 154, 674 113, 567 103, 216 103, 034 107, 940 108, 034 109, 212 160, 523	23 32 20 34 36 55 18 33 42 39	3 6 2 3 2 4 3 2 10 3 1 2 3 3 1 5 5 2 4	2	3 40 16 1 19 2 10 6 1 60 20 1 3 		7 3 2 7 7 2 7 2 4 14 1 11 11 1 2 1	1	8 5 7 18 6 8 5 9 7 3 6 6 8 5 5 9 8 5 5	2 2 3 4 4 1 1 1
ants: Akron, Ohio Altoona, Pa. Atlantic City, N. J. Bayonne, N. J. Berkeley, Cal. Binghamton, N. Y. Brockton, Mass. Canton, Ohio. Charleston, S. C. Covington, Ky. Duluth, Minn El Paso, Tex Erie, Pa. Evansville, Ind. Harrisburg, Pa. Johnstown, Pa. Kansas City, Kans. Lancaster, Pa. Lawrence, Mass. Little Rock, Ark.	82, 958 57, 606 55, 806 67, 552 54, 873 53, 982 65, 746 59, 139 60, 427 56, 520 91, 913 73, 798 72, 125 70, 731 66, 535 96, 531 50, 269 98, 107 55, 135	10 21 8 8 31 12 14 15 18 14	5 4 3 1 3 5 3	1 2	1 18 1 3 16 3 7 1 2 3 12 13 1 1 1 3 1	2	4 1 6 1 7 7 1 8 3 1 2 2 4	1	1 2 1 2 6 	1 1 1 5 1 4 5 1 1 4

¹ Population Apr. 15, 1910; no estimate made.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Con. City Reports for Week Ended May 29, 1915—Continued.

	Popula- tion as of July 1, 1914	Total deaths	_	theria.	Mea	sles.		arlet ver.		ibor- losis.
Cities.	(estimated by U. S. Census Bureau).	from all causes	-	Deaths.	Cases.	Doaths.	Cases.	Deaths.	Casos.	Deaths.
From 50,000 to 100,000 inhabitants—Continued.										
Maiden, Mass	50,067	7	2	1	45	l	6	2	2	
	76 050	21					2		2	1 3 1 2 1 2 3 1 1
Mobile, Ala	56,536	20	. i		·		2		2	3
Mobile, Ala	56, 536 52, 203 88, 076 69, 010		. 1		3		1		2	2
Passaic, N. J	69,010	10	1		. 1		30		4	1
Pawtucket, R. I	58, 156 63, 014	14 17			3		8	·[2 3
Passate, N. J. Pawtucket, R. I. Portland, Me Sacramento, Cal Saginaw, Mich	64,806	12	1 2 3 3 1 7				ļ		4	ĭ
Saginaw, Mich	64,806 54,815	19	3			¦	<u>-</u> -			1
San Diego, Cal	51, 115 95, 265	19	3		9	····i	2 7		2	2 1 1 1
Somerville, Mass	85, 460	18	7	i	13	. .	30	i	10	Ĩ
South Bend, Ind	67,030 59,468	6			25		1 3			1
Wilkes-Barre, Pa	59, 468 75, 218	12 15	1 4		32	····i	3		6	1
York, Pa	50, 543		2						2	
Wilkes-Barre, Pa. York, Pa. From 25,000 to 50,000 inhabitants: Alameda, Cal. Aurora, Ill. Bellingham, Wash. Brookline, Mass. Butler, Pa. Butte, Mont. Chelsea, Mass.		١.	1	l	2		ŀ	1	İ	١.
Alameda, Cal	27,031 33,613	4 8	2		10			• • • • • • •		1 2
Bellingham, Wash	21 602	8	ļ <u>-</u> .							_
Brookline, Mass	31,934	11	1		4		2		3	i
Butler, Pa	31, 934 26, 587 42, 918 132, 452 28, 688	9 12	1 2				i		••••	
Chelsea, Mass	1 32, 452	11	.		11		<u>*</u> .		4	
Chelses, Mass	28, 688	4			5			[<u> </u>		2
Cumberland, Md	25, 564 31, 554	7 6	1	1	1 1	•••••			i	
Dubuque, Iowa	39,650									4
Daivine, III Dubuque, Iowa East Orange, N. J Elgin, III Everett, Mass	41, 155	· · · · · · · · · · · · · · · · · · ·			5		1			
Eigin, III	27,844 38,307	6 10	3		1 6		4		1 3	•••••
Fitchburg, Mass	41, 144	18	3 2		ĭ			i	3	1 2 1
Fitchburg, Mass	41 078	15	1				1		••••	1
Galveston, Tex Green Bay, Wis Haverhill, Mass Kalamazoo, Mich Kenosha, Wis	28, 689 47, 774	6	····i	• • • • • • •	30		1 2 3		····i	1
Kalamazoo, Mich	2/,002	8	l							1 3
Kenosha, Wis	30.319	4 9	2 1		4		1		1	
La Crosse, Wis. Lexington, Ky. Lima, Ohio. Lincoln, Nebr. Lorain, Ohio. Lyzobytes, Vo.	31, 522 39, 703	9 12	1	• • • • • •	14			····i		3 2 1
Lima, Ohio	34,644	11 7			i		4		2	ĩ
Lincoln, Nebr	46,028	7	3		14	1	2			• • • • • •
Lorain, Unio	35, 662 32, 385	7		• • • • • •	4			• • • • • •		i
Medford, Mass	25. 737 l	3	i		5					
Montelair, N. J.	25,550 40,351	3	····:·l				1		1	i
New Castle, Pa Newport Kv	45,351 31,722	10	1	• • • • • •			1		····i	i
Loram, Onio. Lynchburg, Va. Medford, Mass. Montclair, N. J. New Castle, Pa. Newport, Ky. Newport, R. I. Newton, Mass. Niagara Falls, N. Y. Norristown, Pa.	29,631	10								_
Newton, Mass	43,085	14 10			14		11		3	1 1
Norristown, Pa	36, 240 30, 833	10						•••••	• • • • • •	
Norristown, Pa. Ogden, Utah	30 466 I	3 3			6		···i			•••••
Pasadena, Cal. Perth Amboy, N. J. Pittsfield, Mass. Portsmouth Va	43, 859 39, 725 37, 580	8	2 3		20 7		:-		2 2	3
Pittsfield, Mass	39,725 37,580	10	3		2	• • • • • • •			4	• • • • • • • • • • • • • • • • • • •
Portsmouth, Va	38, 610 45, 507	8			2 2					i
Racine, Wis	45,507	8 8 5 9	4		13					•••••
South Omaha, Nebr. Steubenville, Ohio. Stockton, Cal. Superior, Wis. Taunton, Mass.	27, 961 26, 394	9								•••••
Steubenville, Ohio	26,631	10	3	i			1		2	•••••
Stockton, Cal	34,508	3			2	·····	2		•••••	
Taunton, Mass	45, 285 35, 957	3 16			2		6 2		3	·····2
Waltham, Mass	30, 129	8			40		4		2	2
Wheeling, W. Va	43,097	12	1	••••••	···i		1	-		•••••
Waitham, Mass. Wheeling, W. Va. Williamsport, Pa. Wilmington, N. C. Woonsocket, R. I. Zanesville, Ohio.	33, 495 28, 264	5 18	3		<u> </u>					····i
Woonsocket, R. I	28, 264 43, 355		î	i			5	i .		
Zanesville, Ohio	30,406		اا	اا	'.	۰۰۰۰۰۰۰	1 1	!.	!.	•••••

¹ Population Apr. 15, 1910; no estimate made.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Con.. City Reports for Week Ended May 29, 1915—Continued.

	Popula- tion as of July 1, 1914	Total deaths	Dipht	theria.	Mea	slos.		riot er.		bor- osis.	
Cities.	by U. S.	Čensus	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 10,000 to 25,000 inhabitants: Ann Arbor, Mich. Braddock, Pa. Cairo, Ill. Clinton, Mass. Coffeyville, Kans. Concord, N. H. Galesburg, Ill. Harrison, N. J. Key West, Fla. Kokomo, Ind. Marinette, Wis. Melrose, Mass. Morristown, N. J. Muscatine, Jowa. Nanticoke, Pa. Newburyport, Mass. New London, Conn. North Adams, Mass. Northampton, Mass. Phoenix, Ariz. Plainfield, N. J.	15, 593 13, 075 16, 765 22, 4923 16, 555 21, 437 20, 312 14, 610 17, 166 13, 158 17, 287 22, 441 17, 178 20, 771 122, 019 19, 846 17, 788 23, 280	7 1 3 4 6 4 8 9 7 3 4	1		1 1 2 10 5 1		1	1	5 5 5 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	4	
Rutland, Vt. Saratoga Springs, N. Y. Steelton, Pa. Wilkinsburg, Pa. Woburn, Mass.	14,624 12,942 15,337 22,361 15,862	8 11 1 8 5	2 1 1		28		1 2		1	i	

¹ Population Apr. 15, 1910; no estimate made.

FOREIGN REPORTS.

CHINA.

Plague-Infected Rat-Hongkong.

During the three weeks ended April 17, 1915, out of 6,177 rats examined at Hongkong 1 rat was found plague infected.

Plague-Infected Rats-Shanghai.

During the week ended May 1, 1915, out of 207 rats examined at Shanghai 2 were found plague infected.

Plague Outbreak-Swatow.

An outbreak of plague occurred in the Chinese quarter of Swatow about April 1,1915. To April 17,10 cases, of which 8 were pneumonic, were notified. The cases occurred in one family in a locality near the Chinese maritime customs house. The origin of the outbreak has not been determined.

Plague, mainly of the bubonic type, was reported, April 19, to be present in villages in the vicinity of Swatow.

CUBA.

Plague—Habana.

A fatal case of plague, occurring in an old focus, was notified at Habana June 14, 1915.

EGYPT.

Plague.

During the period from January 1 to May 13, 1915, 81 cases of plague, with 44 deaths, were notified in Egypt. The cases were distributed as follows:

Places.	Cases.	Deaths.	Date of first case, 1915.	Date of last case, 1915.	Remain- ing Dec. 31, 1914.
Alexandria. Port Said Provinces: Asslout Fayoum Gizeh Minieh Total	4 41 17 7 8	23 9 7 2 44	Jan. 28 Feb. 27 Jan. 12 Jan. 3 Apr. 1 Apr. 28	May 1do May 5 May 12 Apr. 8 May 6	1

JAPAN.

Plague-Tokyo.

A case of plague was notified at Tokyo during the week ended June 14, 1915.

JAVA.

Plague.

During the period from January 29 to February 25, 1915, plague was notified in east Java as follows:

Districts.	New cases.	Deaths.
Kediri Madioen Pasoeroean	189 19 781	179 18 680
Surabaya	60	334

PERU.

Plague.

During the period from April 12 to May 2, 1915, plague was notified in Peru as follows:

Places.	New cases.	Remaining May 2, 1915.
Callao. Chiclayo. Ferrenafe.	2	2 2 2
Lambeyeque Lima (city) Lima (country) Mollendo Salsverry Truiillo	3	(1)

¹ Sent to lazaretto at Trujillo.

TYPHUS FEVER.

Reports Received During Week Ended June 18, 1915.1

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary: Austria Canary Islands: Santa Cruz de Teneriffe	Apr. 18-24	347	1	Mainly among soldiers, prisoners, and persons from Galicia.
Dutch East Indies: Java— Batavia	Apr. 18-24 May 2-8	12 61	3	Among German soldiers. Pre- sent among Russian prisoners in 11 districts and in Saxony.

¹ From medical officers of the Public Health Service, American consuls, and other sources.

TYPHUS FEVER—Continued.

Reports Received During Week Ended June 18, 1915—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Great Britain: Dundee Mexico: Aguascalientes Russia: Moscow Petrograd Spain: Madrid	May 9-15	34 2	1 1 20 1	
Turkey in Asia: Jaila	Apr. 18-May 8	3	5	

Reports Received from Jan. 1 to June 11, 1915.

T - T

Austria-Hungary	AugDec. 31, 1914.	279	1	
Do	Jan. 1-Apr. 17			
D0		7		
Budapest	Apr. 25-May 1		, ,	
Fiume	May 3-9	1 1		
Vienna	Apr. 4–17	14		
Azores:	i	ł	1	
Terceira	Jan. 31-Feb. 6	1	1	Present.
Bermuda:				
Dermuda.	Mar. 14-20			Among troops.
Warwick Camp	mai. 1 20	1 ^		Among woops.
China:	1			
Antung	Feb. 1-7		1	
Hankow	Mar. 21–27	1		On steamship from Shanghai.
Harbin	Jan. 25-Apr. 11	. 5	l	
Manchuria Station	Mar. 15-21	1	l	
Tientsin	Jan. 23-30			Present.
	Jan. 20 03	1	l	
Dutch East Indies:		l	i	
Java-	B	۔ ا		. A forest
Batavia	Dec. 19-26			Among foreigners.
Do	Mar. 14-Apr. 17	49	8	Present in surrounding country.
Egypt:	_	1	l	
Alexandria	Dec. 25-31	1 2		Jan. 15-21: Present.
Do	Feb. 12-May 6	218	35	
Cairo	Dec. 23	l	3	Jan. 8-14: Present.
Cairo		1	170	
Do	Jan. 21-Apr. 29	1		Esh 11 10. Decemb
Port Said	Mar. 5-Apr. 22	4	2	Feb. 11-18: Present.
Germany	Feb. 14-May 1	179		Among German soldiers. Pres-
duma-j		1	l i	ent among Russian prisoners of
		ı		war in camps in 11 Government
		i	1	districts and in Saxony and
				other divisions of the Empire.
		1		office divisions of one runbite.
Great Britain and Ireland:				
Dublin	10 Ah 7 99	l 6		
	Feb. 7-20			
	Mar. 28-Apr. 3		i	
Do	Mar. 28-Apr. 3		i	
Do Dundee	Mar. 28-Apr. 3 May 2-8	3	1	
Do Dundee Glasgow	Mar. 28-Apr. 3 May 2-8 Mar. 11-18	3 2	1	
Do	Mar. 28-Apr. 3 May 2-8	3	1	
Do	Mar. 28-Apr. 3 May 2-8 Mar. 11-18 May 6-12	3 2 1	1	Descent
Do Dundee Glasgow Do Greece: Athens.	Mar. 28-Apr. 3 May 2-8 Mar. 11-18 May 6-12 Apr. 12-18	3 2 1		Present.
Do Dundee Glasgow Do Greece: Athens.	Mar. 28-Apr. 3 May 2-8 Mar. 11-18 May 6-12 Apr. 12-18 Apr. 19-May 11	3 2 1		Present.
Do	Mar. 28-Apr. 3 May 2-8 Mar. 11-18 May 6-12 Apr. 12-18 Apr. 19-May 11 Dec. 20-26	3 2 1	2 5	
Do Dundee Glasgow Do Greece: Athens Do Saloniti	Mar. 28-Apr. 3 May 2-8 Mar. 11-18 May 6-12 Apr. 12-18 Apr. 19-May 11 Dec. 20-26	3 2 1		Jan. 17-23: Present.
Do Dundee Glasgow Do Greece: Athens Do Saloniiri Do	Mar. 28-Apr. 3 May 2-8 Mar. 11-18 May 6-12 Apr. 12-18 Apr. 19-May 11 Dec. 20-26 Dec. 27-Jan. 2	3 2 1 2 5	2 5	Jan. 17-23: Present.
Do	Mar. 28-Apr. 3. May 2-8. Mar. 11-18. May 6-12. Apr. 12-18. Apr. 19-May 11. Dec. 20-26. Dec. 27-Jan. 2. Feb. 6.	3 2 1 1	2 5 5	
Do	Mar. 28-Apr. 3 May 2-8 Mar. 11-18 May 6-12 Apr. 12-18 Apr. 19-May 11 Dec. 20-26 Dec. 27-Jan. 2 Feb. 6 Feb. 21-Mar. 7	3 2 1	2 5 5 5	Jan. 17-23: Present.
Do	Mar. 28-Apr. 3. May 2-8. Mar. 11-18. May 6-12. Apr. 12-18. Apr. 19-May 11. Dec. 20-26. Dec. 27-Jan. 2. Feb. 6.	3 2 1	2 5 5	Jan. 17-23: Present.
Do Dundee Glasgow Do Greece: Athens Do Saloniti Do Do Do Constemals:	Mar. 28-Apr. 3. May 2-8. Mar. 11-18. May 6-12. Apr. 12-18. Apr. 19-May 11. Dec. 20-26. Dec. 27-Jan. 2. Feb. 6. Feb. 21-Mar. 7. Apr. 3-May 1.	3 2 1	2 5 5 5	Jan, 17-23: Present, From Belgrade.
Do Dundee Glasgow Do Greece: Athens Do Saloniti Do Do Do Do Guatemala: Guatemala: City	Mar. 28-Apr. 3 May 2-8 Mar. 11-18 May 6-12 Apr. 12-18 Apr. 19-May 11 Dec. 20-26 Dec. 27-Jan. 2 Feb. 6 Feb. 21-Mar. 7	3 2 1	2 5 5 5	Jan. 17-23: Present.
Do Dundee Glasgow Do Greece: Athens Do Salonlid Do Do Do Co Guatemala: Guatemala City	Mar. 28-Apr. 3 May 2-8 Mar. 11-18 May 6-12 Apr. 12-18 Apr. 19-May 11 Dec. 20-26 Dec. 27-Jan. 2 Feb. 6 Feb. 21-Mar. 7 Apr. 3-May 1	3 2 1 2 5	2 5 5 5	Jan, 17-23: Present, From Belgrade.
Do Dundee Glasgow Do Greece: Athens Do Salonlid Do Do Do Co Guatemala: Guatemala City	Mar. 28-Apr. 3 May 2-8 Mar. 11-18 May 6-12 Apr. 12-18 Apr. 19-May 11 Dec. 20-26 Dec. 27-Jan. 2 Feb. 6 Feb. 21-Mar. 7 Apr. 3-May 1 Mar. 21-27 Nov. 1-30	3 2 1 2 5 1	2 5 5 5	Jan, 17-23: Present, From Belgrade.
Do Dundee Glasgow Do Greece: Athens Do Saloniki Do Do Do Co Do Guatemala: Guatemala City Florence	Mar. 28-Apr. 3 May 2-8 Mar. 11-18 May 6-12 Apr. 12-18 Apr. 19-May 11 Dec. 20-26 Dec. 27-Jan. 2 Feb. 6 Feb. 21-Mar. 7 Apr. 3-May 1 Mar. 21-27 Nov. 1-30	3 2 1 2 5	2 5 5 5	Jan, 17-23: Present, From Belgrade.
Do. Dundee. Glasgow Do. Greece: Athens. Do. Saloniki Do. Do. Do. Guatemala: Guatemala: Guatemala City Italy: Florence. Do.	Mar. 28-Apr. 3 May 2-8	3 2 1 2 5 1	2 5 5 5	Jan, 17-23: Present, From Belgrade.
Do	Mar. 28-Apr. 3 May 2-8 Mar. 11-18 May 6-12 Apr. 12-18 Apr. 19-May 11 Dec. 20-26 Dec. 27-Jan. 2 Feb. 6 Feb. 21-Mar. 7 Apr. 3-May 1 Mar. 21-27 Nov. 1-30 Dec. 1-31	3 2 1 2 5 1 1	2 5 5 5	Jan, 17-23: Present, From Belgrade.
Do Dundee Glasgow Do Greece: Athens Do Salonitri Do Do Do Cuatemala: Guatemala: Guatemala City Italy: Florence Do	Mar. 28-Apr. 3 May 2-8. Mar. 11-18. May 6-12. Apr. 12-18. Apr. 19-May 11. Dec. 20-26. Dec. 27-Jan. 2. Feb. 6. Feb. 21-Mar. 7. Apr. 3-May 1. Mar. 21-27. Nov. 1-30. Dec. 1-31. Jan. 1-31.	2 1 2 5 1 17 2 4 3	2 5 5 5 6 5	Jan, 17-23: Present, From Belgrade.
Do	Mar. 28-Apr. 3 May 28 Mar. 11-18 May 6-12 Apr. 12-18 Apr. 19-May 11 Dec. 20-26 Dec. 27-Jan. 2 Feb. 6 Feb. 21-Mar. 7 Apr. 3-May 1 Mar. 21-27 Nov. 1-30 Dec. 1-31 Jan. 1-31 Feb. 1-28 Mar. 1-31	3 2 1 2 5 1 17 2 4 4 3	2 5 5 5 2 2	Jan, 17-23: Present, From Belgrade.
Do Dundee Glasgow Do Greece: Athens Do Salonitri Do Do Do Cuatemala: Guatemala: Guatemala City Italy: Florence Do	Mar. 28-Apr. 3 May 2-8. Mar. 11-18. May 6-12. Apr. 12-18. Apr. 19-May 11. Dec. 20-26. Dec. 27-Jan. 2. Feb. 6. Feb. 21-Mar. 7. Apr. 3-May 1. Mar. 21-27. Nov. 1-30. Dec. 1-31. Jan. 1-31.	2 1 2 5 1 17 2 4 3	2 5 5 5 6 5	Jan, 17-23: Present, From Belgrade.
Do	Mar. 28-Apr. 3. May 2-8. Mar. 11-18. May 6-12. Apr. 12-18. Apr. 19-May 11. Dec. 20-26. Dec. 27-Jan. 2. Feb. 6. Feb. 21-Mar. 7. Apr. 3-May 1. Mar. 21-27. Nov. 1-30. Dec. 1-31. Jan. 1-31. Feb. 1-28. Mar. 2-9.	3 2 1 2 5 1 17 2 4 4 3 4 8	2 5 5 6 5 2 2	Jan. 17-23: Present, From Belgrade. Present.
Do	Mar. 28-Apr. 3 May 28 Mar. 11-18 May 6-12 Apr. 12-18 Apr. 19-May 11 Dec. 20-26 Dec. 27-Jan. 2 Feb. 6 Feb. 21-Mar. 7 Apr. 3-May 1 Mar. 21-27 Nov. 1-30 Dec. 1-31 Jan. 1-31 Feb. 1-28 Mar. 1-31	2 1 2 5 1 17 2 4 3 4 8 15	2 5 5 5 2 2	Jan, 17-23: Present, From Belgrade.
Do. Dundee Glasgow Do. Greece: Athens. Do. Saloniki. Do. Do. Do. Do. Lo. Jo. Jo. Guatemala: Guatemala City Italy: Florence Do. Do. Do. Jo. Jo. Jo. Jo. Jo. Jo. Jo. Jo. Jo. J	Mar. 28-Apr. 3 May 2-8 Mar. 11-18 May 6-12 Apr. 12-18 Apr. 19-May 11 Dec. 20-26 Dec. 27-Jan. 2 Feb. 6 Feb. 21-Mar. 7 Apr. 3-May 1 Mar. 21-27 Nov. 1-30 Dec. 1-31 Jan. 1-31 Feb. 1-28 Mar. 2-9	3 2 1 2 5 1 17 2 4 4 3 4 8	2 5 5 6 5 2 2	Jan. 17-23: Present, From Belgrade. Present.
Do. Dundee. Glasgow Do. Greece: Athens. Do. Saloniki. Do. Do. Do. Do. Jo. Guatemala: Gruatemala City. Italy: Florence Do. Do. Do. Do. Lo. Lo. Lo. Lo. Lo. Lo. Lo. Lo. Lo. L	Mar. 28-Apr. 3. May 2-8. May 11-18. May 6-12. Apr. 12-18. Apr. 19-May 11. Dec. 20-26. Dec. 27-Jan. 2. Feb. 6. Feb. 21-Mar. 7. Apr. 3-May 1. Mar. 21-27. Nov. 1-30. Dec. 1-31. Jan. 1-31. Jan. 2-9. Feb. 1-Apr. 3. Apr. 3-Apr. 3. Feb. 1-28.	2 1 2 5 1 17 2 4 3 4 8 15	2 5 5 6 5 2 2	Jan. 17-23: Present, From Belgrade. Present.
Do	Mar. 28-Apr. 3 May 2-8 Mar. 11-18 May 6-12 Apr. 12-18 Apr. 19-May 11 Dec. 20-26 Dec. 27-Jan. 2 Feb. 6 Feb. 21-Mar. 7 Apr. 3-May 1 Mar. 21-27 Nov. 1-30 Dec. 1-31 Jan. 1-31 Feb. 1-28 Mar. 2-9	17 22 4 3 4 8 15 13	2 5 5 6 5 2 2	Jan. 17-23: Present, From Belgrade. Present.
Do. Dundee Glasgow Do. Greece: Athens. Do. Saloniki. Do. Do. Do. Co. Do. Do. Jo. Jo. Guatemala: Guatemala City Jialy: Florence Do. Do. Do. Jo. Jo. Jo. Athens. Japan: Hakodate Tokyo Yokobama	Mar. 28-Apr. 3 May 2-8. Mar. 11-18. May 6-12. Apr. 12-18. Apr. 19-May 11. Dec. 20-26. Dec. 27-Jan. 2. Feb. 6. Feb. 21-Mar. 7. Apr. 3-May 1. Mar. 21-27. Nov. 1-30. Dec. 1-31. Jan. 1-31. Feb. 1-28. Mar. 1-31. Feb. 1-28. Apr. 13-28. Apr. 13-28. Apr. 27-May 10.	17 22 5 1 17 24 4 3 4 8 15 13 15	2 5 5 6 5 2 2	Jan. 17-23: Present, From Belgrade. Present. Mar. 6: Still present.
Do. Dundee. Glasgow Do. Greece: Athens. Do. Saloniki. Do. Do. Do. Do. Guatemala: Guatemala City Italy: Florence. Do. Do. Do. Lo. Venice. Japan: Hakodate Tokyo. Armscalientes.	Mar. 28-Apr. 3 May 2-8 May 11-18 May 6-12 Apr. 12-18 Apr. 19-May 11. Dec. 20-26 Dec. 27-Jan. 2. Feb. 6. Feb. 21-Mar. 7. Apr. 3-May 1 Mar. 21-27 Nov. 1-30 Dec. 1-31 Jan. 1-31 Jan. 2-9 Feb. 1-Apr. 3 Apr. 13-28 Apr. 13-28 Apr. 13-29 Jan. 13-29 Jan. 1-31 Jan. 2-9 Feb. 1-Apr. 3 Apr. 13-29 Jan. 13-29 Jan. 13-29 Jan. 17-23 Jan. 17-23 Jan. 17-23	17 2 5 1 1 17 2 4 4 3 4 8 8 15 13 15	2 5 5 6 5 2 2	Jan. 17-23: Present, From Belgrade. Present. Mar. 6: Still present. Present.
Do. Dundee Glasgow Do. Greece: Athens. Do. Saloniki. Do. Do. Do. Do. Lo. Do. Jo. Jo. Guatemala: Guatemala City Italy: Florence Do. Do. Do. Jo. Venice Japan: Hakodate Tokyo Yokobama Mexico: Agusscalientes Do.	Mar. 28-Apr. 3 May 2-8 May 11-18 May 6-12 Apr. 12-18 Apr. 19-May 11. Dec. 20-26 Dec. 27-Jan. 2. Feb. 6. Feb. 21-Mar. 7. Apr. 3-May 1 Mar. 21-27 Nov. 1-30 Dec. 1-31 Jan. 1-31 Jan. 2-9 Feb. 1-Apr. 3 Apr. 13-28 Apr. 13-28 Apr. 13-29 Jan. 13-29 Jan. 1-31 Jan. 2-9 Feb. 1-Apr. 3 Apr. 13-29 Jan. 13-29 Jan. 13-29 Jan. 17-23 Jan. 17-23 Jan. 17-23	17 2 5 1 1 17 2 4 4 3 4 8 8 15 13 15	2 5 5 6 5 2 2	Jan. 17-23: Present, From Belgrade. Present. Mar. 6: Still present.
Do. Dundee. Glasgow Do. Greece: Athens. Do. Saloniki. Do. Do. Do. Do. Guatemala: Guatemala City Italy: Florence. Do. Do. Do. Lo. Venice. Japan: Hakodate Tokyo. Armscalientes.	Mar. 28-Apr. 3 May 2-8. Mar. 11-18. May 6-12. Apr. 12-18. Apr. 19-May 11. Dec. 20-26. Dec. 27-Jan. 2. Feb. 6. Feb. 21-Mar. 7. Apr. 3-May 1. Mar. 21-27. Nov. 1-30. Dec. 1-31. Jan. 1-31. Feb. 1-28. Mar. 1-31. Feb. 1-28. Apr. 13-28. Apr. 13-28. Apr. 27-May 10.	17 2 5 1 1 17 2 4 4 3 4 8 8 15 13 15	2 5 5 6 5 2 2	Jan. 17-23: Present, From Belgrade. Present. Mar. 6: Still present. Present.

TYPHUS FEVER-Continued.

Reports Received from Jan. 1 to June 11, 1915—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Netherlands:				
Flushing	May 1-8	1		
Russia:		_		1
Moscow	Jan. 2-Feb. 20	64	6	
Do	Feb. 21-Apr. 4	799	74	
Odessa	Feb. 21-Mar. 6	6		ŧ
Petrograd	Dec. 19-26	8	2	i '
Do	Dec. 25-Apr. 17	65	1 11	
Vladivostok	Dec. 20-28	5	l ī	
Do	Jan. 14-Mar. 8	l š	l š	
Serbia.	Feb. 6		l	Epidemic. About 500 death:
	- 1		1	daily.
Ppain:	1	ŀ	i	, ,
Madrid	Mar. 1-31	5	5	
witzerland:		_		
Zurich	Apr. 25-May 1	1		-
Turkey in Asia:		-		
Adana	Apr. 4-24			Present.
Beirut	Mar. 28-Apr. 10	4	1	
Erzeroum	Apr. 10.	•	•	Military center. Epidemic.
Erzinian .	do		• • • • • • • • • • • • • • • • • • • •	Do.
Harput	Feb. 1-27			Present.
Do				Do.
Jaffa			•••••	Da
Do	Mar. 28-Apr. 17	23	7	24
Mersina	Mar. 7-13.		•	Do.
Samsoon	Mar. 4.			Present in military hospital.
Tarsus.	Apr. 4-24	•••••		Present.
Trebizond	Dec. 13-Feb. 27	•••••	•••••	Many cases among troops, with
***************************************			•••••	high fatality rate.
Do	Apr. 10			Epidemic.
DV	·· Thr : To			Epidemic.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.

Reports Received During Week Ended June 18, 1915.1

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary: Austria. Bosnia-Herzegovina. Croatia-Slavonia. Hungary. Balkan territory	Apr. 11-24 Apr. 5-17 Apr. 5-19 Apr. 5-11do	9 14 1 5	1 1 1	Military. Austro-Hungarian forces.
Outch East Indies: Java— Batavia	Apr. 18-24	11	9	101000,
Bombay Madras Rangoon	dododo	2 1 2	2 1 1	
Indo-China: Saigon	do	139	42	

PLAGUE.

China: Amoy	Apr. 10-29	5 10	4	Present; also present in vicinity. Chinese. Mostly pneumonic. Present in villages in vicinity.
Habana Dutch East Indies: Java	June 14	1	1	Jan. 29-Feb. 25; Cases, 1,049;

[:] From medical officers of the Public Health Service, American consuls, and other sources.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received During Week Ended June 18, 1915—Continued.

PLAGUE-Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Egypt				Jan. 1-May 13: Cases, 31; deaths,
Alexandria	Apr. 30-May 1	1		***
Assiout, Province	do	<u> </u>	2	
Foroum Province	do	i		
Minieh, Province	do	Ē	2	ŕ
Port Said	do	i		
India:		_		
Bombay	Apr. 18-24	74	62	
Karachi	do	142	105	
Rangoon	Apr. 11-17	14	13	_
Japan:			1	
Taiwan-			1	
Kagi	Apr. 25-May 1	6	6	
Tokyo	June 8-14	1		
Peru:			1	
Callao	Apr. 12-May 2	2		
Ferrenafe	do	2		•
Lima (city)	do	3		
Lima (country)	do	3		
Mollendo	do	1		
Salaverry	do	5		
Trujillo	do	4		

SMALLPOX.

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CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX-Continued.

Reports Received from Dec. 26, 1914, to June 11, 1915.

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks,
Austria-Hungary: Austria	Man 01 Am 10			Matal Good St Day & G
Austra	. Mar. 21-Apr. 10	8		Jotal Sept. 15-Dec. 5: Cases, 3,467; deaths, 937. Total Jan. 4-Mar. 20: 151 cases.
Do			-	. Total Nov. 18-Dec. 22: Cases, 741; deaths. 133.
Bohemia			· ·····	Total Sept. 23-Dec. 5: Cases, 176; deaths, 56.
Coast land— Trieste Galicia.	Nov. 15-21	5		Total Cant 92 Dec F. Con-
Kracow	Oct. 4-Dec. 5 Sept. 23-Nov. 7	109 355		Total Sept. 23-Dec. 5; Cases, 2,047; deaths, 793.
Przemsyl Lower Austria	Nov. 1-14	132	3	Total Sept. 1-Dec. 5: Cases, 473;
Vienna Do Moravia	Sept. 1–Jan. 30 Mar. 7–Apr. 3	390 2		deaths, 67.
Brunn Silesia	Sept. 15-Nov. 21	18	3	Total Sept. 15-Dec. 5: Cases, 362; deaths, 93. Total Sept. 23-Dec. 5: Cases, 288;
Styria		•••••		deaths, 39 Sept. 23–28; Cases, 55; deaths, 18.
GratzUpper Austria	Oct. 3-Nov. 14 Oct. 4-Nov. 7	10 3		Dopu. 20 24, Cases, co, deadis, 10.
Bosnia-Herzegovina. Croatia-Slavonia	Jan. 4-Apr. 10 Dec. 31-Apr. 5	172 489	69 163	Total Oct. 4-10: Case, 1. Total Oct. 4-10: Case, 1; death, 1.
Esseg, city	Mar. 9-15 Dec. 31-Apr. 4	578	164	Total Sept. 15-Nov 30 Cases
DoBudapest	Dec. 25-Feb. 13	22	ļ	3,042; deaths not yet reported. Total Nov. 18-Dec. 22: Cases, 452; deaths not reported.
Balkan Territory	Dec. 25-Feb. 13 Jan. 25-Feb. 7 Mar. 22-Apr. 4	3 6	4	•
Borneo: Membakut estate Simporna	Mar. 2-31 Jan. 1-Feb. 8	6	1 4	In scene of war. West coast.
Do	Mar. 2-19	60 	53 14	Mar. 13, still present.
ColomboChina:	Sept. 5	1	1	
Nanking Wuchow	Nov. 15-21 Nov. 27	••••••		Present. Do.
Dutch East Indies: Banca— Muntok	Dec. 6-12	••	_	
Celebes— Menado	Oct. 18-Dec. 5	425	7 409	
Java— Batavia	Oct. 25-Dec. 26	361	343	May 4, epidemic.
Do Sumatra—	Mar. 14-Apr. 17	26	22	
Lampong	Nov. 8	27 65 175	7 69	•
Palembang Pencoulen district Telok Betong	Oct. 18-Dec. 19 Oct. 25-31 Nov. 14-Dec. 12	88 47	147 32 44	
Germany	Feb. 21-Mar. 3	17		Total, Nov. 8-Jan. 16; Cases, 54. In prison camps.
Brandenburg	Dec. 6-23	4	••••••	Vicinity of Frankfort on the Oder.
Torgau	Jan. 5-16 Dec. 20-26	1 2 5		At Birnbaum.
Rosenberg.	Jan. 5-16. Nov. 8-Dec. 26 Jan. 5-16.	46		In 23 localities.
ndia: Bombay	Nov. 1-Apr. 10	13	5	
Calcutta Do Madras	Nov. 1-28 Mar. 14-20 Nov. 8-Apr. 10		42 124	Oct. 25-31: Deaths, 17. Not pre- viously reported.
T-811KOOH	Nov. 8-Apr. 10 Jan. 17-Mar. 6 Sept. 1-Dec. 31	182 622 6	130 403 5	
	Feb. 28-Apr. 17	41	8	

CHOLERA—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Indo-China				Jan. 4-Aug. 31: Cases, 259; deaths, 148. Aug. 1-31: Cases, 18; deaths, 15.
Anam— Binh-Dinh Cambodia—	Oct. 1-Nov. 30	84	42	
Pnum Penh Cochin China	Aug. 1-Oct. 31	2	1	
Baria	Aug. 1–31 Oct. 1–31	6 2	6	And vicinity, Nov. 3-23: Cases, 20; deaths, 10. Total Jan. 1-Dec. 20: Cases, 154;
Cholon	Aug. 1-Nov. 30 Aug. 1-Apr. 10	70 923	49 492	Total Jan. 1-Dec. 20: Cases, 154; deaths, 79.
Pakse	Aug. 1-31	1	1	
Ninh-Binh	Oct. 1-31	11	2	Total Jan. 1-Dec. 31: 5 cases, 4
Kyoto fu Philippine Islands: Manila	Oct. 1-31 Oct. 25-Jan. 30	1 66	1 37	deaths.
DoRussia:	Feb. 7-Apr. 10	38	23	
Moscow	Nov. 8-Jan. 23		4	
BangkokStraits Settlements:	Sept. 27-Mar. 20		13 5	
Singapore	Oct. 4-Jan. 30	5		
	YELLOW	FEVE:	R.	
Brazil: Bahia	Jan. 24–Feb. 20 Dec. 13–16	3 2	1	•
GuayaquilFrench Guiana: St. Jean du Maroni	Nov. 1-Mar. 31 Sept. 23-Oct. 10	. 5 15	3 8	At the penal station.
Mexico: Merida Do. Do. Venezuela: Caracas.	Jan. 25	1 1 2	1	In children. Mild type.
	PLAC	GUB.		
Bahrein (in Persian Gulf)	Dec. 29			Present.
Brazil: Bahia Do Pernambuco Rio de Janeiro	Nov. 16-Feb. 27 Apr. 4-10 Oct. 11-Dec. 31 Dec. 20-Jan. 5 May 20	20 1 2 1	16 1 12	Mar. 21-27: Cases, 4; deaths, 2.
Do Ceylon: Colombo	Oct. 25-Apr. 10	70	65	t en e
China: Amoy	Mar. 28-Apr. 3			Present. Also present in villages in vicinity.
Canton	Apr. 6 Dec. 28-Apr. 10 Dec. 6-Jan. 2	3	2 3	June 12-July 12: Cases, 325. Present. Chinese. Among natives.
Guanabacoa	May 13	16 2	7	Thorat Town Makel Oak 1 Nove
Java	Jan. 29-Mar. 27 Oct. 1-Nov. 30 do do Dec. 13-Apr. 3	951 730 128 1,405 299 198	846 678 110 1,211 279 184	East Java. Total, Oct. 1-Nov. 30; Cases, 2,562; deaths, 2,278.

PLAGUE—Continued.

Alexandria	Places.	Date.	Cases.	Deaths.	Remarks.
Milagro. Dec. 1-31. 1 1 1 1 1 1 1 1 1				•	
Milagro. Dec. 1-31. 1 1 1 1 1 1 1 1 1	Duran	Nov. 1-Jan. 31		4	
Egypt	Guayaquil	Nov. 1-Mar. 31			1
Egypt. Alexandria. Do. Area political and	Milagro				
Alexandria	Sanborondon	Nov. 1-Dec. 31	4	3	·
Do.	Egypt				Total, Jan. 1, 1914-Jan. 28, 1915
Rayound	Alexandria	NOV. 5-28	1 4	1	Cases, 225; deaths, 116.
Rayound, Province	Agricust Drawings	Apr. 9-15	2		· ·
Greeco. Jan. 17-27 Jan. 17-27 Jan. 17-27 Jan. 17-27 Jan. 17-27 Jan. 17-27 Jan. 18-28 Jan. 1	Foreign Province	Ame 00	20		
Greece	Circh Province	Ang 1_8	,	1 7	
Greeco. Jan. 17-27 Jan. 17-27 Jan. 17-27 Jan. 17-27 Jan. 17-27 Jan. 17-27 Jan. 18-28 Jan. 1	Minish Province	Apr 28			
Greeces	Port Said	Oct. 22-Dec. 24		7	Jan 1-Dec 18: Cases 44.
Fireus	Greece	000.22 200.200.	1		Sent 12 present in Drama and
Salonki	Pirmis	Jan. 17-27	i		Kavala.
India: Bassein		Apr. 4-10		7	1
Bassein		pr. 1 20	"		İ
Rarach Nov. 22-Dec. 12		Jan 4-Dec 5	13	10	Not previously reported.
Rarach Nov. 22-Dec. 12	Rombay	Now 1-Apr 17			Troublet some some
Madras Nov. 22-Dec. 12	Karachi	Nov. 8-Apr. 14	80		
Madras Presidency	Madras	Nov. 22-Dec. 12	6		
Rangoon	Madras Presidency	Jan. 17-30	299		
Rangoon		Feb. 7-Mar. 6			ļ
Do	Rangoon	Sept. 1-Dec. 31	125		
Indo-China	Do	Feb. 28-Apr. 17			Feb. 1-28, 1915; Cases, 54; deaths,
Indo-China		_ 00.20p.: 2000		1	
Anam— Phanitet	Indo-China				Jan. 1-Aug. 31: Cases, 1,780; deaths, 1,413. Aug. 1-3: Cases,
Phanitet	Anam—			}	
Do.		Ang. 1-31	4	1	
Phanrang	Do	Oct. 1-Nov. 30			
Cambodia	Phanrang	Aug. 1-Nov. 30			
Nov. 1-30	Cambodia—	"			* '
Pnum-Penh	Kompong-Speu	Nov. 1-30	5	3	
Stung-Treng	Pnum-Penh	Aug. 1-Nov. 30	88	84	
Cochim China— Cantho. Nov. 1-30. 3 3 14 Cholon. Aug. 1-Nov. 30. 39 14 Giadinh. Oct. 1-31. 1 23 15 3 15 25 15 25 15 25 15 25 2	Stung-Treng	Oct. 1-Nov. 30	4	3	
Saigon	Cochin China—	· ·			
Saigon	Cantho	Nov. 1-30			
Saigon	Cholon	Aug. 1-Nov. 30		14	
Saigon	Giadinh	Oct. 1-31			
Kaouang-Techeou-Wan		Ang. 1-31			And vicinity Nov. 3-30: Cases, 5.
Kaouang-Techeou-Wan	_ Do	Jan. 4-Apr. 10	42		
Tonkin	Thudaumot	Nov. 1-30			
Tong-San		Aug. 1-Nov. 30	70	70	·
Japan		37 1 00			
Chiba-ken— Komikawa. Jan. 1-Dec. 31, 1914 6 6 6 6 Moriyama. do	Tong-san	NOV. 1-30	25	25	Madel Tom 1 Dec 01: 405 const
Chiba-ken— Komikawa. Jan. 1-Dec. 31, 1914 6 6 6	Japan		•••••		Total, Jan. 1-Dec. 31: 485 cases;
Komikawa	Chiha kan				110 destiis.
Moriyama		Ton 1 Dec 21 1014			
Ibaraki-ken	Morinomo	Jan. 1-Dec. 31, 1914			· ·
Isohama	morryama			3	
Isohama	Thornbi-bon				
Kagi Jan. 24-Apr. 24 59 41 Kanagawa-ken- Hodogaya Jan. 24-Feb. 13 8 6 Kawasaki do 1 1 Ohno-mura do 5 4 Yokohama do 5 4 Yokohama do 1 1 Taiwan (Formosa) do 303 275 Tokyo-fu do 47 29 Tokyo Dec. 29-Jan. 4 1 1 Do May 31-June 6 4 4 Libya (Tripoli) Mov. 6-Jan. 14 74 Persia: Doc. 30-Nov. 9 80 80 On Caspian coast.		Ton 1 Dec 21 1014	-	4	•
Kanagawa-ken	Vogi				
Hodogaya	Vanamura kan	Jan. 24-Apr. 21	99	31	
Kawasaki	Hodorere	Ten 24 Feb 12		R	Including reports previously
Kawasaki do 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Trougaya	Jan. 21-Feb. 10	•	v	muhlished in D H D
Ohno-mura do 9 8 Tijima-mura do 5 4 Yokohama do 1 1 1 Tatwan (Formosa) do 303 275 Tokyo-1 do 47 29 Tokyo Dec. 29-Jan. 4 1 1 Do May 31-June 6 4 Libya (Tripoli) Present in Derna and Ma Susa among native laborer Belessavar Oct. 30-Nov. 9 80 80 On Caspian coast.	Vormoni	امما		1	published in r. m. m.
Tijima-mura.	Ohnomire	do			
Yokohama.					
Mauritius Nov. 6-Jan. 14 74 Persia: Belessavar Oct. 30-Nov. 9. 80 80 On Caspian coast.	Vokohomo	do			The .
Mauritius Nov. 6-Jan. 14 74 Persia: Belessavar Oct. 30-Nov. 9. 80 80 On Caspian coast.	Taiwan (Rormosa)	do			
Mauritius Nov. 6-Jan. 14 74 Persia: Belessavar Oct. 30-Nov. 9. 80 80 On Caspian coast.	Torvo-in	do		210	
Mauritius Nov. 6-Jan. 14 74 Persia: Belessavar Oct. 30-Nov. 9. 80 80 On Caspian coast.	Tokyo	Dec 20-Ion 4		27	~~
Mauritius	Do	May 31-June 6			
Mauritius Nov. 6-Jan. 14 74 Persia: Belessavar Oct. 30-Nov. 9. 80 80 On Caspian coast.	Libva (Tripoli)	, v uno v	-		Present in Darna and Marca.
Mauritius					
Persia: Belessavar	Manritins	Nov. 6-Jan. 14	74		
Belessayar Oct. 20-Nov. 9 80 80 On Caspian coast.	Persia:		••		
Kesri Shiraem Dec. 12	Belessavar	Oct. 30-Nov. 9	80	80	On Caspian coast.
	Kasri Shireen	Dec. 12	ĭ		

PLAGUE—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Peru:				
Departments— Ancachs				Total year 1914: Cases, 34; deaths
Arequipa		ļ		20. Total year 1914: Cases, 54; deaths,
Cajamarca		ļ		24. Total year 1914: Cases, 16; deaths,
Callao		ļ	.	Total year 1914: Cases, 14; deaths,
La Libertad		ļ	.	Total year 1914: Cases, 335; deaths, 176.
Lambayeque		ļ		Total year 1914: Cases, 1,907; deaths, 47.
Lima				Total year 1914; Cases, 106; deaths, 48.
Piura		ļ		Total year 1914: Cases, 94; deaths, 56.
BarrancoCallao	Mar. 1-Apr. 4 Nov. 16-Apr. 4	13	2	ubaus, 00.
Catacoas Chiclayo	dodo	35 6	3 15	
Chocope	Nov 16-Ten 3	i	ļ	Present.
CocrachacraFerrenale	Mar. 1-Apr. 4 Nov. 16-Jan. 31 Jan. 4-31	6		
Guadalupe	Jan. 4-31do	1 1	1 1	,
Huancayo Lambayeque	Nov. 16-Apr. 11	18	5	·
Lima (city)	Nov. 16-Apr. 4	20 10	2 1	
Lima (country) Lurigancho	Mar. 1-Apr. 4	1		•
Lurin	Nov. 16-Apr. 4	1 24	 	
Mollendo Pacasmayo	Nov. 16-Jan. 3	i		
Piura	Nov. 16-Apr. 4 Nov. 16-Apr. 25	25 7	7 3	•
SalaverrySan Pedro	Nov. 16-Apr. 11	26		
Trujillo	Nov. 16-Apr. 4 Dec. 6-Feb. 13	57 9	8 2	•
Senegal: Dakar	Dec. 5		_	Do.
Siam: Bangkok	Dec. 26-Mar. 20		14	
Straits Settlements: Singapore	Nov. 1-Mar. 27	29	22	
Turkey in Asia: Bagdad	Nov. 1-Dec. 3	11	. 9	
Do	Dec. 26-Jan. 5	12 532	8 355	
Do Union of South Africa	Jan. 12-Apr. 17			Corrected statement: To Mar. 29, cases, 28; deaths, 18.
Cape Province—		_		Cases, 26, doams, 10.
Cradock district Queenstown district	Mar. 30-Apr. 5 Feb. 5-Apr. 10	7 13	1 8	•
Zanzibar	Oct. 25-31	2	3	
			·	
	SMAL	LPOX.		
Arabia:	;			:
Aden	Nov. 5–14 Feb. 7–13	49	51	Present.
Argentina: Rosairo Australia:	Oct. 1-31	•••••	1	
New South Wales-	25 40.05	اء		
Aberdare Cessnock	Mar. 19-25 Mar. 5-Apr. 15	2 8		
Newcastle	Mar. 5-Apr. 15 Jan. 22-28	2		
Penrith	Dec. 11-17 Dec. 11-Mar. 25	40	•	Total, Nov. 13-19: Cases, 7 in the
Sydney	Apr. 16-22	1		metropolitan area and 2 in the country districts.
M. 62 MTT	Ayı. 10-22,	* }		committee of the contract of t

SMALLPOX—Continued.

Thursday Island	Places.	Date.	Cases.	Deaths.	Remarks.
Queensland	Anetrolia-Continued				
Brisbane	Queensland—			1]
Thursday Island	Brisbane			.	Nov. 19, in Colmslie quarantine
Thursday Island Mar. 8. 2 From s. s. Chands from Calcutts South Australia. Jan. 3-16. 1 Canada From Calcutts Victoria—Melbourne. Mar. 5. 1 Total, Fob. s. s. Gregory Apear from Calcutts From S. s. Gregory Apear from Calcutt From S. s. Gregory Apear from Calcutt From S. s. Tall, Feb. 2-1. S. S. Daniella From S. s. Gregory Apear from Calcutt From S. s. Tall, Feb. 2-1. S. S. Daniela From S. s. Gregory Apear from Calcutt From S. s. Tall, Feb. 2-1. S. S. S. Daniela From S. S. Gregory Apear from Calcutt From S. S. Gregory Apear from Calcutt From S. S. Gregory Apear from Calcutt From S. S. Gregory Apear from Calcutt From S. S. Gregory Apear from S. S. Gregory Apear from S. S. Gregory Apear from S. S. Gregory Apear from					station, 1 case from s. s. Kano Na from Melbourne, via Syd-
South Australia	Thursday Island	Mar e	١ ,		
Melbourne	South Australia	Jan. 3-16		1	From S. S. Chanda from Calcuta.
Do. Mar. 13. 1 1 From s. s. transport H2 from Ca cruths From table From s. s. Umballa from Bom bay.	Melbourne	Mar. 5	1	ļ	From s. s. Gregory Apear from Calcutta.
Fremantle	Do	Mar. 13	1	1	From s. s. transport H2 from Cal-
Austria - Mungary:		Mar. 5	3	ļ	From s. s. Umballa from Bom- bay.
Vianna. Oct. 31-Jan. 9 141 15	Austria-Hungary:	1.	Į		
Vienna. Oct. 31-Jan. 9 141 15	Austria	Mar. 28-Apr. 17			Total, Feb. 28-Mar. 6,292 cases.
Vienna	Prague	Jan. 17-23		<u>.</u> .	
Hungary	Vienna	Oct. 31-Jan. 9			A 1014 A
Budapest		Jan. 17-Apr. 24	902	. 221	Aug. 1914-Apr. 17, 1915: Cases, 1,360; deaths, 281.
Fimms	Hungary—	T 01 351		1	ł
Antwerp	Fiume	Dec. 6-Apr. 25		2	•
Pernambuco	Antwerp	Mar. 23-29	1		
Rio de Janeiro		Oct. 1-Dec. 31	l	57	1
Rio de Janeiro	Do	Jan. 18-31		4	
Sao Paulo Nov. 9-15 2 2 2 3 3 3 3 3 3 3	Rio de Janeiro	Nov. 1-Jan. 9			·
British Honduras: Belize. Belize. Bulgaria: Sofia	Do	Feb. 7-Apr. 17	94	32	
Belize	Sao Paulo	Nov. 9-15	2		
Sofia	Belize	Apr. 16-22	. 1	ļ	Isolated 3 miles from Belize.
Alberta	Sofia	June 30-Nov. 28	121		
British Columbia			ł	Ī i	
Manitoba	Calgary	Apr. 10-17	1		× -
Ontario	Manitoba—		_		r e i e e
Hamilton Jan. 1-Apr. 30. 9	Ontario	,			
Sarnia	Fort William	May 16-22			From vessel.
Toronto	Hamilton	Jan. 1-Apr. 30			•
Variable Variable		Dec 6 Mov 22			
Quebec— Montreal Quebec. Dec. 28-May 15. 22 Canary Islands Trunk ferry boat Lansdown. Canary Islands' Teneriffe—Santa Cruz. Dec. 6-26. 2 Ceylon: Colombo Oct. 25-Apr. 10. 211 64 China: Foochow. Hankow Mar. 6-Apr. 24. Feb. 7-13. 1 Hankow Feb. 7-13. 18 Feb. 7-14. Hongkong. Nov. 22-Apr. 3. 17 14 Newchwang. Shanghai. Shanghai. Doc. 6-12. Nov. 9-Apr. 24. 50 125 Tientsin. Do. Mar. 7-13. 1 1 Mar. 15: 1 case on steamship Cuba: Gusyos. Gaysos. Habana. Mar. 2-1. 1 Mar. 15: 1 case on steamship	Windsor	Jan 17-May 1		•	Jan. 13: Cases 4 from Grand
Montreal					
Canary Islands Teneriffe	Montreal	Dec. 28-May 15	22	l	•
Dec. 6-26. Dec. 6-26. 2 Santa Cruz. Santa Cruz. Dec. 6-26. 2 Santa Cruz. Santa Cruz. Dec. 6-26. 2 Santa Cruz. Santa Cr	Quebec Canary Islands	Dec. 13-Jan. 16	5		
Colombo	Tenerifie— Santa Cruz	Dec. 6-26		2	
China: Foochow Hankow Harbin Hongkong Nov. 22-Apr. 3 Newchwang Shanghai Do Tientsin Do Cuba: Gusyos Gusyos Jan. 12-Feb. 10 Jan. 12-Feb. 10 Jan. 13-Feb. 10 Knight Templar; fatal. Feb. 6, 1 case on steamship Chindwara. Present. Present. Feb. 20, present. Mar. 21-Apr. 24, present. Present. Deaths among natives. Lan. 12-Feb. 10 Mar. 7-13 Mar. 15: 1 case on steamship		Oct. 25-Apr. 10	211	64	Jan. 14, 1 case from steamship
China:		•			6, 1 case from steamship Chind-
Foochow	China:				***************************************
Harbin	Foochow	Mar. 6-Apr. 24		l	Present.
Harbin	Hankow	Feb. 7-13	-		
Nanking Feb. 22, present. Mar. 21-Apr. 24, present. Shanghai Dec. 6-12 1 Dec. 6-12 1 Dus: Grayos Jan. 12-Feb. 10. 7 Habana Mar. 8-21. 1 Mar. 15: 1 case on steamship	Harbin	Jan. 11-Mar. 21		<u>-</u>	
Shanghai	Nanking	NOV. 22-Apr. 3	17	14	Feb. 20, present. Mar. 21-Apr.
Shanghai	Newchweng				Present
Tientsin	Shanghai	Nov. 9-Apr. 24	KO.	125	
Do		Dec. 6-12		1	
Guayos	Do	Mar. 7-13		[
Habana 1 Mar. 8-21 1 Mar. 15: 1 case on steamship					
mar. 5-21 1 1 Mar. 15: 1 case on steamship		Jan. 12-Feb. 10		1	Man 15, 1 mar on charmette
	118 D&D&	=87. ₹-21	1	1	Mar. 15: 1 case on steamship Moro Castle,

SMA	LLPOY	Contin	neđ.

	<u> </u>	ī —		T
Places.	Date.	Cases.	Deaths.	Remarks.
Dutch East Indies:				
Borneo	Nov. 8-14	50	30	Oct. 18-24: Cases, 112; deaths, 44; mainly in Pontianak.
Java	Jan. 8-Apr. 17	722	237	In the western part, including Batavia, Feb. 18-Mar. 20 Cases, 155; deaths, 45.
Batavia Do	Oct. 18-Nov. 21 Jan. 8-Apr. 17	166 149	44 45	Custo, no, udatio, so,
Surabaya	Nov. 1-7	1		<u> </u>
Sumatra— Tepanodi district	Dec. 5-29	6	2	
Egypt: Alexandria	Nov. 19-May 6	127	34	
Cairo France:	Dec. 3-Apr. 29	50	9	
Havre	Dec. 20-26	1	2	<u>.</u>
Marseille Nantes	Jan. 1-Mar. 31 Apr. 30-May 7	2	l . .	
Paris	Apr. 30-May 7 Nov. 15-Dec. 26 Mar. 20-27	4	2	
Do Roubaix	Jan. 1-31	1	27	
Germany	Apr. 11-May 1	11		Nov. 15-Dec. 19: Cases, 14. Jan. 10-16: 11 cases.
Districts—	Арг. 25-Мау 1	1	ŀ	
Bromberg	do	ī		
Schaumberg-Lippe	do	1		
StettinStrassburgGreat Britain:	do Jan. 1-Feb. 28	10	1	
Bradford	May 9-15	2		
CardiffLeeds	Nov. 30-Dec. 5 Apr. 25-May 1	5 1		
Liverpool	Dec. 19	1		
LondonSouth Shields	Jan. 31–Apr. 10 Apr. 18–24	28 1	3	
Greece: Kavala	Nov. 22-Mar. 27	11		
Kilkish Patras	Nov. 22-Feb. 27 Nov. 23-Feb. 21	1	18	Jan. 31; Epidemic.
SolonikiGuatemala:	Nov. 15-Apr. 10	86	64	
GuatemalaIndia:	Mar. 21-Apr. 5	•••••	•••••	Present.
Bombay	Nov. 1-Apr. 17	353	126	•
Calcutta	Oct. 25-Nov. 28 Mar. 14-20		37 201	Epidemic.
Karachi	Jan. 3-Apr. 14	14	4	Epitemic.
Madras	Nov. 1-Apr. 17	111	16 3	
Rangoon	Oct. 1-Dec. 31 Jan. 1-Apr. 17	146	20	Feb. 1-28: Cases, 16; deaths, 6.
Indo-China: Anam—				•
Binh-Dinh	Oct. 1-31	3		
Phanrang Cambodia—	Nov. 1-30		1	
PnompenhCochin China—	Oct. 1-Nov. 30	2	1	
Bac-Lien Saigon	Nov. 1-30 Feb. 22-Apr. 3	1 18	ii	
Laos— Pakse	Feb. 22-Mar. 27	1		
Tonkin— Haidu ong	do	4		••
Haiphong	Oct. 1-Nov. 30 Nov. 1-30	13 1	1	
Hanoitaly: Milan Do	Dec. 1-31	1		
	Mar. 1-31	2		
Turin	Dec. 21-Mar. 21	1		Jan. 1-Dec. 31: Cases, 485; deaths
Kagi	Jan. 31-Feb. 6 Jan. 18-Mar. 14	3	3	110, exclusive of Taiwan.
NagasakiNagasaki-ken	Jan. 18-Mar. 14 Oct. 1-Dec. 31	60 CO	1 12	
Taiwan	Oct. 25-Apr. 24	75	28	

SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Mexico:				·
Aguascalientes	Dec. 7-May 16	.	. 29	1
Chihuahua	Nov. 30-Apr. 9	29	19	· ·
Frontera	May 9-15	6	1	May 24, present.
Juares.	Dec. 4.			Prevalent.
Mazatlan	Dec. 9-May 4	66	44	1 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -
Mexicali	Feb. 14-20	3	**	1
Mexicali	Dec 14 Word		2	Feb. 10: Epidemic.
Monterey	Dec. 14-May 2			
Nuevo Laredo	Jan. 31-Apr. 10 Apr. 4-May 22	5	5	To May 13: Cases, 17.
Progreso	Apr. 4-May 22	1 12	15	· ·
Salina Cruz	Nov. 1-7	. 1		1
San Juan Bautista	May 8			Present among troops.
Tampico	Dec. 1-May 10		49	Prevalent among the military.
Tuxpam	Apr. 29			Recent epidemic: 300 cases es
Vera Cruz	Dec. 1-May 16	234	46	mated.
Netherlands:	,	i	1	1
Rotterdam	Jan. 24-Mar. 6	5	1	
Newfoundland:		1	-	<u> </u>
St. Johns.	Jan. 23-29	1	1 •	
Norway:	van. 20-20	· -		
Christiansand	Nov. 1-30	7	2	Including report, vol. 29.
	NOV. 1-30			Including report, von 20.
Stavanger	Nov. 30-Dec. 5			
Persia:		l	1 .	5
Teheran	Feb. 14-20			Present.
Peru:		i		
Arequipa	Feb. 28			Epidemic.
Philippine Islands:		1.	}	
Manila	Dec. 20-26	2		From steamship Ixion.
Portugal:		1		-
Lisbon	Nov. 22-May 15	38		
Russia:		"		
Moscow	Nov 8-Apr 18	223	53	
Odessa	Nov. 8-Apr. 18 Oct. 25-Nov. 18	10	ı	• .
	Nov. 30-Mar. 13	111	13	Feb. 20-27; Cases, 6; deaths, 1.
Do	NOV. SU-MISH. 13	932	297	100. 20-21. Casas, 0, donate, 1.
Petrograd	Oct. 25-Apr. 17 Oct. 11-Apr. 24	242	291	
Riga	Oct. 11-Apr. 24			
Vladivostok	Mar. 2-S	1	•••••	
anto Domingo:				
Santo Domingo	Feb. 1-15		2	
spain:				
^ Almeria	Mar. 1-31		2	
Barcelona	Nov. 22-Mar. 25		66	
Madrid	Nov. 1-Feb. 28	5	10	
Do	Mar. 1-31		ġ	
Seville	Dec. 1-Mar. 31		12	
Valencia	Nov. 15-May 15	1 197	65	
traits Settlements:	1101.10 may 10	2,200		•
	Oct. 10-Apr. 10	21	8	the second of th
Singapore	Oct. 10-Apr. 10	21	°I	
weden:	D: 10 10			
Stockholm	Dec. 13-19		1	
Sundsvall	Feb. 1-28	1	• • • • • • • • • • • • • • • • • • • •	· ·
witzerland:				
Basel	Nov. 7-May 1	87		
mrkay in Agia.				
Beirut	Nov. 1-May 1	143	47	
Haifa.	Nov. 2-Dec. 6	14	6	
Jaffa	Jan. 10-Apr. 10	9		
Jerusalem	Oct. 1-Nov. 30	5		
Tripoli	Dec. 27-Apr. 24	78	7	Present in villages in vicinity.
	Dec. ar-apr. m	0	' ' '	
enezuela:	A OF			Outbreak.
Zulia, State	Apr. 25	•••••	7	Outstone.
anzibar	Nov. 14-21	•••••	7	
t sea:			1	The married to Condense
S. S. Chanda, from Cal- cutta, via Thursday	Mar. 14	1	1	En route to Sydney.
cutta, via Thursday			l	
Island.				

SANITARY LEGISLATION.

COURT DECISIONS.

CALIFORNIA DISTRICT COURT OF APPEALS, SECOND DISTRICT.

Poisons—Sale of Ant Poison Containing Arsenic Prohibited Except by Registered Pharmacists.

Ex parte Potter, 146 Pac. Rep. 62. (Nov. 27, 1914.)

Under the law of California as amended in 1913 the sale of ant poison containing arsenic, by grocers and dealers generally (not registered pharmacists), is prohibited.

CONREY, P. J.: On writ of habeas corpus directed to the chief of police of the city of Los Angeles.

Petitioner is held under arrest by virtue of a criminal complaint charging him with a violation of the provisions of "an act to regulate the sale of poisons in the State of California and providing a penalty for the violation thereof," commonly known as the "poison act." This petitioner is the same person who was the petitioner in the case of In re Potter, 164 Cal., 735, 130 Pac. 721. The facts in that case are similar to those here presented, and the statutes affecting the case are the same now as then. with the exceptions hereinafter noted. A certain act, referred to in the briefs in this case as the insecticide or fungicide act, approved May 1, 1911, was amended by an act approved June 2, 1913, by adding thereto a section numbered 14a (Stats.. 1911. p. 1248; Stats., 1913, p. 363). In that new section "ant poison" was included in a list of articles permitted to be sold by grocers and dealers generally without restriction. Section 7 of the so-called "poison act" was amended June 11, 1913 (Stats., 1913, p. 694). Prior to this amendment said section 7, in schedule A referred to therein, included "arsenic, its compounds and preparations," in a list of articles which might not lawfully be sold by persons situated as the petitioner, he not being a licensed pharmacist. Nevertheless, it was held by the decision above mentioned that under the permissive language contained in the so-called "pharmacy act" the petitioner had a right to sell Kellogg's ant paste, an ant poison containing arsenic. It was declared that the pharmacy act and the poison act are statutes in pari materia, and that construing them together grocers, such as the defendant, were empowered to sell ant poisons "when prepared and sold only in original and unbroken packages and labeled with the official poison labels," even though they contained arsenic.

Subsequent to that decision, by the amendment approved June 11, 1913, to section 7¹ of the poison act, the legislature added to schedule Λ the following words: "Ant poison containing any of the poisons enumerated in this schedule." Petitioner claims that the addition of these words does not extend the meaning of the section, which already contained, in the same list, the words "arsenic, its compounds and preparations." If this contention be sustained, the decision in the former case is fully applicable here.

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We are of the opinion, however, that this latest and very specific expression of the will of the legislature recognizes the existence of two classes of ant poisons, some of which may contain poisons enumerated in the Schedule A, and others may be prepared without any of those poisons. The first-named class is thereby excluded from the ant poisons which may be sold by grocers and dealers generally, and on the facts here presented may not lawfully be sold by the petitioner.

The writ is discharged, and the petitioner is remanded to the custody of the chief of police of the city of Los Angeles.

STATE LAWS AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

MICHIGAN.

Communicable Diseases—Notification of Cases. (Act May 11, 1915.)

Section 1. Section 44 of chapter 35 of the Revised Statutes of 1846, relative to the preservation of the public health, quarantine, nuisances, and offensive trades, as amended by act 158 of the public acts of 1895, the same being section 4453 of the compiled laws of 1897, is hereby amended to read as follows:

"SEC. 44. Whenever any physician shall know that any person whom he is called to visit, or who is brought to him for examination, is infected with smallpox, cholera, diphtheria, scarlet fever, or any other disease dangerous to the public health, he shall immediately give notice thereof to the health officer of the township, city, or village in which the sick person may be; and to the householder, hotel keeper, keeper of a boarding house, or tenant, within whose house or rooms the sick person may be. The notice to the officer of the board of health shall state the name of the disease, the name, age, and sex of the person sick, also the name of the physician giving the notice; and shall, by street and number, or otherwise, sufficiently designate the house or room in which such person sick may be. And every physician and person acting as a physician, who shall refuse or neglect immediately to give such notice, shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine not less than \$10 nor more than \$50, or by imprisonment in the county jail not exceeding 30 days in default of the payment of such fine: Provided, That this penalty shall not be enforced against a physician, if another physician in attendance has given to the health officer or other officer hereinbefore mentioned an immediate notice of said sick person, and the true name of the disease in accordance with the requirement of this section."

Vaccination Against Smallpox and Typhoid—Antitoxin—Municipal Boards of Health Authorized to Furnish Free. (Act Apr. 29, 1915.)

SECTION 1. Act number 146 of the Public Acts of 1879, entitled "An act to authorize boards of health of cities, villages, and townships to furnish vaccination to the inhabitants thereof," approved February 15, 1879, being compiler's section 4465 of the Compiled Laws of 1897, is hereby amended to read as follows:

"Section 1. That the board of health of each city, village, and township may at any time direct its health officer or health physician to offer vaccination or inoculation, with bovine vaccine virus, antitoxin, and antityphoid vaccine to every child and to all other persons, without cost to the person vaccinated or inoculated, but at the expense of such city, village, or township, as the case may be."

Tuberculosis—Appropriation for Control of. (Act May 17, 1915.)

SECTION 1. There is hereby appropriated from the general fund of the State the sum of \$50,000 for the fiscal year ending June 30, 1916, and the further sum of \$50,000 for the fiscal year ending June 30, 1917, for the purpose of making a tuberculosis survey

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of the State, the employment of medical men and nurses and other experts to make said survey, the organization of antituberculosis societies throughout the State, and the prosecution of a campaign to lessen the ravages of the said disease.

Sec. 2. The State board of health shall have charge of the work outlined in section 1 hereof and of the expenditure of the said sums of money. The moneys herein appropriated shall be paid upon vouchers approved by the State board of auditors, in accordance with the accounting laws of the State, all vouchers to be countersigned by the secretary of the State board of health. The compensation of all persons employed under authority of this act shall be fixed by the State board of health.

SEC. 3. The auditor general shall incorporate in the State tax for the year 1915 the sum of \$50,000, and for the year 1916 the further sum of \$50,000, which, when collected, shall be used to reimburse the general fund of the State for the moneys herein appropriated.

State Tuberculosis Sanatorium—Appropriation for. (Act May 11, 1915.)

SECTION 1. There is hereby appropriated for the current expenses for the State Tuberculosis Sanatorium for the fiscal year ending June 30, 1916, the sum of \$23,000, and for the fiscal year ending June 30, 1917, the sum of \$28,000.

Sec. 2. The further sum of \$43,125 is hereby appropriated for the fiscal year ending June 30, 1916, for purposes and by amounts as follows:

To build and equip infirmary wing for men, \$15,000; to remove and rebuild and equip present infirmary wing, \$1,500; to build and equip a cottage for children, \$15,000; one farm cottage and furnishings, \$3,500; for the purchase of dairy cows, \$1,000; for additional farm equipment, \$629; for office furnishings, \$185; for porch and furnishings, superintendent's cottage, \$1,000; to relay pipe and install adequate pumping outfit, \$4,000; screens for cottages, \$500; improvements and repairs, \$800; Provided. That if the amount designated in this section for any of the purposes stated be insufficient to complete the work or purchase, any surplus remaining after the completion of other work or purchase specified in this section, may, by obtaining the consent of the State Board of Corrections and Charities and the auditor general in writing, before any expense in excess of the specified appropriation is incurred. be used in the account or accounts where such deficiency seems unavoidable, the intent of this proviso being to make the entire \$43,125 available for the purposes stated herein, if in the judgment of the State board of corrections and charities and the auditor general it is deemed advisable to make the transfers for which provision is hereby made.

Sec. 3. The several sums appropriated by the provisions of this act shall be paid out of the general fund in the State treasury to the treasurer of the State Tuberculosis Sanatorium at such times and in such amounts as the general accounting laws of the State prescribe, and the disbursing officer shall render his account to the auditor general thereunder.

Sec. 4. The auditor general shall incorporate in the State tax for the year 1915 \$66,125, and for the year 1916 the sum of \$28,000, which amounts when collected shall be credited to the general fund to reimburse the same for the moneys hereby appropriated.

State Tuberculosis Sanatorium—Deficiency Appropriation for. (Act April 27, 1915.)

SECTION 1. The sum of \$4,227.87 is hereby appropriated to the State Tuberculosis Sanatorium at Howell, to meet the deficiency in appropriation for current expenses for the fiscal year ending June 30, 1914, and the further sum of \$5,772.13 to said sanatorium to meet the deficiency in appropriation for the fiscal year ending June 30, 1915.

- Sec. 2. The several sums appropriated by the provisions of this act shall be paid out of the general fund of the State treasury to the treasurer of the State Tuberculosis Sanatorium at such times and in such amounts as the general accounting laws of the State prescribe, and the disbursing officer shall render his accounts to the auditor general thereunder.
- SEC. 3. The auditor general shall add to and incorporate in the State tax for the year 1915 the sum of \$10,000, which when collected, shall be credited to the general fund to reimburse the same for the moneys hereby appropriated.

Hospitals, County—Taxes for. (Act April 21, 1915.)

SECTION 1. Section 2 of act number 139 of the Public Acts of 1909, entitled "An act relative to the maintenance and construction of hospitals and sanatoria within the counties of this State and to provide a tax to raise moneys therefor," approved May 26, 1909, is hereby amended to read as follows:

"Sec. 2. The tax provided for herein shall be apportioned and collected as other taxes for county purposes. Said tax shall not exceed five per cent of the general fund for any one year unless the same shall have been submitted to a vote of the qualified electors of such county."

Communicable Diseases of Animals—Control of. (Act April 21, 1915.)

Section 1. Section 7 of act 182 of the Public Acts of 1885, entitled "An act to provide for the appointment of a State live stock sanitary commission and a State veterinarian and to prescribe their powers and duties and to prevent and suppress contagious and infectious diseases among live stock of the State," the same being section 5633 of the Compiled Laws of 1897, as amended by act 172 of the Public Acts of 1909, is hereby amended, and a new section is added to said act to stand as section 29 thereof, the said amended and added sections to read as follows:

"SEC. 7. The commission, or any member thereof, to whom the existence of any infectious or contagious disease of domestic animals is reported, shall forthwith proceed to the place where such domestic animal or animals are and examine the same, and if in his or their opinion any infectious or contagious disease does exist he or they are authorized to call upon the State veterinarian or other competent and skilled veterinarians to proceed to the place where said contagious or infectious disease is said to exist and examine said animal or animals, and report his or their finding to the said commission, which then shall prescribe such rules and regulations as in its judgment the exigencies of the case may require for the effectual suppression and eradication of the disease, and for that purpose the said commission may list and describe the domestic animals affected with such disease and those which have been exposed thereto and included within the infected district or premises so defined and quarantined, with such reasonable certainty as would lead to their identification, and no domestic animal liable to become infected with the disease or capable of communicating the same shall be permitted to enter or leave the district, premises, or ground so quarantined, except by the authority of the commission. The said commission shall also from time to time give and enforce such directions and prescribe such rules and regulations as to separating, mode of handling, treating, feeding, and caring for such diseased and exposed animals as it shall deem necessary to prevent the two classes of animals from coming in contact with each other, and perfectly isolate them from all other domestic animals which have not been exposed thereto and which are susceptible of becoming infected with the disease, and the said commission and veterinarian are hereby authorized and empowered to enter upon any grounds or premises to carry out the provisions of this act.

"When in the opinion of the commission it shall be necessary to prevent the further spread of any contagious or infectious disease among the live stock of the State, to June 18, 1915 1856

destroy animals affected with or which have been exposed to any such disease, it shall determine what animals shall be killed, and appraise the same, as hereinafter provided, and cause the same to be killed and the carcasses disposed of as in its judgment will best protect the health of domestic animals of that locality. Said commission shall also have power to declare and enforce a quarantine on dogs in any district of this State in which there is an outbreak of rabies, hog cholera, hoof-and-mouth disease, or any other contagious or infectious disease among live stock; and may order that all dogs in said district shall be securely chained or otherwise confined. Any dog found at large in contravention of the terms of such quarantine or order may be killed. It shall be the duty of the sheriff of each county in the district affected and of his deputies, constables, and other municipal police officers to see to it that such quarantine and orders are enforced. Any officer killing a dog pursuant to the provisions of this act shall not be subject to any liability therefor.

"Sec. 29. It shall be unlawful to import horses into this State for any purpose except when such horses shall have been subjected to the mallein test by or under the direction of a graduate of some recognized veterinary college. A certificate shall accompany such horses and shall show the time and manner of making such test, the results thereof, and the manner in which said test was conducted. It shall further state that at the time of the inspection, which shall not be more than sixty days prior to the importation, such horses were free from any contagious or infectious disease. Certified copies of such certificate shall be prepared in triplicate, one for the use of the shipper, one for the transportation company, and the third shall be forwarded immediately to the president of the State live stock sanitary commission. The expense of procuring the inspection, testing, and certificate aforesaid shall be paid by the person seeking to import such horses into this State: Provided, That the provisions of this section shall not apply to the shipment of horses on cars through the State to points beyond where there is a continuous passage; nor to persons living in this State and owning land in an adjoining State, who may take their horses across the State line for pasturage or in connection with the working of such land."

Secretary State Board of Health—Qualifications and Appointment. (Act April 21, 1915.)

SECTION 1. Section 4 of act number 81 of the public acts of 1873, entitled "An act to establish a State board of health, to provide for the appointment of a superintendent of vital statistics, and to assign certain duties to local boards of health," as amended by act No. 18 of the public acts of 1905, being section 4,400 of the compiled laws of 1897, is hereby amended to read as follows:

"Sec. 4. At the meeting of the legislature in the year 1905 and every six years thereafter, the governor upon the recommendation of the State board of health and with the consent of the senate shall appoint a suitable and competent person who shall be a medical doctor of 10 years' practice, duly licensed as a medical practitioner in this State to be the seventh member of the board, which member shall be the secretary of the said board and its executive officer."

Branch Bacteriological Laboratory—Establishment. (Act May 7, 1915.)

SECTION 1. The State board of health is hereby authorized and empowered to establish a branch bacteriological laboratory in the upper peninsula of the State, and to employ a competent bacteriologist to take charge of such laboratory, whose duties shall be such as are or may be defined by law or defined by the State board of health, and shall be performed in connection with the department of the State board of health. The same fees shall be paid for examinations and analysis made by this said bacteriologist as are required by act 109 of the public acts of 1907, as amended from time to time.

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SEC. 2. The salary of the person appointed bacteriologist under this act shall be fixed by the State board of health, but shall not exceed the salary paid to the bacteriologist appointed under the provision of act 109 of the public acts of 1907. Such salary shall be paid in the same manner as other employees of the State board of health are paid, and all fees paid or received by the said bacteriologist shall be immediately forwarded to the secretary of the State board of health at Lansing to be by him covered into the State treasury to the general bacteriological fund of the State as provided in section 3 of act 109 of public acts of 1907.

Sec. 3. The State board of health is hereby authorized to purchase any and all such apparatus and appliances as shall be necessary to equip the branch laboratory authorized in this act: *Provided*, That the amount paid as salary to the bacteriologist, and expended for the apparatus and appliances in any one year shall not exceed the amount of the yearly appropriation provided for in this act. The State board of health shall select and designate a central point in the upper peninsula for the location of said laboratory. In all matters not herein otherwise expressly provided for, the said branch laboratory shall be governed by the provisions of act 109 of the public acts of 1907, as amended from time to time.

SEC. 4. For the purpose of carrying out the provisions of this act there is hereby appropriated out of any moneys in the State treasury not otherwise appropriated for the fiscal year ending June 30, 1916, the sum of \$6,000, and for the fiscal year ending June 30, 1917, and annually thereafter, the sum of \$4,000, which amounts shall be paid to the State board of health in the manner now provided by the general accounting laws of the State.

SEC. 5. The auditor general shall add to and incorporate in the State tax for the year 1915, the sum of \$6,000, and for the year 1916, and annually thereafter, the sum of \$4,000, which amounts, when collected, shall be credited to the general fund to reimburse the same for the money hereby appropriated.

Municipal Health Officers—Duties in Control of Communicable Diseases—Compensation. (Act May 11, 1915.)

Section 1. Sections 1 and 3 of act 137 of the public acts of 1883, entitled "An act to specify certain duties of health officers and to provide for compensation therefor in townships, cities, and villages where a health officer is not otherwise instructed by the local board of health," the same being sections 4460 and 4462 of the Compiled Laws of 1897, are hereby amended to read as follows:

"SECTION 1. That whenever the health officer of any township, city, or village in this State shall receive reliable notice or shall otherwise have good reason to believe that there is within the township, city, or village of which he is the health officer, a case of smallpox, diphtheria, scarlet fever, or other communicable disease dangerous to the public health, it shall be the duty of said health officer, unless he is or shall have been instructed by the board of health, of which he is an executive officer, to do otherwise, immediately to investigate the subject, and in behalf of the board of health. of which he is an executive officer, to order the prompt and thorough isolation of those sick or infected with such disease, so long as there is danger of their communicating the disease to other persons; to order the prompt vaccination or isolation of persons who have been exposed to smallpox; to see that no person suffers for lack of nurses or other necessaries because of isolation for the public good; to give public notice of infected places by placard on the premises and otherwise if necessary; to promptly notify teachers or superintendents of schools concerning families in which are contagious diseases; to supervise funerals of persons dead from scarlet fever, diphtheria, smallpox, or other communicable disease which endangers the public health; to disinfect rooms, clothing, and premises, and all articles likely to be infected, before allowing their use by persons other than those in isolation; to keep the president of

his own board of health and the secretary of the State board of health constantly informed respecting every outbreak of a disease dangerous to the public health, and of the facts so far as the same shall come to his knowledge, respecting sources of danger of any such diseased person or infected article being brought into or taken out of the township, city, or village of which he is the health officer.

"It shall be the duty of the health officer to comply with and enforce the rules and regulations and the health laws of the State of Michigan, to make a thorough and complete investigation of all nuisances, sources of sickness, public water supplies, and the water supplies of cities, boarding houses, schools, restaurants, and other public places; to inspect sewage and garbage disposal systems and to investigate schools, churches, jails, railroad stations, restaurants, theaters, and other places of amusement or entertainment as to their sanitary conditions, and in every possible way to guard and protect the health of the public and to do such work as may be necessary for the improvement of general sanitary and hygienic conditions of the community and to prevent the development of disease.

"Sec. 3. In the fulfillment of the requirements of this act the health officer, unless other provisions shall have been made in accordance with law, shall be entitled to receive from the township, city, or village of which he is health officer, compensation at the rate of not less than \$3 per day while actually engaged in the performance of his duties: *Provided*, That this section shall not be construed to conflict with any action by the local board of health under section 1693 of the Compiled Laws of 1871 as amended by act 202 of the Laws of 1881."

Milk By-Products to be Used for Feeding Animals—Required to be Pasteurized. (Act Apr. 27, 1915.)

Section 1. Every owner, operator, or manager of a cheese factory, creamery, skimming station, or other place where milk is received and the by-products distributed shall, before returning to or delivering to any person or persons any skim milk, whey, buttermilk, or other milk by-products to be used for feeding purposes for farm animals, cause such skim milk, whey, buttermilk, or other milk by-products to be thoroughly pasteurized by heating the same to 145° F. and holding at that temperature for not less than 30 minutes or to 185° without holding: *Provided*, That the provisions of this act shall not apply to cheese factories or creameries that pasteurize the milk or cream prior to manufacture.

SEC. 2. Whoever violates any of the provisions of this act shall be deemed guilty of a misdemeanor, and on conviction shall be punished by a fine of not more than \$100, or imprisonment in the county jail for not exceeding 90 days, or both, in the discretion of the court.

Drugs-Definition-Adulteration and Misbranding. (Act May 7, 1915.)

SECTION 1. Sections 2, 3, and 4 of act number 146 of the public acts of 1909, entitled "An act to prohibit and prevent adulteration, misbranding, fraud, and deception in the manufacture and sale of drugs and drug products in the State of Michigan and to provide for the enforcement thereof," are hereby amended to read as follows:

"SEC. 2. The term 'drug' as used in this act shall include all medicines and preparations recognized in the United States Pharmacopæia or National Formulary for internal or external use, and any substance or mixture of substances or device intended to be used for the cure, mitigation, or prevention of disease of either man or other animals.

"SEC. 3. An article shall be deemed to be adulterated within the meaning of this act:
"First. If, when it is sold under or by a name recognized in the United States
Pharmacopæia or National Formulary, it differs from the standard of strength, quality,

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or purity as determined by the test laid down in the United States Pharmacopæia or National Formulary official at the time of investigation: *Provided*, That no drug defined in the United States Pharmacopæia or National Formulary shall be deemed to be adulterated under this provision if the standard of strength, quality, or purity be plainly stated upon the principal label of the bottle, box, or other container thereof, although the standard may differ from that determined by the test laid down in the United States Pharmacopæia or National Formulary;

"Second. If the strength or purity fall below the professed standard or quality under which it is sold.

"SEC. 4. An article shall be deemed to be misbranded within the meaning of the act: "First. If it is an imitation of or offered for sale under the name of another article;

"Second. If the contents of the package as originally put up shall have been removed in whole or in part, and other contents shall have been placed in such package, or if the package fail to bear a statement on the label of the quantity or proportion of any alcohol, antipyrin, opium, morphine, codeine, heroin, cocaine, alpha or beta eucaine, chloroform, cannabis indica, chloral hydrate or acetanilide, or any derivative or preparation of any such substances, contained therein: *Provided*, That nothing herein shall be construed to apply to the dispensing of prescriptions written by regularly licensed practicing physicians, veterinary surgeons and dentists, and kept on file by the dispensing pharmacist, nor to such drugs as are recognized in the United States Pharmacopæia and National Formulary, and which are sold under the name by which they are so recognized;

"Third. If the package containing it or its label shall bear any statement, design, or device regarding the ingredients, or the substances contained therein, which statement, design or device shall be false or misleading in any particular, and to any drug or drug product which is falsely branded as to the State, Territory, or country in which it is manufactured or produced;

"Fourth. If its package or label shall bear or contain any statement, design, or device regarding the curative or therapeutic effect of such articles or any of the ingredients or substances contained therein, which is false and fraudulent."

Poisonous Fly Paper—Must be so Prepared or Guarded as to be Inaccessible to Children When in Use. (Act May 17, 1915.)

Section 1. It shall be unlawful for any person, firm, or corporation to manufacture, compound, sell or offer for sale, or cause to be manufactured, compounded, sold or offered for sale, any fly paper or other form of fly killer which contains arsenic or other poison in sufficient quantity to be dangerous to the life or health of persons, unless same, when so manufactured, compounded, sold or offered for sale, shall be so prepared, constructed, or guarded that when in use said poisonous paper, substance, compound, or solution shall be inaccessible to children or other persons who might eat, drink, or swallow the same, or any portion thereof.

SEC. 2. Any person, firm, or agent of a corporation violating any of the provisions of this act shall be guilty of a misdemeanor, and upon conviction thereof for the first offense shall be fined not more than \$100 or imprisoned in the county jail for a period not to exceed two months, or both, and for each succeeding offense shall be fined not less than \$50 nor more than \$300, or imprisoned in the county jail for a period not less than two months nor more than nine months, or by both such fine and imprisonment.

WASHINGTON.

County Health Officers—Annual Convention. (Chap. 75, Act Mar. 15, 1915.)

SECTION 1. That it shall be the duty of the State commissioner of health to hold annually a convention of county health officers, at such place as he shall deem con-

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venient, for the discussion of questions pertaining to public health and sanitation. Said convention shall continue in session for such time not exceeding three days as the said commissioner of health shall deem necessary. It shall be the duty of the health officer of each county to attend said convention during its entire session, and such officer shall receive his actual and necessary traveling expenses, to be paid by said county: *Provided*, That no claim for such compensation or expenses shall be allowed or paid unless it be accompanied by a certificate from the State commissioner of health attesting the attendance of such health officer at said convention.

MUNICIPAL ORDINANCES, RULES, AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

PITTSFIELD, MASS.

Nuisances. (Reg. Bd. of H., Feb. 26, 1915.)

Rule 1. Whatever is dangerous to human life or health; whatever building or part of cellar thereof is overcrowded or not provided with adequate means of ingress or egress, or is not sufficiently supported, ventilated, sewered, drained, lighted, or cleaned; and whatever renders soil, air, water, ice, or food impure or unwholesome is declared to be a nuisance and to be illegal; and every person, or firm, or corporation having aided in creating or contributing to the same, or that may support, continue, or retain any of them shall be deemed guilty of a violation of this regulation and liable to the penalties provided by the Revised Laws of the Commonwealth for violation of such regulations as the board of health judges necessary to make for the preservation of the public health and safety, and shall also be liable for the expense of the abatement or remedy required.

Privies and Cesspools—Location, Construction, and Removal of Contents. Sewers—Connections With. (Reg. Bd. of H., Feb. 26, 1915.)

Rule 2. Every building in said city shall, when deemed necessary by the board of health, be furnished with sufficient drain, underground, into a common sewer or reservoir; and also with suitable water-closets or with a privy, the vault of which shall be so constructed that the inside of the same shall be at least 3 feet from the line of any adjoining lot, unless the owner of such lot shall consent or agree otherwise, and also 3 feet from every street, lane, passageway, or public place; and every such vault or privy shall be built of brick or stone laid in cement and in such a manner that its contents may be readily removed.

Rule 3. No privy, cesspool, or vault shall be opened in any manner or at any time other than at such time and in such manner as the board of health may direct; and no person shall remove or carry through any public street, highway, or square of the city, contents of any privy or vault, unless the person removing the same, and the cart, wagon, or other conveyance in which the same is carried shall be licensed for such person by the board of health. All such vaults shall be thoroughly cleaned out and the contents thereof removed to the city dump, once each year, and oftener if the board of health so directs.

Sewage—Disposal of, so as to Prevent Contamination of Water Used for Domestic Purposes. (Reg. Bd. of H., Feb. 26, 1915.)

Rule 4. No drain not water-tight which carries or contains sewage, shall be allowed to pass within 20 feet of any well or other source of water used for domestic purposes, and no person shall allow any pool of stagnant water to be and remain upon his premises after notice to remove the same by the board of health.

Sewage shall be construed to mean liquid waste from whatever source which contains offensive or injurious matter.

Rule 5. No person shall permit the drainage of any building to enter any pond or stream within the limits of the city of Pittsfield without permission of the board of health.

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Buildings and Premises—Sanitary Regulation. (Reg. Bd. of H., Feb. 26, 1915.)

RULE 6. No dwelling or any part thereto within the city shall be used for the sale, storage, sorting, or handling of rags, without a written permit from the board of health.

RULE 7. No putrid, decayed, or decaying animal or vegetable matter shall be allowed to remain in cellars or outbuildings. No fish, slaughterhouse offal or other decaying and offensive animal or vegetable matter shall be left or permitted to remain upon the land for purposes of fertilization without being plowed in or otherwise being rendered inoffensive.

Rule 8. Every owner or occupant of every building in this city shall keep such building and the yard belonging thereto free from all filth and substances liable to produce offensive odors.

Rule 9. No owner or occupant of land abutting upon a private passageway, or having the right to use such passageway, shall suffer any filth or waste or stagnant water to remain on such passageway.

RULE 10. The owner or lessee of any building within the limits of the city shall, when in the opinion of the board of health, or its duly authorized agent, it is deemed necessary, whitewash, paint, or otherwise clean and make wholesome the walls, ceiling, and passageways of the above buildings.

Rule 12. Whenever the board of health is satisfied on due examination that a cellar, tenoment, or building within the city, occupied as a dwelling house, has become by reason of the number of occupants, want of cleanliness, or other cause, unfit for such purpose, the occupants shall correct the specified unsanitary condition or remove therefrom within 48 hours after written notice has been given them. The board of health may conspicuously post in any room a card stating the number of adults or children who may sleep within it at one time. This card shall not be removed without the permission of said board. No room shall be used for sleeping purposes unless it contains 400 cubic feet of air space for each adult sleeping therein or 300 cubic feet of air space for each child under 12 years of ago.

Rule 13. No rags, old paper, or other refuse material collected from dumping grounds, streets, or recovered from any source shall be brought into or allowed to remain within any building used as a dwelling.

Rule 14. No person shall remove from a public dump matter of any sort without permission from the board of health.

RULE 15. No person shall store or keep or allow to be stored or kept in any living room in the house of which he is the owner or occupant any fruit for merchandise.

Garbage, Refuse, and Manure—Care and Disposal—Dumps. (Reg. Bd. of H., Feb. 26, 1915.)

RULE 11. Every house shall be provided by its owners or occupant with a suitable water-tight covered receptacle to keep garbage and swill until the same is removed by the licensed scavengers. This receptacle shall be kept covered at all times except when depositing or removing the garbage. It shall be kept where it shall be convenient of access upon the ground floor.

No person shall deposit in the garbage to be taken by the authorized scavengers any tin cans, water (dish water not excepted), ashes, glass, sweepings, eyster and clam shells, sawdust, cork dust, old boots or shoes, lawn clippings, nor any poisonous substances. Any garbage containing foreign matter of the kind enumerated above must be cared for by the owners at their expense.

No person shall go about, in, or through the streets, squares, or highways of the city collecting or removing swill, offal, butchers' waste, soap grease, rough tallow, or slaughterhouse refuse unless duly authorized by the board of health.

All such refuse collected and carried through the streets, squares, and all highways as before provided shall be put and carried in a close-covered vehicle, box, or other

tight vessel, from which no odors can escape and which shall at all times when not necessarily opened for the purpose of depositing the material collected therein be kept securely covered. If any of the contents thereof shall be spilled or fall upon the street, walk, or promises it shall be the duty of the keeper or driver to replace the same and immediately remove all traces thereof.

RULE 16. No person shall go about, in or through any of the streets of the city collecting manure or removing ashes, paper, or other refuse, except in a vehicle with a tight box, and said vehicle covered so that the contents can not be scattered on the streets.

The deposit by any person of any stable manure, night soil, or other fertilizer of like nature on the surface of his lawn or yard within the city of Pittsfield, where the same is liable to become spread or scattered on any street or sidewalk, or is offensive to the sight or smell of persons traveling upon such street or sidewalk, is a nuisance, and the same is hereby prohibited. Any person engaged in removing such refuse as mentioned in rule 16 shall be licensed annually by the board of health.

RULE 25. All truckmen, engaged in the handling of ashes, waste, manure, etc., shall have a record of such license made by the board of health, and such license may be revoked at the discretion of said board.

Rule 26. The board of health recognizes one public dump, known as the city dump, situated off Crane Avenue in rear of the Ward Clark property. At this place all dead animals, grease, bones, or any decaying or putrifying animal matter or vegetable substances, waste, ashes, or paper may be deposited. All other so-called "dumps," provided the same are not posted by the board of health, may receive clean ashes, paper, and cans, said paper to be either burned or buried and cans covered over with ashes. Whenever any such dump, by reason of excessive amount of material, or uncleanliness becomes a nuisance, such dump shall be posted and declared closed by board of health. Any truckman who disregards this notice may have his license revoked.

Domestic Animals—Keeping of—Disposal of Dead Bodies. (Reg. Bd. of H., Feb. 26, 1915.)

Rule 17. No person shall keep any fowl or animal in any part of a dwelling house, or in any place in the city where the board of health may deem such keeping detrimental to public health or offensive to the neighborhood or to those that may pass thereby. All henneries and animal pens shall be kept clean and free from decaying food and from filth of any kind; and shall be thoroughly disinfected from time to time as occasion requires.

No swine shall be kept anywhere within the city limits without a permit from the board of health.

All such permits shall expire on the 1st day of January, annually, and may be revoked at any time by said board.

No permit shall be granted to any person unless the premises where he proposes to keep swine are suitable, in the opinion of the board of health, for the purpose, and will permit of the same being housed and kept within a reasonable distance from any adjoining dwelling house or public thoroughfare.

All swine must be confined to the premises named in the permit; must not be allowed to run at large; and such permit shall not be valid to any other person or for any other premises than the person and premises named therein.

RULE 22. No person shall deposit or cause to be deposited upon any lot or in any street, alley, stream, or body of water within said city, any dead animal or part thereof without first securing written permit from the board of health.

Diseased Animals—Not to be Brought into City—Care of. (Reg. Bd. of H., Feb. 26, 1915.)

Rule 18. No animal affected with a contagious disease shall be brought within the limits of the city.

Rule 21. No person shall abandon or leave in any street, alley, or other public place within said city, any sick or injured horse or other animal. Any animal so found which is adjudged by the board of health, or by any veterinary surgeon summoned by said board, to be past recovery, shall after an interval of two hours, if unclaimed and uncared for by the owner thereof, be killed and removed by order of said board.

Foodstuffs—Protection—Sale of Unwholesome, Prohibited. (Reg. Bd. of H., Feb. 26, 1915.)

Rule 19. No diseased animal, its flesh or its product, shall be sold or offered for sale, and no decayed, diseased, or unwholesome meat, fish, fruit, or other articles of food shall be sold or offered for sale, and the board shall cause the seizure and destruction of all such articles so sold or offered for sale.

Rule 56. No person, firm, or corporation shall sell, expose, or offer for sale any fruit, vegetable, confectionery, meat, poultry, fish, or any other article of food, not contained in a dust proof package or box (except such fruit and vegetables as have a natural covering that requires to be removed before the fruit or vegetable is eaten, or in the use of which for food the process of boiling or cooking is necessary), that is or has been exposed in or upon any street, sidewalk, doorway, lane, alley, open window, or other private or public place in the open air adjacent to any street, sidewalk, lane, alley, or square unless said articles of food shall be or shall have been reasonably protected from dust, filth, or other infectious substances, by a suitable covering.

All fruits, vegetables, or other articles of food exposed in the manner set forth in this regulation shall be kept at a height of not less than 18 inches from the sidewalk or ground above which they are placed.

No person, firm, or corporation shall convey through the streets of Pittsfield, in a wagon or otherwise, for sale or delivery, any bread, pie, or pastry unless such pie or pastry is protected from the dust of the streets by being inclosed in a dust proof receptacle or housing, and such bread is suitably and separately wrapped in paraffine paper.

Communicable Diseases of Animals—Notification of Cases. (Reg. Bd. of H., Feb. 26, 1915.)

Rule 20. Whoever has knowledge of, or has reason to suspect the existence of, a contagious disease among domestic animals in this city shall forthwith give notice thereof to the board of health.

Spitting—Prohibited in Public Places. (Reg. Bd. of H., Feb. 26, 1915.)

Rule 23. Spitting on the floor, platform, or any part of any street car or other public conveyance is prohibited.

Spitting upon the floor or other part of any room, hallway, entrance, or lobby to any church, theater, or public hall is prohibited.

Spitting upon the sidewalk of any street, court, or passageway is prohibited.

Stables—Construction of. (Reg. Bd. of H., Feb. 26, 1915.)

Rule 24. The conditions governing the granting of licenses to occupy buildings as livery or boarding stables shall be as follows:

The stable must be erected and complete in all its compartments before license to occupy is granted.

A manure pit shall be constructed of brick or stone, laid in cement, and water-tight. Such pit shall be ventilated by a shaft not less than 12 inches square, carried 2 feet above the roof of the main building.

The storage of manure, except in said pit, is prohibited. No bedding shall be deposited outside of the stables.

The drainage of every stable shall be properly conducted to a public conduit whenever practicable.

In every case ventilation and drainage shall be made satisfactory to the board of health.

The said building shall neither be enlarged or altered without special permit having first been obtained from the board of health.

Owners and occupants of livery and other stables within the city shall not wash or clean their carriages or horses or cause them to be washed or cleaned in the streets or public ways. They shall keep their stables and yards clean, and not allow large quantities of manure to accumulate in or near the same at any time.

Every barn within the city limits wherein a milch cow is kept shall contain at least 1,000 cubic feet of space and shall be ventilated, lighted, and cleaned to the satisfaction of the board of health.

Communicable Diseases—Notification of Cases—Placarding—Quarantine—Disinfection—School Attendance—Libraries—Burial. (Reg. Bd. of H., Feb. 26, 1915.)

RULE 27. The following is an amended list of diseases declared by the State department of health to be reportable under the provisions of sections 49, 50, and 52 of chapter 75 of the Revised Laws, as amended by chapter 480 of the acts of 1907. Householders and physicians must now give immediate notice, the latter in writing over their own signatures to the local board of health, of all cases of:

Actinomycosis.

Anterior poliomyelitis.

Anthrax.

Asiatic cholera.

Chicken-pox.

Diphtheria.

Dog bite (requiring antirabic treatment).

Dysentery:

a. Amebic.

b. Bacillary.

Epidemic cerebrospinal meningitis.

German measles.

Glanders.

Hookworm disease.

Infectious diseases of the eye:

- a. Ophthalmia neonatorum.
- b. Suppurative conjunctivitis.
- c. Trachoma.

Leprosy. Malaria. Measles.

Mumps.

Pellagra. Plague.

Rabies.

Scarlet fever.

Septic sore throat.

Smallpox.

Tetanus.

Trichinosis.

Tuberculosis (all forms).

Typhoid fever.

Typhus fever. Whooping cough.

Yellow fever.

Rule 28. Immediately upon recovery, death, or removal of a person afflicted with a contagious disease all bedding or other personal property liable to communicate any of the diseases mentioned in rule 27 shall be at once properly cleansed and fumigated or destroyed at the discretion of the board of health. The room or rooms occupied by the patient shall be fumigated at the discretion of the board. This work will be done under the supervision of said board.

Rule 29. No person sick with an acute contagious disease shall be transported in any public vehicle used for the carrying of passengers.

Rule 30. Whenever scarlet fever, diphtheria, or smallpox is found to exist, a placard shall be displayed in a conspicuous place, informing the public of the presence of such disease, and no person shall remove such card without permission of the board of health. All other contagious diseases may be placarded at the discretion of the board of health.

Rule 31. In all cases of diphtheria the patient shall be held in quarantine until two negative cultures have been received by the bacteriologist of the board of health. The first release culture not to be taken sooner than two weeks after reporting and every four days thereafter until two successive negative cultures have been obtained. The board of health reserve the right to have the second release culture taken by their authorized agent.

Scarlet fever patients are to remain in quarantine for at least four weeks after reporting and until all desquamation is completed and all discharge from nose, mouth, and ears has abated.

Rule 32. No person or persons, except physicians, nurses, clergymen, and undertakers in the performance of their duties, and members of the household who at the time may be living in any house or building which is under quarantine, shall for any purpose whatever enter such home or building without permission from the board of health.

The sick person is to be kept in a room by himself. No one but the nurse and doctor will be allowed in the room with him.

All children must be kept at home. They may play in their own yard, but must be kept off the street. All children in the house are to be kept from school until a certificate to return is granted by the board of health. This applies to Sunday school and all public mootings, etc. Other people's children must not be allowed to enter your house nor play with your children during quarantine.

Adult members of the family will not be allowed to work or to attend any public meetings, clube, lodges, church services, etc., without permission of the board of health. They must keep out of the sick room at all times.

Neighbors must not come into the house. You may talk to them through a closed window. Grocers, butchers, milkmen, etc., may receive orders and deliver goods at the outside door. No milk can or glass jars to be taken out of the house during quarantine.

The sick person will not be allowed to leave the house until the card is removed from the door.

Public library books, day school and Sunday school books must not be used by the patient, nor any attendant on the patient, nor left in the sick room. All such books must be burned.

Rule 33. No person or persons who may be visiting upon premises which are under quarantine shall leave such premises without permission from the board of health.

Rule 34. Wherever two or more families residing in the same building use the entrances, halls, or stairways of such building in common, or where there is other direct communication, such building shall, for the purpose of quarantine, be considered one house. If only a part of any building or house shall be under quarantine, these rules shall apply only to such part.

Rule 35. No child ill with any contagious disease shall attend school, nor shall any child attend school in this city while any member of the household to which such child belongs is ill with diphtheria, smallpox, scarlet fever, measles, whooping cough, chicken-pox, mumps, or during the period of two weeks after the death, recovery, or removal of such person, except that all children who have been excluded from school on account of measles may be readmitted immediately after the termination of the disease on presenting a written permit from the board of health signed by its agent.

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RULE 36. All bedding and personal clothing or property exposed to contagion or infection by any of the diseases dangerous to the public health, shall be at once properly cleansed, fumigated, or destroyed, as the board of health may direct.

Toys that the patient plays with should be burned after quarantine is removed.

Do not use handkerchiefs for the patient. Use old, soft linen or cotton, and burn it as soon as used.

The patient should not use the same eating utonsils (knives, forks, plates, spoons, etc.) that are used by the family. Give the patient separate ones during the illness.

RULE 37. No pupil who by reason of this rule has been debarred from school attendance shall be admitted to any school in the city without a written permit from the board of health signed by its agent.

RULE 38. The principal of any school, upon the receipt of information that a pupil under his charge has visited a household where at the time of such visit any of the diseases enumerated in rule 35 existed, shall immediately notify the board of health.

RULE 39. Whenever any child is absent from school on account of illness the principal, if he has reason to suspect that the child is suffering from a contagious disease, shall exclude from school all pupils from such household and notify the school physician at once. Any teacher when sending a pupil to the home of another pupil shall forbid him to enter the house to which he is sent. (This is to prevent him from inadvertently exposing himself to a contagious disease.)

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RULE 41. It shall be the duty of the undertaker or other person having charge of the funeral or burial of the dead body of a person within said city who has died of Asiatic cholera, yellow fever, typhus fever, smallpox, scarlet fever, diphtheria, or membranous croup, to keep such funeral strictly private and to permit no person other than members of the family of the deceased who are at the time residents at the place of death, and the officiating clergyman to be present thereat; and to convey such dead body directly from the place of death to the place of burial and in no other vehicle than a hearse, and the funeral to take place within 24 hours after death.

RULE 42. It shall be the duty of the undertaker, or of any other person or persons within said city, who shall have charge of the burial or shipment or of the preparation for the burial or the shipment of the dead body of any person who has died of any contagious disease, to observe and obey the following rules and regulations embodied in this section:

The dead body of any person who has died of any contagious or infectious disease shall be thoroughly disinfected and shall not be exposed to the view of any person who is not necessarily engaged in the preparation of the same for burial.

The dead body of any person who has died of any contagious or infectious disease shall not be placed or kept in any receiving vault in any cemetery or burying ground, unless such dead body shall be first inclosed in a hermetically sealed zinc-lined or other metallic casket.

No dead body of any person who has died of Asiatic cholera, yellow fever, typhus fever, or smallpox, shall be shipped or carried into or from said city by any means of conveyance whatsoever.

In preparing for shipment the dead body of any person who has died of scarlet fever, diphtheria, or membranous croup, the said body shall be wrapped in a sheet saturated either with a solution of bichloride of mercury of a strength of one part in two thousand, or with a solution of carbolic acid of the strength of one part in forty. The said body shall then be inclosed in a tightly-sealed casket, and said casket shall be placed in a zinc-lined or a tin-lined box, hermetically sealed.

RULE 43. The body of any person who has died of any contagious disease except Asiatic cholera, yellow fever, typhus fever, or smallpox, when taken directly from the

place of death to the grave, must be completely wrapped in absorbent cotton and then wrapped in a sheet saturated with a solution of bichloride of mercury 1:2000; all inclosed in a tightly sealed casket.

Burial—Permits—Cemeteries. (Reg. Bd. of H., Feb. 26, 1915.)

Rule 44. It shall be the duty of every superintendent of a cemetery, or other person in charge of any cemetery or burying ground within the city, to receive the permits issued for burials in said cemetery or burying-ground; to preserve the same and to furnish to the board of health of said city, upon Monday of each week, a written report, upon blank forms to be furnished upon application by said board of all burials made or caused to be made by him.

Rule 45. Any grave in which any dead body shall be buried within this city shall be dug to a depth of not less than 5 feet below the surface of the ground.

Rule 46. No new cemetery, burying-ground, vault, or tomb for the reception and burial of human bodies, shall be established within this city, or under the control of any organization within said city, without a permit so to do first being granted by the board of health of said city. No additions shall be made to those already in use without the same authority.

Offensive Trades—Regulation of. (Reg. Bd. of H., Fcb. 26, 1915.)

Rule 47. No person, company, firm, or corporation shall erect or maintain any manufactory or place of business within this city which is dangerous to life or detrimental to health, or where unwholesome, offensive, or deleterious odors, gas, smoke, deposit, or exhalations are generated, except in such places as are allowed by the board of health. All such establishments shall be kept clean and wholesome, nor shall any offensive or deleterious waste substance be allowed to accumulate upon the premises or be thrown or allowed to run into any public waters, stream, watercourse, street, or public place.

Rule 48. All licenses granted by the board of health may be revoked at the discretion of said board.

Medicines and Substances for Household Use—Distribution of. (Reg. Bd. of H., Feb. 26, 1915.)

Rule 49. No person shall distribute, or cause to be distributed, from house to house on any street in this city, any package or bottles containing free samples of any medicinal substances, or substances for household use, except by permission of the board of health.

Barbers and Barber Shops-Regulation of. (Reg. Bd. of H., Feb. 26, 1915.)

Rule 50. The place of business, together with all the furniture, shall be kept at all times in a cleanly condition.

Mugs, shaving brushes, razors, tweezers, needles, or other instruments used for removing hairs, shall be sterilized in boiling water after every separate use thereof.

A separate clean towel shall be used for each person.

Alums or other astringents shall be used in powdered form and applied with a clean towel.

The use of powder puffs and sponges is prohibited.

Every barber shop shall be provided with running hot water.

Every barber shall clean his hands thoroughly immediately after serving each customer.

Hair brushes and combs shall be thoroughly washed, at least once a day.

No person shall be allowed to use any barber shop as a dormitory.

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Shaving mugs, etc., except those in constant use, shall be kept in closed or covered receptacles.

Hair and other waste accumulations shall be destroyed each day by fire, or by such means as the board of health may approve.

Every barber, after handling any one with any skin eruption, must cleanse his hands thoroughly before handling the next person, and all tools used in connection therewith must be thoroughly sterilized before they are used again.

Common Eating and Drinking Utensils—Prohibited in Public Places. (Reg. Bd. of H., Feb. 26, 1915.)

RULE 51. The use of common drinking cups in any public place, park, street, or avenue, public institution, or in any hotel, theater, factory, school, public hall, or in any railroad car or ferryboat, or in any railway station or ferry house, or the furnishing of any such common eating or drinking utensils for use in any such place is hereby prohibited.

The term "public place" as used herein shall be construed to include:

- (a) Any place where goods, wares, or merchandise are sold or offered for sale.
- (b) Any department, bureau, building, or office of a municipal corporation.

The term "factory" as used herein shall be construed to include any workshop or manufacturing or business establishment where persons are employed at labor.

Eating and Drinking Utensils—Cleansing of. (Reg. Bd. of H., Feb. 26, 1915.)

Rule 52. All utensils used in the preparation, service, and sale of any food or drink intended for human consumption shall be properly cleansed after being used, and no such utensil shall, under any circumstances, be used a second time unless it shall have been, after the previous use thereof, so cleansed. In such cleansing the use of water which has become insanitary by previous use is prohibited.

Milk and Cream—Production, Care, and Sale. (Reg. Bd. of H., Feb. 26, 1915.)

Rule 53. Section 1. No milk or cream shall be sold in the city of Pittsfield after the passage of this ordinance except from cows that have been subjected within one year to examination that shall be satisfactory to the board of health and to the inspector appointed by the board of health of the city of Pittsfield under chapter 405 of the acts of 1909, and pronounced free from the disease known as tuberculosis or any other disease that may render the milk injurious to man.

In case an examination made by any person other than the inspector of the city of Pittsfield shall be unsatisfactory either to him or to the board of health, a proper examination shall be made by said inspector for the city of Pittsfield and his decision shall be final.

- SEC. 2. Any person selling or distributing milk in the city of Pittsfield shall at the time of taking out his license inform the board of health in writing of all sources from which he receives his supply, and upon making any change whatever in the sources of his supply shall immediately give notice to the board of health of such change.
- SEC. 3. Whenever the board of health shall deem it necessary, but not less frequently than once during each year, it shall make or cause to be made an inspection of all dairies and other places from which the milk is sold in the city of Pittsfield and shall keep a written report of the result of such inspections on file in its office for public examination and reference.
- SEC. 4. All cans, bottles, or other vessels of any sort used in the sale, delivery, or distribution of milk shall be cleansed or sterilized before they are used again for the same purpose, and all wagons used in the conveyance of milk for sale or distribution shall be kept in a cleanly condition and free from offensive odors. No person shall use

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a milk vessel as a container for any other substance than milk. Bottles shall not be filled except at the dairy or creamery.

- SEC. 5. Every person keeping cows from which the milk is sold in the city of Pitts-field shall have a room entirely apart from the stable (although it may be in the same building if desired) in which the milk shall be strained and cooled, said room to have an impervious floor and the side walls and ceilings to be made of matched lumber or battened unless lathed and plastered. No water-closet, earth closet, or privy shall be within or communicate directly with this room. The floors of all stables in which animals are kept shall be constructed of impervious materials and they shall be so graded as to conduct the excretions of the animals to the outside of such building. Drops behind cows shall be not less than 21 inches wide and 6 inches deep. The walls and ceilings of all cow stables shall be cleaned and whitewashed at least twice a year and oftener if required by the board of health; nothing in this section, however, shall be interpreted to prevent cooling of milk in spring houses when same are properly conducted and located as approved by the board of health.
- Sec. 6. Every person engaged in the production, storage, transportation, sale, delivery, or distribution of milk, immediately on the occurrence of any case or cases of typhoid fever, scarlet fever, diphtheria, or other infectious disease, either in himself or in his family, or amongst his employees or their immediate associates, or within the building or premises where milk is stored, sold, or distributed, shall notify the Pittsfield Board of Health, and at the same time shall suspend the sale and distribution of milk until authorized to resume the same by the said board of health.

No vessels which have been handled by persons suffering from such diseases shall be used to hold or convey milk until they have been thoroughly sterilized. No bottle, can, or receptacle used for the reception or storage of milk shall be removed from a private house, apartment, or tenement wherein a person has any infectious disease, except with the consent of said board of health.

- SEC. 7. Every person selling milk or offering for sale in a store, booth, or stand in the city of Pittsfield shall keep such milk in a refrigerator or other perfectly tight receptacle entirely separate from any food or other contaminating product, said refrigerator or other receptacle to be provided with ice during the warm months, or at any other time when required so to do by the board of health.
- Sec. 8. Any person, party, or corporation violating the provisions of this ordinance shall be punished by a fine of not less than \$20 for each offense.
- SEC. 9. Any person, party, or corporation after being notified by the board of health to discontinue the sale of milk in the city of Pittsfield who shall sell or distribute any milk in the city of Pittsfield until he receives permission in writing so to do from the board of health shall be punished by a fine of not less than \$20 for each offense, and his license to sell milk in this city shall be revoked.
- SEC. 10. For the purpose of enabling the board of health to carry out and enforce the provisions of these regulations any member of the board of health or any duly authorized agent of the board of health shall at all times have free access to all creameries, dairies, barns, stables, stores, wagons, and all other buildings or premises in which cattle are kept and from which any part of the milk supply of the city of Pittsfield is obtaine 1, or in which milk, skimmed milk, or cream is received, kept, stored, bottled, canned, or offered for sale, or which are used in the transportation or delivery of milk, for the purpose of making inspections of said premises, vehicles, cans, vessels, measures, and other utensils used in conducting the handling, sale, and delivery of milk, and for the purpose of taking samples of the milk, skimmed milk, or cream for analysis or other tests to determine its quality.
- Sec. 11. At the time of issuing any license hereunder a copy of this ordinance shall be delivered to and receipted for by the person to whom a license shall be granted for the sale and distribution of milk in the city of Pittsfield.

Ice Cream-Manufacture, Care, and Sale. (Reg. Bd. of H., Feb. 26, 1915.)

RULE 53. SEC. 12. No ice cream shall be manufactured or stored in any portion of a building which is used for the stabling of horses or other animals, or in any room used in whole or in part for domestic or sleeping purposes, unless the manufacturing and storage room for ice cream is separated from other parts of the building to the satisfaction of the board of health.

SEC. 13. All rooms in which ice cream is manufactured or stored shall be provided with tight walls and floors and kept constantly clean. The walls and floors of said rooms shall be of such construction as to permit of rapid and thorough cleansing. The room or rooms aforesaid shall be equipped with appliances for washing or sterilizing all utensils employed in the mixing, freezing, storage, sale, or distribution of ice cream, and all such utensils after use shall be thoroughly washed with boiling water, or sterilized by steem.

Vessels used in the manufacture and sale of ice cream shall not be employed as containers for other substances than ice cream.

Sec. 14. All establishments in which ice cream is manufactured shall be equipped with facilities for the proper cleansing of the hands of operatives, and all persons immediately before engaging in the mixing of the ingredients entering into the composition of ice cream, or its subsequent freezing and handling, shall thoroughly wash his or her hands and keep them cleanly during such manufacture and handling. All persons shall be dressed in clean outer garments while engaged in the manufacture and handling of ice cream.

SEC. 15. No urinal, water-closet, or privy shall be located in the rooms mentioned in the preceding section, or so situated as to pollute the atmosphere of said rooms.

SEC. 16. All vehicles used in the conveyance of ice cream for sale and distribution shall be kept in a cleanly condition and free from offensive odors.

SEC. 17. Ice cream kept for sale in any shop, restaurant, or other establishment shall be stored in a covered box or refrigerator. Such box or refrigerator shall be properly drained and cared for, and shall be kept tightly closed, except during such intervals as are necessary for the introduction or removal of ice cream or ice, and they shall be kept only in such locations and under such conditions as shall be approved by the board of health.

SEC. 18. Every person engaged in the manufacture, storage, transportation, sale, or distribution of ice cream, immediately on occurrence of any case or cases of infectious disease, either in himself or in his family, or amongst his employees, or within the building or premises where ice cream is manufactured, stored, sold, or distributed, shall notify the board of health and at the same time shall suspend the sale and distribution of ice cream until authorized to resume the same by the said board of health. No vessels which have been handled by persons suffering from such disease shall be used to hold or convey ice cream until they have been thoroughly sterilized.

SEC. 19. All cream, milk, or skimmed milk, employed in the manufacture of ice cream shall before use be kept at a temperature not higher than 50 degrees Fahrenheit.

SEC. 20. No person, by himself or by his servant or agent, or as the servant or agent of any other person, firm, or corporation, shall, in the city of Pittsfield, sell, exchange, or deliver any ice cream which contains more than 500,000 bacteria per cubic centimeter.

SEC. 21. No old or melted ice cream, or ice cream returned to a manufacturer from whatever cause, shall again be used in the preparation of ice cream.

SEC. 22. No person shall sell or offer for sale in the city of Pittsfield, any ice cream or preparation similar thereto, until the place of manufacture of the same, the utensils and receptacles used and wagon or other means of carrying the same shall have been examined by an inspector of the board of health. Such inspector when satisfied as to the cleanliness of all articles used shall provide such person with his certificate to that effect.

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SEC. 23. Inspectors shall examine all articles used in the business as often as they may deem necessary and whenever an inspector shall certify that a proper cleanliness is not observed, either in the place of manufacture, in the implements, materials, or manner of making ice cream, etc., or in the manner of carrying or selling the same, no further sales of such ice cream shall be allowed until the objectionable features are removed and the inspector so certifies.

Bakeries—Construction—Sanitary Regulation. (Reg. Bd. of H., Feb. 26, 1915.)

Rule 54. All buildings which are occupied as biscuit, bread, or cake bakeries shall be properly drained and plumbed. They shall be provided with a proper wash room and water-closets, having ventilation apart from the bake room or rooms where food products are manufactured. And no water-closet, earth closet, privy, or ash pit shall be within or communicate directly with the bake room of any bakery. Every room used for the manufacture of flour or meal food products shall have an impermeable floor constructed of cement or of tiles laid in cement and an additional floor of wood properly saturated with linseed oil. The walls and the ceiling of such room shall be plastered or wainscoted and shall be whitewashed at least once in six months. The furniture and utensils therein shall be so arranged that they and the floor may at all times be kept clean and in good sanitary condition. Proper screens for doors and windows must be provided to keep the rooms free from flies and other insects. Sleeping rooms for persons employed in such bakery shall be separate from the room in which flour or meal food products are manufactured or stored.

Rummage Sales-Permit Required. (Reg. Bd. of H., Feb. 26, 1915.)

RULE 55. No rummage sale shall be held in the city of Pittsfield without a permit from the board of health.

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