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PLAGUE IN CUBA.

Between March 5 and March 9 two cases ¹ of human plague were reported in Habana, Cuba. The time was when such an announcement would have caused consternation to shipping interests and would have been a source of much worry to United States seaports.

There is very little, if any, reason for fear under the circumstances. The manner in which plague spreads is known. It is known that ordinarily plague spreads only through the medium of rats, and that usually wherever a human case occurs there has previously been plague in rodents. This knowledge has caused epidemiologists to pay really more attention to the existence of plague in rats than to its It has caused them wherever cases in man occur presence in man. to trap rats diligently in the localities of the human cases and usually within a considerable radius of such localities. These rats are trapped mainly for the purpose of laboratory examination, so that the existence and extent of the disease in rodents may be ascertained. The control of the disease is then largely a question of its eradication among rodents or of the rat-proofing of human habitations to such an extent that the sick rats and their infectious fleas can not gain access to man.

The disease can be effectively controlled where intelligent sanitary measures are employed. But fully as important as intelligent sanitary measures, and perhaps even more important, both in the prevention of the spread of the disease and in preventing undue interference with shipping and unwarranted fears in commercially related ports and countries, is sanitary honesty.

By this is meant giving frankly to those who may be interested or affected by the existence of a disease in a port prompt and full information regarding existing conditions. So far as plague is concerned, and the same is true of most other diseases, there is little to be feared when conditions are known. It is only in the absence of definite and dependable information, when people do not know existing conditions and consequently allow their imaginations full play, that the occurrence of a few cases of such a disease as plague gives anything but nominal inconvenience to social and commercial intercourse.

The United States Public Health Service has always received prompt and full information from the director of sanitation of Cuba. Dr. Juan Guiteras, on matters which might be of interest or affect the public health of the United States. Dr. Guiteras is keeping the Public Health Service currently informed of all developments. Under such conditions of cooperation the occurrence of a few cases of plague has not been and need not be a cause for alarm.

TYPHUS FEVER.

ITS PREVALENCE AND GEOGRAPHIC DISTRIBUTION WITH SPECIAL REFERENCE TO QUARANTINE ADMINISTRATION.

The following vessels have recently arrived at United States ports with typhus fever on board:

At Providence:	Cases.
Jan. 1, 1914, steamer Roma, from Marseille	1
Nov. 30, 1913, steamer Germania, from Marseille	2
Jan. 4, 1914, steamer Roma, from Marseille	1
At New York:	
. Jan. 17, 1914. steamer Belvidere, from Trieste	4
Jan. 18, 1914, steamer Kaiser Franz Joseph I, from Trieste	1
Jan. 27, 1914, steamer Rochambeau, from Havre	2
Mar. 4, 1914, steamer Pannonia, from Trieste	1
Mar. 8, 1914, steamer La Savoie, from Havre	1

Other cases subsequently occurred as the result of contact with the above cases. The nationalities affected appear to be principally Turks, Armenians, Syrians, and Kurds. It is believed that the following statistics justify a most rigid examination of steerage passengers from western Asia and eastern Europe:

RUSSIA.

Place.	Date.	Cases.	Deaths.
Moscow. Odessa. St. Petersburg. Warsaw.	Dec. 20, 1913–Jan. 31, 1914. Jan. 3, 1914–Feb. 20, 1914. Dec. 13, 1913–Jan. 31, 1914. Oct. 25, 1913–Dec. 6, 1913.	34 18 185 15	3 1 48 6
	EGYPT.		
Alexandria	Dec. 31, 1913-Feb. 18, 1914	68	12

EGYPT.					
Alexandria	Dec. 31, 1913-Feb. 18, 1914	68	12		
Cairo	Dec. 16, 1913-Jan. 28, 1914	17	13		
Beirut	Jan. 17, 1914-Feb. 21, 1914	11	7		

т	U	R	K	Е	Y	•

Salonica	Dec. 21, 1913–Feb. 21, 1914	24	21			
Smyrna	Jan. 31, 1914–Feb. 14, 1914	5	5			
SPAIN.						

. Dec. 31, 1913–Jan. 31, 1914.....

Madrid.....

The period of incubation of typhus fever is of sufficient duration to allow an immigrant to take passage after infection and reach a United States port without showing evidence of the disease. Therefore steerage passengers from Western Asia and Eastern Europe in general, and from the above-mentioned localities in particular, should be examined carefully at the time of arrival at the quarantine stations in the United States, and subsequently examined by the officers of the service engaged in the examination of aliens to still further supplement the important work of endeavoring to determine what steerage passengers are most likely to convey the infection of typhus fever.

MOTHERS' BABY BOOKS.

INSTRUCTION FOR MOTHERS IN THE CARE OF INFANTS.

The Indiana State Board of Health has issued a small booklet containing information for mothers and prospective mothers on the care of the mother previous to the birth of the child and the care of the child when born. A copy of this booklet is sent to each mother in Indiana when her first child is born. Information as to who the mothers are is obtained from the birth certificates registered. This is one of the ways in which birth registration can be made of direct value in public health administration.

A committee of the American Association for the Study and Prevention of Infantile Mortality has also prepared a booklet on the baby which was adopted by the association at its meeting in Washington, D. C., in November, 1913. This booklet has been published by the Treasury Department and boards or departments of health can obtain copies for distribution to the mothers of infants by application to the Surgeon General of the Public Health Service in so far as the available edition will allow. Or health officers can furnish the addresses of mothers to the Public Health Service on frank slips which will be sent on request. Copies of the booklet will then be mailed to these addresses by the Surgeon General.

AN OPEN LETTER.

To owners, agents, and masters of lake and river vessels:

SIR: I desire to call your attention to the fact that there were admitted to the United States marine hospitals during the fiscal year ending June 30, 1913, 392 cases of typhoid fever among seamen employed aboard United States merchant vessels.

Considering the fact that in addition to this number many other cases were treated at various public hospitals and at home, it is evident that the incidence of typhoid among the personnel of our merchant marine is high.

That the question of typhoid prevalence is of prime importance, from the standpoints of health conservation and financial welfare, to seamen, shipping interests, and the public at large, may be readily appreciated when we consider a few facts.

Hospital experience has demonstrated that the average seaman who has an attack of typhoid loses in actual working time, as a result of his illness, from two to four months. Taking two and a half months, which is a fairly low average, as the individual loss in time, and \$1.50 as the average daily wage of the employee, it is seen that the above mentioned 392 cases represent in the aggregate a loss of 80 years in actual working time, and of \$44,000 in wages. In terms of cold dollars and cents alone, this is a rather heavy price to pay for an entirely preventable disease.

Every case of typhoid must be considered as a focus for the spread of the disease, either during the period of actual illness or subsequent to recovery as a possible "carrier." If such a case or "carrier" is on a vessel, he is not only a constant menace to his fellow shipmates and passengers on account of the close association which exists on board between individuals, but to the public at large, for his frequent shifting from port to port as a traveling focus of infection renders him an active agent in the spread of the disease. As illustrative of the foregoing, it may be stated that recently a "carrier" aboard one of our coastwise vessels was found to have been responsible for the occurrence of 28 subsequent cases of typhoid among the crew, and during the past summer a cook who performed his duties in the galley while in the early stages of his illness played an important part in a serious outbreak of the disease among the passengers and crew of one of our large inland steamers. Such incidents not only militate against operative efficiency, but by becoming general knowledge may affect prospective passenger traffic and occasion financial loss to the steamship company.

In order to efficiently combat typhoid prevalence, it is necessary either to enforce sanitary measures which will protect individuals from the sources of infection, or to immunize them against the disease.

Though the former provision should be carefully carried out by people on board ship as well as on shore, the nature of a sailor's calling necessarily subjects him to many insanitary dangers over which he has practically no control. On account of his close association with fellow shipmates on board, the great variation in character of food and drinking water, and his roving life from port to port, he is exposed to many more sources of infection than is the average citizen who remains at home surrounded by municipal sanitary safeguards. For these reasons, there is no class of individuals to whom immunization by typhoid prophylactic is of more value as an insurance against the disease than to sailors. There is no doubt that if the practice of typhoid immunization is encouraged aboard ship, there will be a marked reduction in the yearly typhoid rate among crews.

That this method of prevention has long since passed beyond the theoretical and experimental stages is evidenced by the results obtained in the armies and navies of the United States and Europe. The value of this safeguard is recognized as being so great that vaccination against typhoid is now compulsory in both our military services, and as an instance of what it has accomplished toward prevention of illness and death the following figures give a graphic idea: During the Spanish-American War, in 1898, among 10,759 troops assembled at Jacksonville, Fla., there occurred over 2,000 cases of typhoid, with 248 deaths during a period of about four months. In 1909 the use of the typhoid prophylactic was begun by the Army and was made compulsory late in 1911. The opportunity to observe the results of typhoid vaccination on a large scale was afforded during the summer of 1911, when 20,000 troops were mobilized in Texas and along the southern border of the United States. Among this large assemblage of men, over 9,000 more than were encamped at Jacksonville in 1898, there occurred during the mobilization period of over four months but two cases of typhoid, both mild and ending in recovery. The report of the Surgeon General of the Army for the fiscal year ending June 30, 1913, states that there occurred during the year, among the entire personnel of the forces stationed within the geographical limits of the United States. but 18 cases of typhoid, with 3 deaths, as compared to 44 cases, with 6 deaths, in 1911; 142 cases, with 10 deaths, in 1910, and 173 cases, with 16 deaths, in 1909.

As showing the War Department's opinion of the value of typhoid vaccination, the following is quoted from the report: "It has now been clearly demonstrated that the immunization against typhoid fever by the use of typhoid prophylactic is a thoroughly practical measure for the prevention of this disease; that it is unattended by bad results; and that its protective value is very probably equal to that afforded against smallpox by vaccination."

Not only are the military establishments availing themselves of this form of insurance against disease and death, but throughout the country many municipal health authorities are bending every endeavor to similarly fortify the citizens of their respective communities.

Therefore, in view of the undoubted value of the use of the typhoid prophylactic to sailors, it is strongly urged that all shipping interests unhesitatingly recommend and encourage their ship employees to avail themselves of this protection against typhoid infection. A display of interest and action on the part of the ship companies, owners, agents, captains, seamen's unions, and others in authority toward the furtherance of a campaign of education in typhoid prophylaxis will most certainly be of great value in the fight against this disease.

The United States Public Health Service is ready and willing to render every assistance and advice, and at all relief stations throughout the country service officers are instructed to administer the typhoid prophylactic to all sailors applying for same.

> RUPERT BLUE, Surgeon General.

INTERNATIONAL SANITARY CONFERENCE.

SIXTH INTERNATIONAL SANITARY CONFERENCE OF THE AMERICAN REPUBLICS TO BE HELD IN MONTEVIDEO, URUGUAY, DECEMBER 13-21, 1914.

Announcement by Rupert Blue, Provisional Chairman, International Sanitary Bureau of the American Republics, Washington, D. C., March 7, 1914.

In compliance with the resolution adopted at the Fifth International Sanitary Conference, the Sixth International Sanitary Conference of the American Republics will be held in Montevideo, Uruguay, December 13-21, 1914, under the presidency of Dr. E. Fernández Espiro and the auspices of the Government of Uruguay.

A number of important sanitary subjects will be discussed at this conference, and it is expected that all the nations interested will be duly represented.

Provisional Program for the Conference.

1. Review of sanitary legislation enacted in the different countries since the Fifth Conference.

2. Report of progress made in adopting the resolutions agreed to in preceding conferences.

3. Reports on morbidity and mortality statistics subsequent to the last conference.

4. Recent developments in the campaign against plague, yellow fever, leprosy, trachoma, malaria, hookworm disease, tuberculosis, and veneral diseases.

5. Measures adopted to combat the prevalence of cerebrospinal meningitis and acute infectious poliomyelitis.

6. Progress made in maritime sanitation since the last conference, especially with reference to the opening of the Panama Canal.

7. Data relating to the work of the Sanitary Information Bureau of Montevideo.¹

NOTE.—With the approval of the program committee additional papers may be presented by any delegation on sanitary or scientific subjects of general interest.

The reports by the various delegations shall be submitted in printed form to the secretary of the conference before the beginning of the sessions and will be accompanied by a short résumé.

¹ This subject will be treated by the delegation of Uruguay.

PIPESTONE, MINNESOTA.

SOURCE OF NATURAL ICE SUPPLY CONTAMINATED.

Dr. H. M. Bracken, secretary of the Minnesota State Board of Health, reported March 15, 1914, as follows:

We were called upon to investigate the ice collected for use at a little city in the southwestern part of Minnesota—Pipestone. Investigation showed that the only near-by ice field for Pipestone is a pond in the course of a creek north of that city.

Dr. A. J. Chesley visited this ice field on March 7, 1914, and found that the sewage from the Indian school near Pipestone was discharged into this small pond. Fresh fecal masses were found at the outlet of the tile drain and there was no filtration between the sewer outlet and the pond. The pond is shallow and covers only a few acres. As a result the ice is not fit for use except for refrigeration.

COMMON SENSE IN PUBLIC-HEALTH ADMINISTRATION.¹

By W. C. RUCKEB, Assistant Surgeon General, United States Public Health Service.

The amazing fact of epidemiology is its extreme simplicity. Once the causative organism of a disease is known, and the factors concerned in its dissemination have been determined, the measures to be taken to prevent or to eradicate the disease are relatively simple. It may be stated that the greater our ignorance concerning the cause and method of transmission of a disease, the more complicated are our theories as to its epidemiology. Conversely, once the principles which underly the causation and means of spread of a disease become known, we are amazed by the simplicity of the facts. This has produced a twofold action upon the public-health activities of the present day. In the first place, it has made it possible to reduce the incidence of certain communicable diseases with accuracy and precision. Secondly, it has led large numbers of zealous persons possessed of a few half understood facts to rush into public-health work in its administrative and legislative branches.

In its final analysis, epidemiology is an extremely practical science, and to the mind which has been prepared by proper study and training, it is marvelously easy of application. The technique of prophylactic and eradicative measures is, however, a highly specialized science, which can not be acquired by self-communion and the study of a few text books. The assurance with which the amateur epidemiologist will attack a problem of disease prevention or eradication does not seem in the least amazing to many who would recoil in horror from the thought of an attempted major surgical operation by a

¹ Read before the Chicago Medical Society, Feb. 25, 1914.

sanitarian. With the layman, the case is even worse, and here indeed a little knowledge is an extremely dangerous thing. The physician has a knowledge of the causal elements of disease, and he is also informed as to their means of spread, but he lacks the knowledge of the technique of the application of epidemiological principles. The layman either has none of these, or he has been placed in possession of a few bald facts, without that background of understanding which comes from study and experience.

Take for example the application of the principle that bubonic plague is a rodent disease. The layman may not understand that all that is necessary to control an outbreak or to prevent its recurrence is to thoroughly insulate man against rodents. The layman says: "Let us kill all the rats. We will offer a bounty of 50 cents for female rats and 25 cents for male rats." The epidemiologist says, "No. We will thoroughly rat-proof the habitations of man." Typhoid fever is transmitted by the ingestion of human excrement. The amateur sanitarian says, "We will pass a law forbidding the use of wells." The epidemiologist says, "Very well, but we will also enact laws to the end that sewage may be properly disposed of, the water supply improved, the breeding places of flies destroyed, and the food supplies protected from infection by chronic carriers."

Public-health administration, to be of practical value, must be conducted along logical lines. The prerequisite to a logical course of action is training and the knowledge which comes from it. We must, therefore, expect that until our public-health administrators are thoroughly trained men we can not look for a full measure of common sense in public-health administration. There is at the present time a gradually increasing demand for full-time health officers of proper qualifications, and an attempt is being made by the larger educational institutions to supply this demand by special courses leading to the diploma of public health. At the present time the salaries offered to such men are not commensurate with the time. labor, and expense which they are obliged to undergo in order to properly fit themselves for the discharge of such duties. The employment of incompetent health officers at a low salary is the worst kind of extravagance. Not only because there will not be a return in efficiency for the moneys so expended, but also because the untrained man will adopt a number of unnecessary and expensive measures which would be avoided by the professional epidemiologist who knows how to perform his duties with accuracy and without lost motion. The untrained health officer establishes a shotgun quarantine, burns tar barrels in the streets, and washes down the houses with bichloride of mercury to stop an outbreak of yellow fever, when the simple measure of Stegomvia destruction will accomplish the desired result.

It should be borne in mind that a wave of public-health enthusiasm is now sweeping over this country, and the American people are being awakened to the realization that we are making a wholly needless sacrifice to preventable disease. Whenever public sentiment is aroused in a particular direction, especially if it be with regard to a subject which requires scientific knowledge and training for proper comprehension, there is great danger that the movement may be characterized by fads and fanaticism. The medical profession of this country is very largely responsible for this sanitary awakening, and "the education of the general public" has become one of the slogans of the campaign. It should not be forgotten that you can not create a soldier by simply giving a man a rifle, and you can not make out of a layman a consistent sanitarian by presenting him with a few predigested facts. Let it be remembered that every action has an equal and opposite reaction, and unless we conduct this educational campaign with common sense and extreme care, the present enthusiasm will be succeeded by an apathetic reversion. Also, do not let us be charmed by the music of our own voices in this educational campaign. Shouting never won a football game, and the speaker sometimes mistakes his own enthusiasm for that of his hearers. The lay public has been wonderfully patient with us, and while it is extremely desirable that the purposes and aims of sanitation and hygiene should be brought before all citizens, we commit an incalculable error when we endeavor to make them into sanitarians. The best that we can hope will be to popularize the purposes of preventive medicine and to inculcate in the rising generation the principles and practices of personal hygiene. After the age of 25. toothbrush drill very seldom becomes a habit, and we must not expect any marked and widespread change in personal habits as affected by hygiene within the next 15 years.

Almost every time our lawmakers convene they are flooded by a mass of proposed legislation which is to right the sanitary wrongs of the municipality, the State, or the Nation, and unfortunately many of these find their way into the statute books. There is in this country a wealth of sanitary legislation which is impractical of administration and which lacks uniformity and logical basis. The epidemiologist whose business it is to study disease in the light of its prevention has long ago learned that one law in operation is worth ten unenforced laws on the statute books. More than this, an idle law casts discredit upon the legislators who begat it and the officials whose business it is to enforce it. It encourages a disregard for laws which it is desired to enforce, and therefore acts as a general hindrance. Many of the public-health activities in this country would be further advanced to-day were they not hampered by impractical laws passed by the overzealous. It must be admitted in all justice that the publichealth authorities have to a certain extent aided and abetted in the passage of these laws. The enthusiasm of which we have been speaking has led to the formation of a large number of societies having for their object the prosecution of some particular form of public-health activity. The honesty of purpose which has imbued these organizations is unquestioned, but it must be regretfully admitted that their enthusiasm is not always manifested wisely. Too frequently they have led the health officer instead of the health officer leading them, and this has been possible because the health officer has not always been sure in his own mind just what he wanted to do. After the enactment of the law the climax of enthusiasm has been reached, and as it wanes the health officer finds himself with a weapon in his hands which is so heavy that he can not possibly wield it.

A case in point is the present agitation over track pollution by interstate carriers. From an æsthetic point of view the practice is reprehensible, yet no one has brought forward indisputable evidence that disease is or may be generally spread in this way. Yet the literature on the subject is fairly full, and one author has made the statement that a typhoid carrier traveling from New York to San Francisco by train may infect every mile of roadbed between the two cities. Another writer claims that typhoid fever has a high incidence among traveling salesmen and track employees because they ingest excrement-infected dust. The matter has been carried even further and a bill introduced into one of the State legislatures in order to regulate track pollution. Stripped of its legal verbiage the bill provides that no railway company shall discharge or permit to be discharged from any car carrying passengers any solid or liquid human excreta, either directly or indirectly, within the bounds or on the boundary of any watershed used as a source of public water supply. It further requires that the company shall provide in each car two toilets of such form that they shall thoroughly retain all solid and liquid excreta in a watertight and odorless receptacle. Finally, it is provided that these receptacles shall be emptied, flushed, and thoroughly sterilized or disinfected at least once in every 12 hours of car service, whether in use or not.

Track pollution is undoubtedly a dangerous practice under certain circumstances, and watersheds should always be protected from pollution. The knowledge which we have at hand, however, does not indicate that all track pollution results in human disease. It certainly does not explain the necessity for sterilizing excrement containers which are not in use. What we require first is exact knowledge of the amount of disease spread by track pollution and the mechanism of such spread. Having that, it will be easy enough to legislate sensibly on the question and to put control measures in operation. Premature legislation based on unsupported theories simply reacts to injure the public-health movement.

Two general sets of faults may be found in the sanitary laws of this country. The most common of these is a scatteration of ideas and the loading down of the health officer with more power than he could possibly use. This is just as great a fault as giving him too little power. Frequently a law errs in the opposite direction, and endeavors to be too specific, in which event it becomes the victim of legal quibbles which prove its utter undoing. Most of these laws have been drawn up by amateurs, and even the very wisest professional is sometimes hard put to it to draft a proper In this connection, it may be pointed out that the profession law. of law is becoming highly specialized. We have corporation lawvers for the mining industry, the banking industry, and for the various other classes of corporations. As a matter of fact, there is a specialty for every kind of law from crime to real estate, excepting sanitary law, and there is great need, indeed, for men who can combine with a knowledge of the law a knowledge of the fundamentals of epidemiology.

Too frequently the State or municipality will enact laws giving to the health officer broad powers to adopt any and all measures for the prevention of the spread of disease, and will appropriate, let us say, \$1,800 for clerk hire, office rent, and the other purposes of the act. It would be a very good thing if we could have a commission for the determination of sanitary valuation and standardization in order that public-health work might receive the financial support which is essential to efficient administration. Unfortunately, the relation between sanitary authority and sanitary appropriations has never been worked out in a practical way, practical, that is, from the layman's point of view.

It is not the purpose of this paper to be iconoclastic or pessimistic, neither is the value of the lay cooperative effort underestimated. It is a good thing for the sanitary workers of this country to have the help and the council of the medical profession and the general public. Their watchful eyes may observe administrative errors and instances of effort gone astray. Their praise and their criticism are of equal value—the one acting as a stimulus to better work and the other as a spur to more efficient effort. But the amateur sanitarian should be controlled and directed and the principles of epidemiological practice applied with precision. We should not continue to cling to the practices of yesterday merely because of precedent, but should take stock of ourselves and ask whether the measures which we are now using in our endeavors to control and prevent disease have an actual basis of fact. Formerly a vessel from a cholera-infected port was subjected to rigid quarantine. The passengers and crew were held during the incubation period. The ship was disinfected from stem to stern and from truck to keelson. The freight was exposed to antiseptic gases which did not penetrate its interior, and it is extremely doubtful if very much was accomplished by these measures toward the prevention of the introduction of cholera. To-day a bacteriological search is made for carriers, and if none are found the vessel is allowed to proceed. Disinfection is not performed unless there is actual reason for so doing, and then with the accuracy of a rifle rather than by the methods of a blunderbuss.

We must be careful in our public-health work that we do not advocate the adoption of a certain measure merely because it may control some remote source of danger. It is entirely proper that we insist upon the abolition of the common drinking cup, both as a prophylactic and an educational measure; but when we insist that cups furnished to the general public shall be sterilized the question has assumed a phase as farcical and ridiculous as would be the individual door knob. Already a good many common-sense laymen are offering the criticism that we are carrying public health measures to an unnecessarily fine point of perfection. While this contention is not granted, it must be admitted that some of the recommendations which are being made by untrained enthusiasts bear a close resemblance to the Royal Society's recommendations with regard to bathing. These, when reduced to their lowest terms, are "Do not bathe."

The general public is fundamentally practical, and it is not enough that we be able to show that the funds which it has given for the prosecution of public-health work have resulted in the saving of human lives. This is all very well, but the hard-headed business man is interested in the other returns from his public-health investment. "Where the treasure is, there is the heart also." We must show in actual figures that public health is public wealth if we are to secure funds for the conduct of research or the prophylaxis of disease. Furthermore, no matter how high our ideals may be as to the humanitarian aspects of our profession, we must administer the public-health activities with due regard for commerce. Compare, for example, the disastrous effects produced upon trade intercourse by the prohibitive quarantines of the past with the way in which Federal quarantines are administered to-day. Formerly nonintercourse was the principle. To-day it is the maximum of protection with the minimum interference with trade.

The arbitrary enforcement of the exact letter of the law instead of applying it with common sense to meet the situation defeats the purposes for which the law was created. It discourages cooperative effort and sometimes works hardships which might have been avoided by a more elastic construction. Sanitary government is by the consent of the governed. In dealing with problems which affect social and industrial life, the epidemiologist must be possessed of breadth of vision, charity, and understanding, if he would lead his people into the paths of sanitary righteousness. Arbitrary house quarantine has brought about a reluctance to report communicable diseases and a disregard for quarantine that could have been avoided, in part at least, by the application of a little common sense and charity. The stiff-necked insistence on the letter of the law, which isolates the bread winner and separates mother and child, kills at a single blow the cooperation which has been developed by years of patient effort.

Consider the untold sums which have been expended in the past in disinfecting places in which infection did not exist, to the utter disregard of the living carriers of the seeds of disease. We smile at the reports of washing walls with antiseptics to the height of 3 feet for the purpose of killing the miasms of plague, but is it any more ridiculous than surface disinfection as carried on by so many of the public health agencies of to-day? Yet we continue, year after year, to burn incense to the unknown gods of disease, and at the expense of the taxpayer, whom we are endeavoring to evolve into a sanitarian.

Common sense in public health administration comprehends the employment of well trained, full time health officers, at adequate salaries, the appropriation of sufficient funds to enable such an official to administer the laws, and the enactment of specific legislation having as its foundation the basis of fact and practicality.

The medical profession as the leader in the campaign of sanitary renaissance must be guided by conservatism. The measures which we recommend must be practical. Fact, not theory, must be the basis of our action. Disease is not a ghost, but a reality. The common-sense application of knowledge alone will control it. Epidemiology is that knowledge. It can be put into force by persons trained in that science, provided they have funds and authority. The sanitary millenium will never come, but research and common-sense administration will bring it nearer.

SALT-WATER SWIMMING BATHS.

EFFECT OF CHLORINE TREATMENT ON THE BACTERIAL CONTENT.

By WILFRED H. KELLOGG, Director of Laboratories, Department of Public Health, San Francisco, Cal.

The attention of the health department of San Francisco having been directed to swimming baths by inquiries on the part of the public and rumors that physicians had stated that people were contracting skin diseases and inflammations of the eye by bathing in The institution most frequently the subject of complaint was one of the largest in the city using ocean water. The management were very attentive to details of ordinary cleanliness and the water was kept constantly circulating through heating coils and a set of Jewel sand filters, thence returning to the plunge. The water was completely changed at intervals varying from one to seven days, according to the number of people bathing.

Bacterial counts made in August and October, 1913, varied from 3,000 to 30,000 and *B. coli* was present usually in 1 cubic centimeter. Water coming from the filters contained as many as and sometimes more bacteria than that in the plunge.

The superintendent having indicated a desire to cooperate in every way possible to secure more ideal conditions, he was requested to add chloride of lime to the water, which was done in quantities of 50 pounds per million gallons. This amount was arrived at by some small scale experiments on the detection of free chlorine in sea water a few hours after the addition of the chemical and some bacteriological counts made at the same time. Although a marked reduction of the bacteria was secured, the process was soon abandoned on account of mechanical difficulties in its application, which was attempted through the filtration system.

The scheme of the electrolytic production of sodium hypochlorite from sea water was then broached to the manager and enthusiastically accepted, the idea that he was not adding any chemical to the water appealing to him, he having been fearful all along that his business might be injured if people learned that the water was being treated chemically.

An apparatus was purchased from a laundry machinery company and installed with a 300-gallon tank. The output of this apparatus, consisting of a single "cell" or electrolyzing box, was 30 gallons per hour of a solution that was found to contain 0.197 per cent of total available chlorine. The current necessary was about 20 amperes at 110 volts, giving a current consumption of 2,200 watts per hour, which at 4 cents per kilowatt would amount to \$0.088 per hour of operation.

This solution was then added to the water in such quantity as to give 1.8 parts of chlorine per million of water.

The following charts show the results of the chlorine treatment under varying conditions (see charts 1, 2, 3, and 4).

March 20, 1914

In chart 1 the first count is 560 per cubic centimeter in a sample taken a few hours after the filling. The sample taken on December 26 at 11 a. m., the chlorine having been added the night before in the proportion of 1.8 parts per million, was 900, the count rising the next day without treatment to 28,000.

In chart 2 there is shown a rapid rise in the count, from 3,000 taken a few hours after filling to 61,000 on the third day. The addition of 1.8 parts of chlorine brought the count down to 4,500 and the repe-

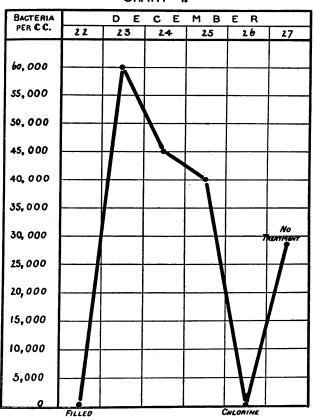


CHART 1.

tition of the chlorine every night resulted as shown. In this table the chlorine was introduced by way of the deep end of the tank through openings near the bottom.

In chart 3 the first three counts were without chlorine and the last three were after the addition of 2.8 parts per million, added by way of openings above the water at the shallow end of the tank. Since the highest count in this series was obtained after the addition of an increased amount of chlorine, it was concluded that the chlorine solution introduced by means of an injector in the circulating system and admitted to the tank through openings above the water was mostly lost into the atmosphere; so the system was changed again to the deep end.

In chart 4 the chlorine was introduced through the deep end of the tank in amounts of 2.8 parts per million and the count did not rise above 112 bacteria per cubic centimeter, the treatments being given nightly after business hours.

After the fourth daily addition of 2.8 parts of chlorine a number of complaints were received of an odor to the water, some of the bathers complaining that their skin was dried up and made harsh by the water. Others wanted to know whether chloride of lime was being

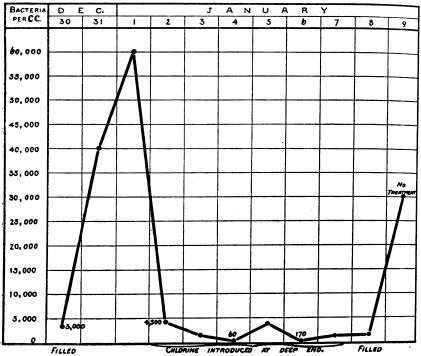


CHART 2.

added. These instances of the play of the imagination on the part of the public recall the experience of some of the eastern cities upon the introduction of the use of chlorine to purify the drinking-water supply. The editor of the Journal of the American Medical Association in an editorial on this subject remarks that "a humorous touch is given the matter by the imaginary grievances that find utterance, such as the fancied injury to delicate fabrics, bleaching of the hair, and the like. Before the chemical is added complaints that the tap water has an unpleasant taste or smell come from people who have read in the newspapers that the hypochlorite treatment is about to be instituted."

In consequence of this the chlorine was omitted altogether one night, and then resumed again, the quantity being alternated, 1.8 parts one night and 2.8 the next. After the second addition of 1.8 parts of chlorine, the count ran up to 40,000, so it was decided to add 2.8 parts nightly, omitting the treatment only when the odor of chlorine became noticeable. Further experiments will be made to determine whether chemical tests can be relied upon to determine

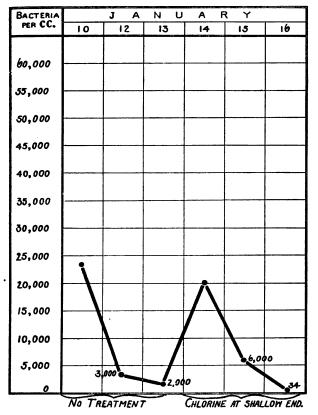


CHART 3.

this point, as the amount of chlorine necessary to become noticeable varies with the amount of organic matter present in the water and therefore with the number of bathers using the tank.

This odor is not due to the presence of free chlorine in the water, the existence of which is not possible so long as the water has an alkaline reaction, but to the presence of chlorine substitution products formed from the organic substances in the water.

The first use of chlorine on a large scale for the sterilization of drinking water was in 1908, when the water of Bubbly Creek, a highly polluted stream supplying the stockyards of Chicago, was treated with chloride of lime, 45 pounds per million gallons being used. As a result of this treatment the water was made far superior bacterio-logically to that of Chicago itself.

The following cities are now using chlorinated lime to purify their entire supply: New York, Philadelphia, Pittsburgh, Cleveland, Montreal, Council Bluffs, Milwaukee, Cincinnati, Omaha, Minneapolis, Niagara Falls, and many others.

BACTERIA	J	A	NU	AR	Υ.
PER C'C.	19	20	21	22	23
60,000					<u> </u>
55,000					
50,000					
50,000					
45,000				1	
40,000					
35,000				1	
30, <i>000</i>					
00,000					
25, <i>00</i> 0					
20,0 <i>00</i>				1	
15,000					
10,000					
10,000			<u>.</u>		
5,000		·····			
0	500	112	20	50	

CHART 4.

CHLORINE INTRODUCED AT DEEP END.-2.8 PARTS PER MILLION.

As a result of our investigations in connection with the use of chlorine in the disinfection of swimming baths, the simplicity of application and the accurate results obtainable in the disinfection of the water, it would seem to be a desirable addition to public-health regulations to require the chlorine treatment of all swimming baths. The electrical generation of chlorine is inexpensive, costing from 30 to 60 cents per 100,000 gallons, according to the price of current, and to those institutions having their own electrical plant, next to nothing.

Chloride of lime is still cheaper, requiring only the installation of a cement-lined mixing tank with arrangements for pumping the clear

solution into the plunge water and a flushing arrangement to carry off the lime sludge.

Most plants having a circulating system, there is no difficulty in introducing the chlorine solution by a pump directly into the feed pipe to the plunge. A force pump is better than a steam injector, as the high heat generated in the operation of the latter is a cause of the loss of some of the chlorine.

Baths using fresh water should be treated in the same way, and if it is desired to generate the chlorine electrically a concentrated solution of salt is subjected to the action of the current, the amount of the solution thus obtained to be used depending upon a chemical estimation of the amount of chlorine produced.

Under the use of this method of purification it will not be necessary to change the water nearly so often as without treatment, thus effecting a considerable saving to the proprietors of establishments; but, inasmuch as the temptation will be to derive too great an advantage in this way, the process should be controlled by regulation prescribing a reasonable frequency of change and by occasional bacteriological tests to insure the proper attention on the part of the management of the institutions.

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.

SMALLPOX.

California-Imperial County.

Acting Asst. Surg. Richter, of the Public Health Service, reported by telegraph that during the week ended March 14, 1914, 19 cases of smallpox had been notified on the Yuma Indian Reservation, and 3 cases in El Centro, Imperial County, Cal.

Indiana---Evansville.

Surg. Oakley, of the Public Health Service, reported by telegraph that during the week ended March 14, 1914, 11 cases of smallpox had been notified in Evansville, Ind.

Maine-Yarmouth.

Surg. McIntosh, of the Public Health Service, reported by telegraph that from March 13 to 16, 1914, 10 cases of smallpox had been notified at Yarmouth, Me.

Maryland-Baltimore.

Senior Surg. Carter, of the Public Health Service, reported by telegraph that during the period from March 6 to 14, 1914, inclusive, 50 cases of smallpox had been notified in Baltimore, Md., making a total of 197 cases reported since January 11, 1914.

Maryland-Centerville, Ilchester, and Wittman.

The State Department of Health of Maryland reported by telegraph March 17, 1914, that 6 cases of smallpox had been notified at Centerville and 2 cases at Wittman; and on March 18 that 7 cases had been notified at Ilchester, Md.

Minnesota-Duluth.

Acting Asst. Surg. Cheney, of the Public Health Service, reported by telegraph that during the week ended March 14, 1914, 10 cases of smallpox had been notified in Duluth, Minn.

696

SMALLPOX—Continued.

New York-Niagara Falls.

Acting Asst. Surg. Bingham, of the Public Health Service, reported by telegraph that during the week ended March 14, 1914, 6 cases of smallpox had been notified at Niagara Falls, N. Y.

North Dakota.

The State Board of Health of North Dakota has written to the bureau that in the January report of that State, published on page 572 of the Public Health Reports of March 6, 1914, an error was made in reporting 99 cases of smallpox for Billings County. These cases were of scarlet fever and should have been charged to that disease, making the total notified in the State during the month of January 175.

Ohio-Cincinnati.

Acting Asst. Surg. Maddox, of the Public Health Service, reported that during the two weeks ended March 7, 1914, 16 cases of smallpox had been notified in Cincinnati, Ohio, making a total of 29 cases reported since January 1, 1914. A total of 35 cases of smallpox was reported at Cincinnati during the year 1913.

Texas-Galveston.

Surg. Bahrenburg, of the Public Health Service, reported by telegraph that during the week ended March 13, 1914, 5 cases of smallpox had been notified in Galveston, Tex., making a total of 25 cases reported since February 12, 1914.

			v	accination h	istory of cas	0 8.
Places.	Number of new cases reported during month.	Deaths.	Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never suc- cessfully vaccinated.	Vaccina- tion history not ob- tained or uncertain.
Wisconsin: Ashland County Barron County Brown County Calumet County Chippewa County Clark County Columbia County Dane County	3 1 4 1 1 4 22 7		4	7	 1 1 11	4 3 1
Douglas County. Dunn County. Eau Claire County. Grant County. Green County. Iron County. Jefferson County. Kenosha County. Kewaunee County.	8 3 1 5 11 1 6 4		1 1 1		 11 	4 2

Wisconsin Report for February, 1914.

March 20, 1914

SMALLPOX—Continued.

Wisconsin Report for February, 1914-Continued.

			Vaccination history of cases.			
Places.	Number of new cases reported during month.	Deaths.	Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never suc- cessfully vaccinated.	Vaccina- tion history not ob- tained or uncertain.
Wisconsin—Continued.	14		3		11	
La Crosse County	14		•			
Marinette County	19		6		4	
Marguette County						1 1
Milwaukee County				•		155
Monroe County			6	4	6	100
Oconto County					4	•
Outagamie County						3
Pierce County		•••••			j g	
Portage County			B			
Racine County			, v			
Richland County						1 1
Rock County		4	1	1	52	
Sauk County			· · · · · · · · · · · · · · · · · · ·		52	-
Sawyer County				· ·	• • • • • • • • • • • • • • •	9
Trempealeau County	21			2	19	
Walworth County						
Washington County					9	
Waukesha County					6	6
Waushara County						
Winnebago County					8	·····i
Wood County					6	ŝ
11 000 00unty						
Total	481	5	37	27	187	230
1.0000000000000000000000000000000000000	101	U U			101	

Miscellaneous State Reports.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Arizona (Feb. 1-28):			Illinois (Jan. 1-31)—Contd. Counties—Continued.		
Counties-			Counties-Continued.		
Maricopa	4		Cook	15	
Mohavē	1		Fulton	3	
Yuma	1		Gallatin	1	
			Greene	1	
Total	6		Grundy	27	
			Hamilton	6	
Connecticut (Feb. 1-28)	ì		Hancock	12	
Counties-			Henderson	1	
Hartford	2		Henry	8	
Middlesex	18		Jefferson	7	
Tolland	3		Kane	13	
			Knox	1	
Total	23		Jasper	3	
			Jo Daviess	14	
District of Columbia (Feb.			Kendall	1	
1-28)	16		La Salle	• 4	
			Lee	71	
Idaho (Jan. 1-31):			McHenry	1	
Counties-			Macon	2 81	
Bannock	4		Madison		
Bingham	45		Moultrie	5	•••••
Boise	1 7		Pike	18	
Bonners	1		Pulaski Richland	10	•••••
Custer	5 1		Rock Island	1	•••••
Minnidoke Shoshone	26	•••••		0 6	
Twin Falls	20		Stephenson Warren	P P	
Twill Fails	1	•••••	Wayne	2	
Total	90		Joliet	11	•••••
10081	80	•••••	Williamson	46	
Illinois (Jan. 1-31);			White	40 79	•••••
Counties-			Whiteside	19	
Alexander	4		Winnebago	26	
Brown	21	•••••	11 mmcuago	20	
Carroll	1	•••••	Total	514	
Clay	1	•••••	+ UV01	P10	•••••
0 kay	1,	•••••	i. I		

697

698

SMALLPOX-Continued.

Miscellaneous State Reports-Continued.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Mississippi (Jan. 1-31): Counties— Bolivar. Calhoun Grenada. Coahoma. Copiah. Lafayette. Lauderdale. Lincoln. Lowndes. Marion. Neshoba.	6 2 6 1 1 3 3 3 3 3	4 22 1 1 1 2 1	Mississippi-Continued. Counties-Continued. Noxubee Oktibbeha Yazoo Total New Jersey (Feb. 1-28): County- Monmouth	4 16 1 1 51 2	

City Reports for Week Ended Feb. 28, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Aurora, Ill. Austin, Tex	1 20 7 2 4 1 5 17 19 2 3 1		Nashville, Tenn. New Orleans, La. Oakland, Cal. Philadelphia, Pa. Racine, Wis. Richmond, Va. St. Joseph, Mo. St. Louis, Mo. San Francisco, Cal. Superior. Wis.	20 22 1 3 1 3 2 6 3 1 15 1	

TYPHOID FEVER.

State Reports for February, 1914.

Places.	Number of new cases re- ported during month.	Places.	Number of new cases re- ported during month.
District of Columbia: Washington New Jersey: Atiantic County Bergen County Camden County Essex County Hudson County Hunterdon County Mercer County	4777855	New Jersey—Continued. Middlesex County. Monmouth County. Ocean County. Passaic County. Somerset County. Union County. Warren County. Total.	3 1 1 1 8

699

TYPHOID FEVER—Continued.

State Reports for January, 1914.

Places.	Number of new cases re- ported during month.	Places.	Number of new cases re- ported during month.
Idaho: Ada County— Boise	1	Mississippi—Continued. Marion County Marshall County	
Boise Meridian Kootenai County— Harrison	ī	Monroe County Montgomery County Newton County	
Harrison Shoshone County Wallace	22	Oktibbeha County Panola County Pearl River County	36
Total	7	Pike County Pontotoc County Prentiss County.	2
Mississippi: Amite County. Attala County.	2 7 7	Rankin County Scott County Sunflower County	1
Bolivar County. Calhoun County. Carroll County. Chickasaw County.	1 3	Tallahatchie County Tishomingo County Warren County.	1
Choctaw County Claiborne County Claiborne County	2	Washington County Wilkinson County Winston County	
Clay County Copiah County Forrest County	4 7 4	Yalobusha County Yazoo County	
Franklin County. George County. Greene County.	4 3 1	Total Wisconsin:	24
Grerada County Hancock County Harrison County	1 2 10	Dane County Dunn County Fond du Lac County	8 2 5 2
Hinds County. Holmes County. Jackson County.	1	La Crosse County Lincoln County Manitowoc County	1
Jefferson Davis County Jones County Kemper County	2 3 9 5	Milwaukee County Monroe County Oneida County	
Lafayette County Lauderdale County Lawrence County	12 5 3	Racine County Sauk County Winnebago County	1
Lee County Leflore County	11 1	Total	2

City Reports for Week Ended Feb. 28, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Alameda, Cal Ann Harbor, Mich Atlantic City, N. J. Baltimore, Md Bennington, Vt Binghamton, N. Y. Buffalo, N. Y. Camden, N. J. Chicago, Ill. Cincinnati, Ohio Cleveland, Ohio Clumburs, Ohio. Cumberland, Md. Fitchburg, Mass	1 2 6 1 7 1 18 3	1 1 1 5 1 1 2 1 2	Oakland, Cal. Orange, N. J. Philadelphia, Pa. Pittsburgh, Pa.	13 7 7 1 3 4 8 1 3	
Little Rock, Ark Los Angeles, Cal. Lowell, Mass. Milwaukee, Wis. Morristown, N. J. Nashville, Tenn.	14 2	1 1 1 1	Toledo, Ohio		

CEREBROSPINAL MENINGITIS.

State Reports for February, 1914.

Places.	Number of new cases re- ported during month.
District of Columbia: Washington	
Wieconcin	
Marathon County. Milwaukee County. Portage County.	i i
Total	3

Mississippi Report for January, 1914.

Places.	Number of new cases re- ported during month.	Places.	Number of new cases re- ported during month.
Mississippi: Coahoma County Lee County Monroe County Neshoba County Tallahatchie County	2 2 1 1 3	Mississippi-Continued. Warren County Winston County Total	11

City Reports for Week Ended Feb. 28, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Baltimore, Md Boston, Mass Chicago, Ill Cincinnati, Ohio Cleveland, Ohio	2 1	1 1 1 2	Los Angeles, Cal. Newark, N. J. New Orleans, La. Richmond, Va. San Diego, Cal.	2	1 1 1

POLIOMYELITIS (INFANTILE PARALYSIS).

Mississippi Report for January, 1914.

Places.	Number of new cases re- ported during month.	Places.	Number of new cases re- ported during month.
Mississippi: Bolivar County Copiah County Jackson County Monroe County Monroe County Montgomey County	2	Mississippi—Continued. Sunflower County Washington County Total	1 2 11

ERYSIPELAS.

City Reports for Week Ended Feb. 28, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Ann Arbor, Mich. Baltimore, Md. Beaver Falls, Pa. Binghamton, N. Y. Boston, Mass Braddock, Pa. Bridgeport, Conn. Buffalo, N. Y. Cambridge, Ohio. Chicago, Ill. Cincinnati, Ohio. Cleveland, Ohio. Cleveland, Ohio. Cleveland, Md. Elmira, N. Y. Kalamazoo, Mich. Lancaster, Pa. Los Angeles, Cal. Milwankee, Wis.	1 1 3 1 23 4 7 1 1 1	1 1 1 1 8 1 1 1 1 1	Muscatine, Iowa. New Castle, Pa. New Castle, Pa. New Orleans, La. Passaic, N. J. Philadelphia, Pa. Pittsburgh, Pa. Pottstown, Pa. Providence, R. I. Reading, Pa. Sacramento, Cal. St. Joseph, Mo. St. Louis, Mo. St. Louis, Mo. St. Louis, Mo. Star Francisco, Cal. South Bethlehem, Pa. Steelton, Pa. Toledo, Ohio. York, Pa.	1 225 5 1 2 1 1 3 3 1 1	

PLAGUE.

California-Squirrels Collected and Examined.

During the week ended February 28, 1914, 10 ground squirrels from Alameda County were examined for plague infection. No plagueinfected squirrel was found.

Maintenance of a Squirrel-Free Zone.

During the week ended February 28, 1914, 44 acres of land in Alameda County and 117 in Stanislaus County were treated with squirrel destructors.

Places.	Week ended—	Found dead.	Total col- lected.	Examined.	Found in- fected.
California: Cities— Oakland Barkeley San Francisco.	Feb. 28, 1914 do do	37 11	508 130 1, 520	403 82 1, 257	
Washington: City— Seattle	Feb. 21, 1914	······	1,077	889	·

Rats Collected and Examined.

PNEUMONIA.

City Reports for Week Ended Feb. 28, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Ann Arbor, Mich. Auburn, N. Y. Binghamton, N. Y. Chicago, Ill. Cleveland, Ohio. Coffeyville, Kans. Harrisburg, Pa. Kalamazoo, Mich. Lancaster, Pa. Los Angeles, Cal. McKeesport, Pa. Muscatine, Iowa.	4 3 176 43 1 2 8 2 17	1 129 15 2 2 	New Castle, Pa. Newport, Ky. Norristown, Pa. Philadelphia, Pa. Plitsburgh, Pa. Plainfield, N. J. Reading, Pa. Rutland, Vt. Sacramento, Cal. San Diego, Cal. San Francisco, Cal. South Bethlehem, Pa.	1 53 50 4 6 4 1 4	1 2 116 62 1

RABIES.

California-Alameda and Oakland-Rabies in Animals.

Surg. Long, of the Public Health Service, reported by telegraph that during the week ended March 14, 1914, rabies in animals had been reported as follows: Three cases in dogs at Alameda, 1 case in a cat, and 3 cases in dogs at Oakland, Cal.

Washington-Seattle-Rabies in Animals.

Surg. Lloyd, of the Public Health Service, reported by telegraph that during the week ended March 14, 1914, 3 cases of rabies in dogs had been reported in Seattle, Wash.

SCARLET FEVER, MEASLES, DIPHTHERIA, AND TUBERCULOSIS.

Philadelphia, Pa.--Scarlet Fever, Measles, and Diphtheria.

Senior Surg. Irwin, of the Public Health Service, reported that during the week ended March 14, 1914, 65 cases of scarlet fever, 468 cases of measles, and 57 cases of diphtheria had been notified in Philadelphia, Pa.

Pittsburgh, Pa.--Scarlet Fever.

Surg. Stoner, of the Public Health Service, reported by telegraph that during the week ended March 14, 1914, 131 cases of scarlet fever, with 6 deaths, had been notified in Pittsburgh, Pa., making a total of 2,608 cases, with 127 deaths, reported since August 1, 1913.

	Scarlet fever.	Measles.	Diphtheria
District of Columbia New Jersey	60 782	305	61 585
Wisconsin		907	168

State Reports for January, 1914.

	Scarlet fever.	Measles.	Diphtheria,
Idaho	12	27	477
Mississippi	37	792	

SCARLET FEVER, MEASLES, DIPHTHERIA, AND TUBERCULOSIS-Contd.

City Reports for Week Ended Feb. 28, 1914.

Cities.	tion,	deaths		eria.		usles.	fe	ver.	cul	ber- osis.
Cities.	United States census 1910.	from all causes.		Deaths.	ſ'ases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants:		236	22		22		21		17	~
Baltimore, Md Boston, Mass	558,485 670,585	230	69	6	46		142		38	22
Boston, Mass Chicago, Ill. Cleveland, Ohio	2, 185, 283	768	136	17	56	1	96	9	182	28 96
Cleveland, Ohio	560, 663 1, 549, 008	183 687	38 52	5 9	18 273	43	16 58	4	31 65	17
Philadelphia, Pa Pittsburgh, Pa	533,905	242	23	2	30	1	84	3	27	65 18
St. Louis, Mo From 300,000 to 500,000 inhab-	687,029	234	47	3	108	ī	36	3	34	19
rom 300,000 to 500,000 inhab-			1.		1					
itants: Buffalo, N. Y.	423, 715	104	24		33		13		23	9
Buffalo, N. Y. Cincinnati, Ohio	364, 463	155	28	1	6		13	1	15	20
			40	6		· · · · • •	33	1		13
Detroit, Mich. Los Angeles, Cal. Milwaukee, Wis. New Orleans, La. San Francisco, Cal. Washington, D. C. Trom 200,000 to 300,000 inhab- itente:	319, 198	131 109	8 13	h	6 71	· · · · · · i	5 32	······ 1	39 18	23 20
Newark, N. J.	373, 857 347, 469 339, 075	138	35		480	3	54	•	26	13
New Orleans, La	339,075	161	28	3	14		3		37	28
San Francisco, Cal	416, 912 331, 069	158	13	2	23		12		35	15
Wasnington, D. C.	331,069	136	18	4	80		11		20	13
itants:										
Providence, R. I	224, 326	96	15	1	11	2	5		4	4
rom 100,000 to 200,000 inhab-										
itants: Bridgeport, Conn	102.054	51	8	4	13	1	2	1	2	3
Columbus, Ohio	102,054 181,548 119,295 106,294 110,364	69	4		53		6		3	7
Columbus, Ohio Fall River, Mass	119, 295	39	27	1			6	1	3	3
Lowell, Mass	106,294	46	7	1	24	3	3	· · · · · · · · · · · ·	•••••	3 4
Oakland, Cal	150,174	36 41	12		14		° I	•••••	$\frac{1}{2}$	4
Richmond, Va	127,628	57	ĩ		3		4		6	4
Fail River, mass Lowell, Mass Nashville, Tenn. Oakland, Cal. Richmond, Va. Toledo, Ohio.	168, 497	57	4	2	.1	1	5	· · · · • • • • • • • • • • • • • • • •	···· <u>-</u> -!	8
Worcester, Mass rom 50,000 to 100,000 inhabit-	145, 986	50	9		12	• • • • • • •	10	1	5	4
onte:				!						
Altoona, Pa.	52, 127	23	3				3			2
Bayonne, N. J.	55, 545				21		3		5	· · · · · ·
Camden, N. J.	94, 538		3		5	· · • • • • ·			4	•••••
Altoona, Pa. Bayonne, N. J. Camden, N. J. Erie, Pa. Harrisburg, Pa. Hartford, Conn.	66, 525 64, 186	20 16	4 5	•••••			3		2	
Hartford, Conn	98, 915	44	13		7	1	3	1	1	ī
Johnstown, 1 a	00, 102	26	14	1	14	ī	4	1.		
Kansas City, Kans	82,331		1		2		7		3	
Lynn, Mass New Bedford, Mass	89, 336 96, 652	36 56	2 3	·····i			8 13	····i	4	6 8
Passaic, N. J.	54,773	22	2	1	12		2	•	41	
Pawtucket, R. I	51,622		1				2		···· [*]	2
Reading, Pa.	96,071	41	8	1	3		6	1	1	2
St. Joseph, Mo	77, 403 53, 684	24 15	3	•••••	2	••••	····i	•••••	4.	2
Springfield, Ill	51,678	23	ĭ		2		6	····i .		2
Springfield, Mass	88,926	32						!	1	2 2
New Bedford, Mass. Passaic, N. J. Pawtucket, R. I. Reading, Pa. St. Joseph, Mo. South Bend, Ind. Springfield, Ill. Springfield, Mass. Trenton, N. J. atlantic City, N. J. Auburn, N. Y. Auburn, N. Y. Auburn, N. Y. Binghamton, N. Y. Binghamton, N. Y. Brookline, Mass. Chicopee, Mass. Danville, Ill. Elmira, N. Y.	96, 815	52	4		4	1	24	2	5	8
Atlantic City, N. J	46, 150	7	2		1		2		Í	
Auburn, N. Y	· 34,668	12			14					
Aurora, Ill	29, 807	6	1	1 .			1.			1
Austin, Tex	29,860	15 22	•••••	••••• •		3	1.4		···i	2 3
Brookline, Mass.	48, 443 27, 792	9			75 2	3	5	•••••	• }	3
Chicopee, Mass.	25,401	5	1		1.		3		2 .	
Danville, Ill	27, 871	8 .			2 .					1
Elmira, N. Y.	37,176	18	1	• • • • • • • •	•••••		1.		17	1
Fitchburg, Mass Haverhill, Mass	37, 826 44, 115	9	1	· · · · · ·			7	1	3	····i
Kalamazoo, Mich	39, 437	20 .			18 .	!	2		2	î
Knoxville, Tenn Lancaster, Pa	36,346 .				18 12					
Lancaster, Pa.	47,227	••••• •	····;• ·		1 .		· · · • • •			· · · · •
Little Rock, Ark. Lynchburg, Va	45,941 29,494	12	1		91 . 2 .	•••••	····i :	••••	·····	····i
Maiden Mass	44, 404	9	3		ní l.		16			2
McKeesport, Pa Newcastle, Pa	42, 694	13 .					1 .			
Newcastle, Pa Newport, Ky	42, 694 36, 280 30, 309		2 .				4 -			•••••

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704

SCARLET FEVER, MEASLES, DIPHTHERIA, AND TUBERCULOSIS-Contd.

City Reports for Week Ended Feb. 28, 1914-Continued.

	States	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Tuber- culosis.	
Cities.			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
				—	<u> </u>		<u> </u>			
From 25,000 to 50,000 inhabi- tants—Continued.										
Newton, Mass	39,806	10	3		9		2			1
Norristown, Pa Orange, N. J.	27,875	8	1		16		2			1
Orange, N. J	29,630	14	5	1	42		2		2	
Regine Wig	38,002	18					1		•••••	
Sacramento, Cal San Diego, Cal	44,696	24							3	
San Diego, Cai	39, 578	9	1	1	1		····;·		3	
South Omaha, Nebr	26, 259 40, 384	3	3	• • • • • •	• • • • • •		1	•••••	•••••	• • • • •
Superior, Wis	27,834	7	1	• • • • • •	•••••	• • • • • •	25	•••••	• • • • • •	• • • • •
Waltham, Mass Wheeling, W. Va	41,641	•	i	····i	• • • • • • •	• • • • • •		•••••	····i	•••••
York, Pa.	44, 750	• • • • • • • • • •	2	-	• • • • • • •	• • • • • • •	•••••	•••••	4	
Less than 25,000 inhabitants:	W2, 100	•••••	-	•••••	•••••			•••••	-	•••••
Alemede Cel	23, 383				1		1			
Ann Arbor, Mich	14.817	5		•••••			2		6	
Beaver Falls, Pa Bennington, Vt	12, 191	ĭ	1						•	
Bennington, Vt.	8, 695	6	-	•••••	3	•••••				•••••
Braddock, Pa	19.357		1		3		3		1	
Cambridge, Ohio	11, 327	3			1		2			
Clinton, Mass	13,075	8	1	1	1		6			
Coffeyville, Kans	12,687				51					
Concord, N. H. Cumberland, Md.	21, 497	10	1							
Cumberland, Md	21, 839	6	4		2		12		3	
Dunkirk, N. Y. Harrison, N. J.	17, 221	2								
Harrison, N. J	14, 498	4			1		4		•••••	
Kearny, N. J.	18,659	6			14		1		1	
Marinette, Wis Massillon, Ohio	14, 610	2					1	•••••	••••	1
Massillon, Onio	13,879		•••••		•	•••••	•••••	•••••	•••••	••••
Medford, Mass	23, 150 12, 507	10	•••••	•••••		•••••	4	•••••	•••••	
Morristown, N. J Muncie. Ind	12, 507 24, 005	13		•••••	•••••	•••••	8	•••••	1	1
Muscatine, Iowa	16, 178	13	•••••	•••••	····i	•••••	•	•••••	•••••	
Nanticoke. Pa	18, 877	6	•••••	•••••	2	•••••	2	•••••	•••••	•••••
Newburyport, Mass	14,949	6	•••••	•••••	î	•••••	~	•••••	ï	
Northampton, Mass.	19.431	ğ	•••••		5	•••••	····i		il	•••••
Palmer, Mass	8, 610	3	•••••			•••••	•		•	
Plainfield, N. J.	20, 550	6			i		1		2	
Pottstown Pa	15, 599	4					ī			1
Rutland, Vt	13, 546	4					ī			
South Bethlenem, Pa.	19, 973	9								
Steelton, Pa	14.246	3			2					
Wilkinsburg, Pa	18, 924		2		1		9		1	
Woburn, Mass	15,308	2								

IN INSULAR POSSESSIONS.

:

HAWAII.

Cholera Carriers in Immigrants.

Surg. Trotter reported from Honolulu March 17 that 2 cholera carriers had been found in the persons of Filipinos who had arrived March 5 from Hongkong.

Examination of Rats and Mongoose.

Rats and mongoose have been examined in Hawaii as follows: Honolulu, week ended February 21, 1914, 311; Hilo, week ended February 14, 1914, 2,537. No plague-infected animal was found.

PHILIPPINE ISLANDS.

Cholera-Plague-Manila.

Surg. Heiser, chief quarantine officer and director of health for the Philippine Islands, reports the occurrence of cholera and plague in Manila as follows: Three weeks ended February 14, 1914, 12 cases of cholera with 4 deaths and 7 cases of plague with 7 deaths.

Dr. Heiser further reports:

Referring further to the reappearance of plague in Manila¹ the following additional cases have occurred:

On January 27 a case was removed from 143 Calle Rosario, which is the same address from which a Chinaman with plague was taken on January 24.

On January 31 a man and his wife were found dead at 675 Calle Echague. There was a rat hole near the bed in which these two victims slept, and upon removing the floor immediately under the bed several mummified rats were found, but it was impossible to demonstrate by laboratory investigation that these rodents had died of plague.

Later, 3 more cases of plague were discovered in different parts of the city. Investigations soon showed, however, that the true addresses of these patients were in the same block in which plague had occurred the previous week. The infected district was immediately surrounded with a gang of over 100 laborers and sanitary inspectors, and these gradually worked inward from the periphery of the zone to the place in which the last human victims had lived.

On February 3 one case occurred at 116 Calle Hormiga. No further cases occurred between February 3 and February 11. On the latter date another case occurred in the person of a Chinaman who lived at No. 206 Juan Luna. The back of these premises abuts on the back of the premises of No. 143 Calle Rosario, in which the plague case reported above occurred.

In carrying out the antirat measures in the house at 206 Juan Luna 65 dead rats were found in the hollow partitions and ceilings and underneath floors. The rats are at present being examined at the bureau of science and the report of the findings will be submitted later.

A study of the outbreak shows that there are now two different centers of infection. One is the so-called Echague district, and the other in the block bounded by Calles Rosario, Hormiga, Juan Luna, Dasmariñas. The true center of the plague infection of this latter block would appear to be in the premises in which the 65 dead rats were found. Each resident in the block has been furnished with a letter advising him of the danger with which he is confronted and the necessity for immediately carrying out ratproofing measures. (Copy of this circular letter is inclosed.) This whole block is an active wholesale and retail center, and in addition is thickly populated, and the living conditions on the whole are extremely insanitary. Many persons use the warehouses in which merchandise is stored as sleeping quarters, most of them sleeping on the bags or boxes without any beds or bedding.

It may also be of interest to report that the back of the premises of 143 Rosario and 116 Hormiga was occupied by a business concern which imports Japanese goods, and on these premises there were actually found many crates of lamp chimneys, lamps, and other glassware packed in straw, and rats were found nesting therein. In view of the fact that plague has been more or less constantly present in many ports and manufacturing centers in the Orient it would appear not unlikely that the disease may have been introduced by rats or fleas with merchandise.

[Circular.]

BUREAU OF HEALTH, Manila, February 12, 1914.

To whom it may concern:

You are hereby informed that the district bounded by Calles Rosario, Juan Luna, Dasmariñas and Plaza Calderon (and possibly the neighborhood bordering upon this congested district) is a dangerous one for all persons living or conducting business therein on account of the presence there of extensive rat plague. Six human cases The bureau of health is now doing everything within its power to make this district safe, but the attention of all citizens, property owners, and tenants is called to the fact that they are required by law to keep their premises free from rats and to abolish all structural conditions of the buildings which favor the harboring of rats. This means rat proofing and owners are earnestly urged to perform this necessary work now, under the direction of the bureau of health.

As a temporary expedient and safeguard all interiors, walls, floors, and ceilings should be sprayed with kerosene daily, or at intervals of two days to kill the fleas which carry plague from rats to human beings. All dark insanitary places used for living rooms should be vacated at once; all merchandise should be piled upon trusses at least a foot above the floor; all straw, shavings and other material attractive to rats for nesting should be removed and burned and all food materials upon which rats may feed and live should be placed in covered boxes, bins, or cans.

All rat holes should be permanently closed and all broken cement or masonry should be repaired.

Observance of these instructions may save the lives of yourselves, your families, and your tenants. It is your duty to do your part in this matter, a part which neither the bureau of health nor the government can do for you.

Through very great effort the bureau of health has controlled plague in Manila and the Philippine Islands during the last two years.

Residents must now do their part and owners of property must permanently make their buildings safe for tenants, both for business and residential purposes.

> VICTOR G. HEISER, Director of Health.

50

FOREIGN REPORTS.

CEYLON.

Plague-Colombo.

During the period from January 25 to February 12, 1914, 11 fatal cases of plague were notified at Colombo. The cases have occurred in the native quarter of the city on the water front. A number of infected rats were found February 9, 1914.

CANADA.

Typhoid Fever-Richelieu River.

An affection resembling typhoid fever has been reported to be epidemic at points along the Richelieu River. The outbreak began early in December, 1913, and to March 10, 1914, 230 cases were notified. Of these 10 were verified as typhoid fever. The outbreak originated at Iberville.

CHINA.

Plague-Hongkong.

During the week ended January 24, 1914, 9 cases of plague with 8 deaths were notified in Hongkong. From March 3 to 17, 67 cases of plague were notified. During the week ended January 24, 1914, 2,145 rats were 'examined at Hongkong for plague infection. No plague-infected rat was found.

Plague-Infected Rats-Shanghai.

During the two weeks ended February 14, 1914, 533 rats were examined at Shanghai for plague infection. Three plague-infected rats were found.

ECUADOR.

Plague-Yellow Fever.

Plague and yellow fever have been notified in Ecuador as follows:

MONTH OF JANUARY, 1914.

Plague.—In Guayaquil and vicinity (Duran and Yaguachi), 57 cases with 23 deaths.

Yellow fever.-In Guayaquil, 7 cases with 2 deaths.

710

PERU.

Status of Plague.

Plague has been notified in Peru as follows:

FEB. 9 TO 15, 1914.

Places.	New cases.	Remain- ing.	Places.	New cases.	Remain- ing.
Callao. Casma Catacaos. Chiclayo. Guadalupe. Lima (city).	1 2 1 5 5 5	2 1 16 9 7	Lima (country). Mollendo Pacasmayo. San Pedro. Trujillo.	3	4 2 4 29

ZANZIBAR.

Plague-Plague-Infected Rats-Zanzibar.

During the week ended January 21, 1914, 4 cases of plague with 2 deaths were notified at Zanzibar.

During the same period 921 rats were examined at Zanzibar for plague infection. Of this number 5 were found plague infected. The total number of rats examined from January 1 to 24, 1914, was 3,073, of which number 13 were found plague infected.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.

Reports Received During Week Ended Mar. 20, 1914.

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
India: Calcutta Negapatam Bagoon Do Indo-China: Laos (Shan States) Saigon. Philippine Islands: Manila Do	do Dec. 1-31 Jan. 1-31 Jan. 1-10 Jan. 20-26 Jan. 1-31.	4 2 10 1	288 14 4 1	Along the upper Mekong River
	YELLOW	FEVER	•	
Brazil: Bahia Ecuador:	Feb. 8-21	3	3	
Guayaquil Venesuela: Caracas		7	2	Feb. 28, 1 case.
	PLA	GUE.		
Brazil: Bahia British East Africa: Kisumu	Feb. 1-21	4	8	Jan. 14–Nov. 15, 1913: Cases, 2
Mombasa			•••••	deaths, 22. Feb. 6-Dec. 15: Cases, 200; deaths 173. Including previous re ports.

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

Reports Received During Week Ended Mar. 20, 1914-Continued.

PLAGUE-Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Ceylon: Colombo				Jan. 25-Feb. 12: 11 deaths.
China: Hongkong	Jan. 18-Feb. 7	40	36	Mar. 3-17: 67 cases.
Ecuador: Duran Guayaquil	Jan. 1–31 do	1 55	1 21	
Yaguachi	do	1	1	Jan. 4-31: Cases, 34,714; death 28,061.
Bassein	Jan. 4-24	38	33	Total, Jan 1, 1913–Jan. 3, 191 Cases, 304; deaths, 283.
Bombay Calcutta Karachi	Feb. 1-7do Feb. 1-14	27 81	. 19 . 9 70	
Moulmine	Jan. 4-24		. 18	Jan. 1, 1913-Jan. 3, 1914: Case 574; deaths, 576.
Rangoon Do Indo-China	Dec. 1-31 Jan. 1-31	48 81	43 79	Nov. 21-Dec. 20: Cases, 29
				deaths, 277. Jan. 1-20: Case 86.
Saigon Japan: Kobe	Jan. 20	3		Feb. 7: 1 case remaining.
Peru: Ancachs— Casma	Feb. 9–15	2		
Arequipa— Mollendo		1		
Callao— Callao Lambayeque—	do	1		
Chiclayo Guadalupe Pacasmayo	do	5 5		
Libertad-	do	3	•••••	
Lima Lima Piura	do	5		
Catacaos hilippine Islands:		1	· · · · · · · · ·	
Manila Do anzibar	Jan. 25–31 Feb. 1–14 Jan. 15–21	1 6 5	 7 2	
	 			
	SMAL	LPOX.		
rgentina: Rosario	Dec. 1-31	1		
ustralia: New South Wales	Jan. 9-31	4		
Sydney, metropolitan area. Brazil:	••••	6		
Bahia Para anade:	Feb. 8–21 Feb. 15–21	4 2	2	
	7.1.1.00	7		
Hamilton Montreal	Feb. 1-28 Mar. 1-7	3		
Hamilton Montreal hina: Hongkong			4	
Hamilton Montreal hina: Hongkong Paris St. Etienne	Mar. 1-7	3	4	Thetal Bals 15 Per Course -
Hamilton. Montreal. hina: Hongkong rance: Paris St. Etienne lermany Lubec	Mar. 1-7 Jan. 18-Feb. 7 Feb. 1-14. Feb. 1-15 Feb. 15-21	3 5 6 2 1	4	Total, Feb. 15-28: Cases, 7.
Hamilton Montreal hina: Hongkong rance: Paris. St. Etienne. Lubec. braitar reat Britain: Aberdeen.	Mar. 1-7 Jan. 18-Feb. 7 Feb. 1-14 Feb. 1-15 Feb. 15-21 Mar. 1 Feb. 22-28	3 5 6 2 1 1 1	1	Total, Feb. 15-28: Cases, 7.
Hamilton. Montreal. hina: Hongkong. Paris. St. Etienne. Lubec. ibraitar. reat Britain: Aberdeen. Londom.	Mar. 1-7 Jan. 18-Feb. 7 Feb. 1-14 Feb. 1-15 Feb. 15-21 Mar. 1	3 5 6 2 1 1 1 4	1	

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712

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued. Reports Received During Week Ended Mar. 20, 1914—Continued.

Places. Date. Cases. Deaths. Remarks. Mexico: Aguascalientes..... Monterey.... Salina Cruz.... San Luis Potosi..... Feb. 24-Mar. 1..... Feb. 23-Mar. 1..... 13 ï ï Jan. 18–24..... Dec. 21–Jan. 10.... Feb. 22–28..... ī 1 4 Vera Cruz..... 6 Spain: Barcelona..... Valencia..... Feb. 18-21..... 25 4 Feb. 8-14..... . . . Turkey in Asia: Beirut...... Jaffa Feb. 8-21..... 25 10do Jan. 18-Feb. 14..... 2 21 6 Smyrna..... Tarsus..... Tripoli..... Feb. 8..... Present. Feb. 8-21..... 7 Turkey in Europe: Saloniki..... 3do 11

SMALLPOX-Continued.

Reports Received from Dec. 27, 1913, to Mar. 13, 1914. CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary: Bosnia-Herzegovina—				
Brod.	Nov. 13-18	2		
Kostinica.			[····	
			[
Novigrad		1	• • • • • • • • • • •	
Sjekocac				
Travnik, district	Dec. 10-16	6		
Vranduk	Nov. 20	1		
Zenica	Oct. 20-Nov. 19	9	2	
Croatia-Slavonia-				1
Pozenga Syrmien—		2	•••••	
	do	6	2	
	do	1	1	
Vitrovica—				
	do	2	2	
Hungary				Total, Sept. 1-Dec. 29: Cases, 729;
				deaths, 372; Dec. 29, free.
Bacs-Bodrog, district	Nov. 9-Dec. 29	52	31	
Jasz - Nagy - Kun - Szol-				
nok—				
Szolnok	Nov. 9-15	2	2	
Maramaros	Nov. 30-Dec. 6	1	1	
Pest Pilis-				
Soroksar	Nov. 9-22	2	1	
Szaboles				
Nyiregyhaza	Nov. 9-15	1	1	
Temes—	1			
Varasliget	do		1	
Torontal	Nov. 9-Dec. 13	27	19	
Ung				
Jasza	Nov. 9–15	1	1	
Ceylon:			· 1	
Colombo	Nov. 9-Jan. 17	33	19	
China:				
Hongkong	Nov. 9-Dec. 20	4	!	
Dutch East Indies:		-		
Java-			1	
Batavia and Tanjong	Nov. 9-Dec. 27	45	34	
Priok.				
Do	Jan. 18-24	1	1	
Samarang	Nov. 30-Dec. 27	47	25	
Sumatra-				
Padang	Dec. 1-13	11	11	
India:				
Bombay	Nov. 10-Feb. 1	18	9	
Calcutta	Nov. 9–Jan. 17		457	
Madras	Nov. 16-Jan. 24	6	4	
Negapatam	Jan. 4-10	× 1	7	
Rangoon		3	2	
Indo China:			-	
Saigon	Jan. 13-19	1		
Gaig011	van. 10-17	* 1	••••••	

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

Reports Received from Dec. 27, 1913, to Mar. 13, 1914--Continued.

CHOLERA-Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Philippine Islands:				
Manila	Nov. 9-Jan. 24		48	deaths, 124. Third quarte 1913: Cases, 14; deaths 6. Jan. 1 1 fatal case on s. s. Sigismum from Rabal, New Guinea. A the necropsy pathological 1 sions of cholera and beribe were for cholera and beribe
Provinces				Total, Aug. 23-Dec. 27: Case 148; deaths, 94.
Bulacan—		1	1	
Bulacan	Dec. 14-20			Present in vicinity.
Meycauayan	do			Present.
-		1	1	Total, Dec. 17-23; Cases, 2 deaths, 18.
Banga Capiz Calivo New Washington	Dec. 17-20	1		Present.
Coniz	Ton 28			Do.
Calivo	Dec 17-Ten 24			1 death daily.
Now Weehington	do	•••••		Present.
Cavite-				I Tesent.
Santa Cruz Cebu—	Nov. 13-19			Do.
Cebu	do			Do.
Opon	Nov 10	1		On Mactan Island.
Pampanga	do Nov. 19 Dec. 27–Jan. 28	·····		Present in Guagua, Macabeb San Fernando, and othe
Pangasinan	Dec. 19–29			places. Present in Dagupan, Lingayer San Carlos, and Urdaneta.
Rizal—				San Carlos, and Ordaneta.
Los Pines	do	1		
Dasin	Nov 10	1 1		Present.
Pasig	Nov. 19			
Pateros	Jan. 28			Do.
Las Pinas Pasig Pateros Rizal	ao		• • • • • • • • • • •	Do.
Roumania		•••••	•••••	Total, Nov. 14 to Dec. 7: Case 18; deaths, 15.
Russia:				
Bessarabia-	0.1.00.17			
Ismail	Oct. 20-Nov. 8	6	1	
Ekaterinoslav	do	1	••••••	
Kherson	do	6	9	
Taurida-	-	_	_	
Dneiper district		1	2	
ervia		•••••	• • • • • • • • • • •	Nov. 10-24: 8 cases with 2 death in the districts Podrigne an
1				Pojarevatz.
iam: Bangkok	Nov. 2-Jan. 24		99	rojarevatz.
Dangkok	NOV. 2-Jan. 24	•••••	99	
traits Settlements: Singapore	Nov. 2-Jan. 17	19	17	
Singapore	NOV. 2-Jan. 17	19	11	
urkey in Asia: Aivali	T		6	
Alvan	Jan. 10-23	9		The second second second second be a
Beirut	Dec. 23	2	1	From among troops on the s.
6	D. 10 T			Bahr Amer from Rodosto.
Smyrna Trebizond	Dec. 16–Jan. 8 Dec. 9–Jan. 24	11 22	4 16	Dec. 9-16: 6 cases among troop from s. s. Guldjemal. Jan. f. 1 case in the city.
urkey in Europe:				
Constantinople	Nov. 25-Feb. 15	141	56	Total, Aug. 2-Feb.15: Cases, 210 deaths, 96.
Dardanelles	Jan 9-20	10	9	
Gallipoli.	Jan. 9–20 Jan. 1–3	2	2	
Pera.	Jan. 3-10	5	<u>م</u>	
Rodosto	Dec. 21-Jan. 9	22	•••••	

YELLOW FEVER.

Brazil: Bahia Ceara.	Nov. 23–Jan. 31 Nov. 1–30	5	72	
Ecuador: Guayaquil Milagro	Nov. 1-Dec. 31 do	9 2	6 1	
Navanjito Mexico: Merida.	do Dec. 10-11	3 1	2 1	From Campeche.
Do	Jan. 4-10	1	1	Do.

714

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

Reports Received from Dec. 27, 1913, to Mar. 13, 1914-Continued.

YELLOW FEVER-Continued.

••••••	IELLOW FE			
Places.	Date.	Cases.	Deaths.	Remarks.
Southern Nigeria: Lagos	Oct. 20-Dec. 28	5	1	Among Europeans from a vessel. Feb. 26, present.
Togo: Lome	Sept. 12	1		100.20, protony.
Trinidad: Brighton	Dec. 30	1		Total, Nov. 22-Dec. 30: Cases, 10 deaths, 3, including previous reports.
	PLA	GUE.		
L	1	1	1	
Australia: Thursday Island Quaran- tine station. Azores:	May 21	5		Pestis minor from s. s. Taynan from Hongkong to Townville.
Terceira- Angra-Heroismo	Dec. 21		1	
Brazil: Bahia Pernambuco	Nov. 23-Jan. 31 Dec. 16-31	21	7	
Do Rio de Janeiro	Jan. 1–15. Nov. 16–22,	·····i	1	
British East Africa: Kisumu Mombasa Nairobi	Sept. 12-Oet. 13 Sept. 12-Dec. 15	2	16 3	
Ceylon: Colombo	Sept. 12-Nov. 15 Jan. 25-31	3	3	Septicemic.
Kandy Chile: Iquique	do Nov. 9-Jan. 31	1 18	9	From Colombo. Also septicemic.
China: Hongkong	Nov. 2-Jan. 17	41	38	
Shanghai Chile: Iquique	Oct. 1–7 Jan. 11–31	1	3	
Cuba: Habana	Mar. 5-9	2		
Dutch East Indies: Java		••••••		Total in East Java, year 1913 Cases 11,218, deaths 10,556.
Provinces— Kediri Madioen Malang Surabaya	Nov. 1-Dec. 31 do	547 151 1,550 93	481 140 1, 463 95	
Kenador:			30	
Babahoyo Duran Guayaquil Manta	Dec. 1-31 Nov. 1-Dec. 31	1 349	157	
MINSTO	NOV. 1-DEC. 31. 1	2	·····i	
Naranjito Yaguachi Egypt	do Nov. 1–30	3 2	1 2	Jan. 1-Dec. 24, 1913; Cases, 654; deaths, 304. Jan. 1-Feb. 18;
Alexandria	Feb. 18	1		Cases, 15, deaths, 7.
Cairo Port Said Provinces—	Feb. 13 Feb. 10	1 2	2	
Assiout Assouan	Jan. 5 Dec. 10	1 1	1	
Do Fayoum	Jan. 5. Feb. 10	1	1	
Garbieh Do	Dec. 11 Jan. 15–17	1 7	2	
Minieh	Dec. 9-24	3	1	
Do India	Jan. 8–29	2	2	Total Jan. 1, 1913-Jan. 3, 1914
Bombay Calcutta Karachi	Nov. 9-Feb. 1 Nov. 2-Dec. 13 Nov. 9-Jan. 31	94 156	79 11 155	Cases, 238,198; deaths, 198,875.
Madras Rangoon	Nov. 16-Dec. 20	4 26	2 25	

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

Reports Received from Dec. 27, 1913, to Mar. 13, 1914-Continued.

PLAGUE-Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Indo-China				Total Jan. 1-Nov. 20: Cases, 3,66
	N 11 T 10			deaths, 3,465.
Saigon	Nov. 11-Jan. 19	11		Total Tan 1 Dag 21. Camp 4
apan	••••••	•••••	• ••••••	Total, Jan. 1-Dec. 31: Cases, 2 deaths, 20; exclusive of Taiwa
Kabe	Dec. 1-7	1		deaths, 20, exclusive of 1 alwa
Kobe Yokohama	Jan. 4-10	î		Total Sept. 19-Jan. 10: Cases, 2
		-		deaths, 17.
auritius	Oct. 26-Jan. 8	82	54	deaths, 17. Total Jan. 1-Nov. 27: Cases, 27 deaths, 163.
forocco:				,,
Casabeanca	Jan. 7	1	1	
El-Ara sh (Larache)	Sept. 17	1		Among the military.
New Caledonia:				
Bourail	Sept. 1-Oct. 14	8	2	In a school of the tribe of t
				Azaren.
eru Ancachs—			••••••••••	Deaths not reported.
Casma	Dec. 1-Feb. 8			Present.
Nepena	Nov. 1-Jan. 18			Do.
Arequipa-				20.
Mollendo	Dec. 1-Feb. 8	11		
Cajamarca				
Contumaza	Jan. 19-24	12	1	Feb. 8, present.
Callao-				
Callao	Jan. 19-Feb. 8	4		
Lambayeque-				
Chiclayo	Dec. 1-Feb. 8	67		
Ferrenaje	do	18		
Guadalupe	do			Present, Feb. 8, 8 cases.
Pacasmayo	Jan. 25–Feb. 2	2		Dit 1.1 million in Coloman
Libertad San Pedro	Dec 1 Feb 9			Feb. 1: 1 case in Salaverry.
Trujillo	Dec. 1-Feb. 8			
Lima	do Dec. 1-Jan. 18	6		
Lima	Dec. 1-Feb. 8	40		
Pisco	Dec. 1-Jan. 18	2		
Monsefu	do	2		
Piura-				
Catacaos	Dec. 1-Jan. 24	12		Feb. 8, present.
Piura	do	10		Do.
hilippine Islands:				m
Mánila	Nov. 23-Jan. 24	3	2	Third quarter, 1913: Cases, deaths, 1.
ussia:				dedtilo, r.
Saratov	Feb.11	1		
Ural, territory				Total Oct. 20-Nov. 10: Cases, 22 deaths, 170; and 2 fatal cas from Issum Tube.
, -				deaths, 170; and 2 fatal cas
				from Issum Tube.
Djakisabevsk district-		_		
Djumarta	Nov. 9-10 Nov. 8-10 Nov. 8	5	1	
Djantayu	Nov. 8-10	2	2	
Kizilu Fourteenth village.	Nov. 8	1	1	
Sarbas	Nov. 7-9 Nov. 8-10	6 13	7	
Kaziljar district	Nov. 5-10	39	24	In Assaukurt Baitchurak B
			*1 *1	In Assaukurt, Baitchurek, B kuduk, and Djamankuduk.
Lbistchensky district-				,
Issum Tube	Oct. 20-Nov. 10	138	127	
Kaimikov	Nov. 4-10	6	6	
am:				
Bankok	Nov. 2-Jan. 24		7	
ipoli:	T			Descent
Bengazi.	Jan. 31	•••••	•••••	Present.
urkey in Asia:	Dec. 10-23	2	2	
Beirut Jiddah	Feb. 2	1	2	
nzibar	Dec. 31-Jan. 2	īl	1	On s. s. Prasident from Dar-e

SMALLPOX.

Algeria: Departments— Algiers Constantine	Sept. 1-Nov. 30 Oct. 1-Nov. 30 Sept. 1-Nov. 30	8 14 171	
Oran	Sept. 1-Nov. 30	17.1	

716

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

Reports Received from Dec. 27, 1913, to Mar. 13, 1914-Continued.

SMALLPOX-Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Arabia:	-	-	-	
Aden	Nov. 25-Feb. 2	5	5	
Maskat		10		Dec. 20, present.
Matarah	Dec. 23-Jan. 10	9		Nov. 30, present.
Argentina:		1		
Buenos Aires	Nov. 1-30		. 1	
Australia:				
New South Wales			• • • • • • • • • • • • • • • • • • • •	July 1, 1913-Jan. 8, 1914: Case
Sydney, metropolitan area.				1,074.
Sydney, metropolitan area.			• • • • • • • • • • •	July 1, 1913-Jan. 8, 1914: Cases
Western Amstrolia				1,026.
Western Australia— Freemantle				Dec. 2, 1 fatal case on R. M. S Malwa, from London via Por Said, Aden, and Colombo.
Austria-Hungary:				
Coastland-		I _		
Trieste	Jan. 25-31	3		.
Lower Austria-	Ten 4 84			
Vienna	Jan. 4-24	6		
Moravia.	Jan. 18-31	25		· [
Tyrol and Vorarlberg	Nov. 23-Jan. 10			
Upper Austria	Dec. 14-Jan. 3	18		
Brazil: Bahia	Nov. 23-Jan. 31	22		
Para.	Dec. 1-Feb. 14	23	40	
Pernambuco	Nov. 1-Jan. 15	40	. 70	
Rio de Janeiro	Nov. 9-Jan. 31	352	61	
Canada:	110v. 5-5an. 51	0.02		
Manitoba-				1
Winnipeg	Feb. 14-21	1	1	
Ontario-	100.11 2	-		
Fort William	Feb. 24-Mar. 2	1		
Hamilton	Jan. 1-31	16		
Ottawa	Dec. 7-Feb. 28	21		
Toronto	Dec. 7-Feb. 14	4	1	
Quebec-		-		
Montreal	Dec. 7-Feb. 28	49		
Quebec	Jan. 24–31	1		
Canal Zone:				
Panama	••••			Nov. 1-30, Santo Tomas hos pital, 1 case from a vessel from Callao.
ceylon:	Nov. 30-Dec. 6	1		
Colombo China:	NOV. 30-Dec. 0	1		
Атоу	Dec. 14-Jan. 10			Present.
Antung	Jan. 4-11	·····i		I lesellt.
Dairen	Dec. 7–17	6		
Hankow	Nov. 2-Jan. 17	11 II	l î	
Hongkong	Dec. 14-20	ĩ		
Nanking	Jan. 24			Present.
Shanghai	Dec. 8-Feb. 19	8	5	Deaths among natives.
Tientsin	Nov. 9-15		1	
Ting Chow	Jan. 5			Epidemic, 130 miles from Amoy
				Dissont 00 miles from Amore
Tong An.	Dec. 27			r resent, 20 miles from Amoy.
Tong An Dutch East Indies: Java	Dec. 27	•••••	••••••	deaths in the western part, and
utch East Indies:	Dec. 27	•••••	•••••	Dec. 13-Jan. 24, 60 cases with 2 deaths in the western part, and 60 cases with 15 deaths in the
utch East Indies: Java	Dec. 27	•••••		Dec. 13-Jan. 24, 60 cases with 24 deaths in the western part, and
utch East Indies: Java Batavia	Dec. 27 Nov. 27-Jan. 11	66		Dec. 13-Jan. 24, 60 cases with 2 deaths in the western part, and 60 cases with 15 deaths in the
utch East Indies: Java Batavia Besoeki	Dec. 27 Nov. 27-Jan. 11 Oct. 19-29.	66 227	47	Dec. 13-Jan. 24, 60 cases with 2 deaths in the western part, and 60 cases with 15 deaths in the
utch East Indies: Java Batavia Besoeki Madicen	Dec. 27 Nov. 27-Jan. 11 Oct. 19-29.	66 227 36		Dec. 13-Jan. 24, 60 cases with 2 deaths in the western part, and 60 cases with 15 deaths in the
utch East Indies: Java Batavia Besoeki Madioen Surabaya	Dec. 27 Nov. 27-Jan. 11 Oct. 19-29 Oct. 19-28 Oct. 28-Nov. 8	66 227 36 3	47 12	Dec. 13-Jan. 24, 60 cases with 2 deaths in the western part, and 60 cases with 15 deaths in th
utch East Indies: Java Besoeki Madioen Surabaya Surakarta	Dec. 27 Nov. 27-Jan. 11 Oct. 19-29.	66 227 36	47	Dec. 13-Jan. 24, 60 cases with 2 deaths in the western part, and 60 cases with 15 deaths in th
utch East Indies: Java Besoeki Madicen Surabaya Surabaya gypt:	Nov. 27-Jan. 11 Oct. 19-29 Oct. 19-28 Oct. 28-28 Oct. 28-Nov. 8 Oct. 28-Nov. 8	66 227 36 3 481	47 12 91	Dec. 13-Jan. 24, 60 cases with 2 deaths in the western part, and 60 cases with 15 deaths in th
utch East Indies: Java Besoeki Madioen Surabaya Surakarta zypt: Alexandria	Dec. 27 Nov. 27-Jan. 11 Oct. 19-29 Oct. 19-28 Oct. 28-Nov. 8 Oct. 19-Dec. 6 Nov. 26-Feb. 11	66 227 36 3 481 21	47 12 91 9	Dec. 13-Jan. 24, 60 cases with 2 deaths in the western part, and 60 cases with 15 deaths in th
utch East Indies: Java Besoeki Madioen Surabaya Syrakarta zypt: Alexandria Cairo	Dec. 27 Nov. 27-Jan. 11 Oct. 19-29 Oct. 19-28 Oct. 28-Nov. 8 Oct. 19-Dec. 6 Nov. 26-Feb. 11 Nov. 19-Feb. 4	66 227 36 3 481 21 114	47 12 91 9 69	Dec. 13-Jan. 24, 60 cases with 2 deaths in the western part, and 60 cases with 15 deaths in th
utch East Indies: Java Besoeki Madicen Surabaya Surakarta gypt: Alexandria Cairo Port Said	Dec. 27 Nov. 27-Jan. 11 Oct. 19-29 Oct. 19-28 Oct. 28-Nov. 8 Oct. 19-Dec. 6 Nov. 26-Feb. 11	66 227 36 3 481 21	47 12 91 9	Dec. 13-Jan. 24, 60 cases with 2 deaths in the western part, and 60 cases with 15 deaths in th
utch East Indies: Java Besoeki Madioen Surabaya Syrakarta zypt: Alexandria Cairo Port Said Fance:	Dec. 27 Nov. 27-Jan. 11 Oct. 19-29 Oct. 19-28 Oct. 19-28 Oct. 28-Nov. 8 Oct. 19-Dec. 6 Nov. 26-Feb. 11 Nov. 19-Feb. 4 Dec. 3-Jan. 28	66 227 36 3 481 21 114	47 12 91 9 69 1	Dec. 13-Jan. 24, 60 cases with 2 deaths in the western part, and 60 cases with 15 deaths in th
utch East Indies: Java Besoeki Madicen Surabaya Surakarta Sypt: Alexandria Cairo Port Said mance: Marseille	Nov. 27-Jan. 11 Oct. 19-29 Oct. 19-28 Oct. 19-28 Oct. 28-Nov. 8 Oct. 28-Nov. 8 Oct. 28-Nov. 8 Nov. 26-Feb. 11 Nov. 19-Feb. 4 Dec. 3-Jan. 28 Nov. 1-Jan. 31	66 227 36 3 481 21 114 21 21	47 12 91 9 69	Dec. 13-Jan. 24, 60 cases with 2 deaths in the western part, and 60 cases with 15 deaths in th
utch East Indies: Java Besoeki Madioen Surabaya Syrakarta Zypt: Alexandria Cairo Port Said rance: Marselle Nantes	Dec. 27 Nov. 27-Jan. 11 Oct. 19-29 Oct. 19-28 Oct. 19-28 Oct. 28-Nov. 8 Oct. 19-Dec. 6 Nov. 26-Feb. 11 Nov. 19-Feb. 4 Dec. 3-Jan. 28 Nov. 1-Jan. 31 Feb. 1-14	66 227 36 3 481 21 114 2 114 2	47 12 91 9 69 1	Dec. 13-Jan. 24, 60 cases with 2 deaths in the western part, and 60 cases with 15 deaths in th
butch East Indies: Java Besoeki Madicen Surabaya Surabaya Surabaya Surakarta gypt: Alexandria Cairo Port Said. rance: Marseille Nates Nice	Dec. 27 Nov. 27-Jan. 11 Oct. 19-29 Oct. 19-28 Oct. 28 Oct. 28 Nov. 26-Feb. 11 Nov. 19-Feb. 4 Dec. 3-Jan. 28 Nov. 1-Jan. 31 Feb. 1-14 Nov. 1-Dec. 81	66 227 36 3 481 21 114 2 1 114 2 2 2	47 12 91 9 69 1 98	Dec. 13-Jan. 24, 60 cases with 2 deaths in the western part, and 60 cases with 15 deaths in the
butch East Indies: Java Besoeki Madioen Surabaya Surakayaya Surakaya S	Dec. 27 Nov. 27-Jan. 11 Oct. 19-29 Oct. 19-28 Oct. 19-28 Oct. 28-Nov. 8 Oct. 28-Nov. 8 Oct. 19-Dec. 6 Nov. 19-Feb. 11 Nov. 19-Feb. 4 Dec. 3-Jan. 28 Nov. 1-Jan. 31 Feb. 1-14 Nov. 1-Dec. 31 Nov. 23-Jan. 31	66 227 36 3 481 21 114 2 114 2 2 2 13	47 12 91 9 69 1 98	Dec. 13-Jan. 24, 60 cases with 2 deaths in the western part, and 60 cases with 15 deaths in the
butch East Indies: Java Besoeki Madioen Surabaya Syrakarta gypt: Alexandria Cairo Port Said Port Said Mantes Nantes Nice Paris St. Etienne	Dec. 27 Nov. 27-Jan. 11 Oct. 19-29 Oct. 19-28 Oct. 28 Oct. 28 Nov. 26-Feb. 11 Nov. 19-Feb. 4 Dec. 3-Jan. 28 Nov. 1-Jan. 31 Feb. 1-14 Nov. 1-Dec. 81	66 227 36 3 481 21 114 2 1 114 2 2 2	47 12 91 9 69 1 98 	Dec. 13-Jan. 24, 60 cases with 2 deaths in the western part, and 60 cases with 15 deaths in the interior.
butch East Indies: Java Besoeki Madioen Surabaya Surabaya Surakarta gypt: Alexandria Cairo Port Said Port Said Nantes Nantes Nice Paris St. Etienne ermany	Dec. 27 Nov. 27-Jan. 11 Oct. 19-29 Oct. 19-28 Oct. 19-28 Oct. 28-Nov. 8 Oct. 28-Nov. 8 Oct. 28-Nov. 8 Nov. 26-Feb. 11 Nov. 19-Feb. 4 Dec. 3-Jan. 28 Nov. 1-Jan. 31 Feb. 1-14 Nov. 1-Dec. 31 Nov. 16-Jan. 31	66 227 36 3 481 21 114 2 2 2 2 13 9	47 12 91 9 69 1 98 3	Dec. 13-Jan. 24, 60 cases with 2 deaths in the western part, and 60 cases with 15 deaths in the
butch East Indies: Java Besoeki Madioen Surabaya Syrakarta gypt: Alexandria Cairo Port Said Port Said Mantes Nantes Nice Paris St. Etienne	Dec. 27 Nov. 27-Jan. 11 Oct. 19-29 Oct. 19-28 Oct. 19-28 Oct. 28-Nov. 8 Oct. 28-Nov. 8 Oct. 19-Dec. 6 Nov. 19-Feb. 11 Nov. 19-Feb. 4 Dec. 3-Jan. 28 Nov. 1-Jan. 31 Feb. 1-14 Nov. 1-Dec. 31 Nov. 23-Jan. 31	66 227 36 3 481 21 114 2 114 2 2 2 13	47 12 91 9 69 1 98 	Dec. 13-Jan. 24, 60 cases with 2 deaths in the western part, and 60 cases with 15 deaths in the interior.

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

Reports Received from Dec. 27, 1913, to Mar. 13, 1914-Continued.

SMALLPOX---Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Gibraltar Great Britain:	Dec. 1-Feb. 8	4		
Cardiff	Feb. 16-21	1		
London	Jan. 18-Feb. 14	2		
Nottingham	Dec. 21-27	28		Ton 08 Feb 19 present in the
Greece				Jan. 28-Feb. 12, present in the barracks at Athens and in the surrounding country.
Achaia and Elis, Province Piraeus Guadeloupe:	Jan. 29 Jan. 18–Feb. 12	19	11	Present.
Pointe a Pitre quarantine station, Islet a Cassou.	Feb. 16–23	10	1	From among returned troops from s. s. Perou from Havre via Bordeaux and Santander
ndia: Bomba▼	Nov. 23-Feb. 1	49	23	
Bombay Calcutta	Nov. 2-Jan. 17		. 23	
Karachi	Nov. 23–Feb. 1 Nov. 2–Jan. 17 Nov. 2–Jan. 31	7	1	
Madras	do	21	5	
ndo-China: Saigon	Nov. 11-24	1	1	
taly: Leghorn Turin	Dec. 21–27 Dec. 22–28	1		
apan	••••••			Total Jan. 1-Dec. 31: Cases, 108 deaths, 39, exclusive of Taiwan.
Fukuoka ken	Dec. 1-31	2		Tom 97 Feb 9 1 fatal case
Nagasaki Tokyo	Nov. 1-30	·····i		Jan. 27-Feb. 8, 1 fatal case.
Yokohama	Jan. 6-12.	i	1	
lauritius lexico:	Jan. 6-12 Oct. 2-25	60	4	
Acapulco Aguascalientes	Dec. 0-reb. 7	•••••	58	
Chihuahua.	Dec. 6-Feb. 7 Dec. 1-Feb. 22 Dec. 29-Feb. 1		10	
Durango	Apr. 1–May 31		77	
Guadalajara	Jan. 11-Feb. 14	89	46	
Imuris	Dec. 29–Jan. 4 Feb. 15–28	5	······	
Juarez Llano	Feb. 15-28		4	
Lano La Paz	Jan. 17 Jan. 16–22	3	1	
Mexico	Oct. 26-Nov. 29	31	15	
Monterev	Oct. 26-Nov. 29 Nov. 17-Jan. 15 Nov. 2-29	1	4	
San Luis Potosi	Nov. 2-29	2		
Tampico.	Dec. 24-Jan. 30 Dec. 6-Feb. 21	100	31	•
Vera Cruz	Feb. 8-14	16 1	5 1	
etherlands, The w Zealand		·····	······	Apr. 8, 1913, to Jan. 7, 1914: Cases, 2,000, including report, p. 2863, vol. 28.
orway:	No. 1 Ten 01	14		V01. 20.
Trondhjem eru: Callao	Nov. 1–Jan. 31 Jan. 26	14		Still epidemic.
Lima.	do	•••••••••		Do.
hilippine Islands: Manila				Third quarter 1913: Cases, 15.
ortugal: Lisbon	Nov. 16-Feb. 7	14		
ussia: Moscow	Dec. 14-Jan. 7	9	2	
Odessa.	Nov. 16-Jan. 10	11	$\tilde{2}$	
St. Petersburg	Nov. 16-Jan. 10 Nov. 23-Jan. 31 Oct. 5-Nov. 29	42	9	
Warsaw	Oct. 5-Nov. 29	44	29	
ervia: Belgrade pain:	Nov. 7-Feb. 8	99	35	
Almeria	Nov. 1-Jan. 31		9	
Barcelona	Nov. 30–Jan. 31		49	
Madrid	Nov. 1-Jan. 31		87	
Seville	Nov. 1-30	· · · · · · <u>-</u> ·	1	
Valencia raits Settlements:	Dec. 1-Feb. 7	7	•••••	
Demonstration .	Nov. 2-Dec. 6	13	1	
Penang.				
Penang. Singapore vitzerland:	Nov. 2-22	2		
Singapore	Nov. 2–22 Nov. 23–Feb. 27	2 74		

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

Reports Received from Dec. 27, 1913, to Mar. 13, 1914-Continued.

SMALLPOX-Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Furkey in Asia:				
Adana	Jan. 10-24	2		Dec. 28, epidemic.
BeirutJaffa.	Nov. 23-Feb. 7 Dec. 6-Jan. 31	237 19	107	
Mersina.	Jan. 4-24	19	-	
Smyrna	Nov. 16-Jan. 17		143	
Tarsus.	Dec. 28-Jan. 24			Still present.
Trebizond	Jan. 11-24			Present.
Tripoli	Jan. 25-31	16		
furkey in Europe:				· ·
Constantinople	Nov. 20-Feb. 14		14	
Saloniki	Dec. 1-Feb. 7		80	

SANITARY LEGISLATION.

STATE LAWS AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

MAINE.

Habit-Forming Drugs-Sale of. (Chap. 211, Apr. 12, 1913.)

SECTION 1. No person, firm, or corporation shall manufacture any so-called catarrh powder or catarrh cure, or any patent or proprietary preparation containing cocaine, or any of its salts, or alpha or beta cucaine, or any of their salts, or any synthetic substitute for them.

SEC. 2. No person, firm, or corporation shall sell, or expose or offer for sale, or give, deliver, or exchange cocaine, or alpha, or beta eucaine, or any synthetic substitute for them or any preparation containing the same, or any salts or compounds thereof, except upon the written prescription of a physician, dentist, or veterinary surgeon, registered under the laws of the State in which he resides, which prescription shall be dated and bear the name of the person giving it and of the person prescribed for, and the original prescription shall be retained by the druggist filling the same for at least two years and shall not be again filled, except upon the written order of the original prescriber, and shall at all times be open to inspection by members of the State board of health, members of the State board of pharmacy and their authorized agents, by State officials and their authorized agents, and by the police authorities and officers of cities and towns. But no practitioner of veterinary medicine shall prescribe any of the above-mentioned substances for the use of a human being.

SEC. 3. No person shall sell, furnish, give away, or deliver opium, morphine, heroin, codeine, cannabis indica, or cannabis sativa, or any salt, compound, or preparation of said substances except upon the written prescription or order of a lawfully authorized practitioner of medicine, dentistry, or veterinary medicine, which prescription shall be dated and shall bear the name of the person giving it and the name of the person prescribed for; which original prescription shall be retained by the druggist filling the same for at least two years, and shall not again be filled except upon the written order of the original prescriber. Such prescriptions shall at all times be open to inspection by members of the State board of health, the State board of pharmacy, State officials and their duly authorized agents, and by the police authorities and officers of the cities and towns. But no practitioner of veterinary medicine shall prescribe any of the above substances for the use of a human being.

The provisions of this section shall not apply to sales made by a manufacturer or wholesale or retail druggist to another manufacturer, wholesale or retail druggist; nor to sales made to hospitals, colleges, scientific or public institutions, or to physicians, dentists, or veterinary surgeons; nor to the sale of cough remedies and other domestic and proprietary preparations, providing that such remedies and preparations are sold in good faith as medicines, and not for the purpose of evading the provisions of this act: And provided further, That such remedies and preparations do not contain more than 2 grains of opium, or one-half of a grain of morphine, or one-fourth of a grain of heroin, or 1 grain of codeine or their salts, in 1 fluid ounce, or, if a solid preparation, in 1 avoirdupois ounce; but such provisos shall not apply to liniments and ointments which are prepared for external use only. Nor shall the provisions of this section apply to preparations containing opium or any of its salts which are sold in good faith as remedies for diarrhea, cholera, or neuralgia, nor to powder of ipecac and opium, commonly known as Dover's powders: *Provided*, That any such preparation is sold in good faith as medicine and not for the purpose of evading the provisions of this act.

SEC. 4. No practitioner of medicine, dentistry, or veterinary medicine shall prescribe, for the use of an habitual user of the same, opium, morphine, heroin, codeine, or any salt or compound of the said substances, or any preparation containing any of the said substances or their salts or compounds, or cocaine or its salts, or alpha or beta eucaine or their salts, or any synthetic substitute for them, or any preparation containing the same or any salt or compound thereof; nor shall any practitioner of dentistry prescribe any of the said substances for any person not under his treatment in the regular practice of his profession, nor shall any practitioner of veterinary medicine prescribe any of the substances for the use of a human being: *Provided, however*, That the provisions of this section shall not be construed to prevent a lawfully authorized practitioner of medicine from prescribing for the use of any habitual user of hypnotic or narcotic drugs who is under the professional care of such practitioner such substances as he may deem necessary for treatment, if such prescriptions are given in good faith and not for the purpose of evading the provisions of this act.

SEC. 5. A manufacturer or jobber of any or all of the drugs enumerated in sections 2 and 3 of this act, a wholesale druggist, or a registered pharmacist, may sell any drug mentioned in said sections 2 and 3 to a manufacturer, jobber, wholesale druggist, or to a pharmacist, physician, veterinarian, or dentist, qualified to practice under the laws of this State, or to an incorporated hospital, but only upon a written order duly signed by such manufacturer, jobber, wholesale druggist, registered pharmacist, registered physician, registered veterinarian, registered dentist, or the superintendent of such incorporated hospital, which order shall show the article or articles ordered and the date of delivery. The said order shall be kept on file in the laboratory, warehouse, pharmacy, or store from which it was filled by the proprietor thereof, or his successor, for a period of not less than two years from the date of delivery, and shall at all times be open to inspection by officers of the State board of health, members of the State board of pharmacy, or their authorized agents, State officials and their authorized agents, and the police authorities and officers of cities and towns; and such order shall not contain items of any drug not mentioned in sections 2 and 3 of this act.

SEC. 6. A person not being a physician, dentist, or veterinary surgeon, qualified to practice in this State, or not being a manufacturer or wholesale or retail dealer in drugs, who has in his possession opium, morphine, heroin, codeine, cannabis indica, cannabis sativa, or any other hypnotic or narcotic drug or salt, compound, or preparation of said substances, cocaine, alpha or beta eucaine or any synthetic substitute for them, or any preparation containing the same, or any salts or compounds thereof, except by reason of a prescription of a physician, dentist, or veterinary surgeon qualified to practice in this State shall be punished as provided in section 8 of this act. The provisions of this section shall not apply to a person, firm, or corporation while transporting any of the above-mentioned drugs from or to a manufacturer or jobber, wholesale druggist, registered pharmacist, registered physician, registered veterinarian, registered dentist, or incorporated hospital, nor to persons who may have the abovementioned articles in their possession in connection with the enforcement of the provisions of this act or with the trial of cases arising thereunder. Possession of any of the drugs mentioned in this section shall be prima facie evidence that such possession is unlawful.

SEC. 7. No practitioner of medicine, surgery, dentistry, or veterinary medicine shall dispense, furnish, or give away opium, morphine, heorin, codeine, cannabis indica, cannabis sativa, or any salt compound of said substances or any preparation containing any of the said substances or their salts or compounds, or cocaine or it's salts or alpha or beta eucaine or their salts or any synthetic substitute for them, or any preparation containing the same or any salt or compound thereof except in good faith as medicines for diseases indicated; and the aforesaid practitioners shall keep a record in a book kept solely for that purpose of the name and address of the patient treated, the name of the disease indicated, and the quantity of the drug dispensed. furnished, or given away on each separate occasion, which record shall be made within 48 hours of the dispensing, furnishing, or giving away and shall be preserved for at least two years, and shall at all times be open to inspection by members of the State board of health, members of the State board of pharmacy or their authorized agents. by State officials or their authorized agents, or by the police authorities or officers of cities and towns. But no practitioner of medicine, surgery, or dentistry shall dispense or prescribe, except for his own professional use, more than 4 grains of morphine, cocaine, heorin, opium, or any other hypnotic or narcotic drug, their salts. compounds, or any preparation of the same, unless it be for a chronic, incurable, or malignant disease.

SEC. 8. A person who violates a provision of the foregoing sections, or aids or abets another in the violation thereof, shall be fined not more than \$1,000 nor less than \$59, or be imprisoned not more than one year, or both. Judges of the municipal and police courts and trial justices shall have original and concurrent jurisdiction with the superior and supreme courts of offenses under this act.

SEC. 9. The director of the Maine Agricultural Experiment Station shall make a chemical analysis to determine the composition and quality of any substance mentioned in this act on application of the county attorney of any county of Maine, and shall furnish a certificate certifying to the composition or quality thereof. The certificate, under seal of the Maine Agricultural Experiment Station, which shall be fixed by the chemist thereof making the analysis, shall be prima facie evidence of the composition and quality of the substance analyzed.

PENNSYLVANIA.

Tenement Houses in Cities of the First Class—Division of Housing and Sanitation. (Act 428, July 22, 1913.)

SECTION 1. Be it enacted, etc., That there shall be in cities of the first class a division of housing and sanitation attached to the department of public health and charities, which division, and all its officers and employees, shall be under the supervision and control of the director of the department of public health and charities, and shall, under said department, have jurisdiction over all matters coming within the provisions of this act, and all laws, ordinances, and the rules and regulations of the board of health, in any way affecting or regulating the use, occupancy, sanitation, or maintenance of all buildings, the grounds surrounding same, and all vacant lands mentioned in this act.

SEC. 2. Organization.—There shall be a chief of the said division, to be known as the chief of the division of housing and sanitation, who shall receive a compensation of not less than \$3,500 a year; and assistant chief, and not less than four supervising inspectors, all of whom shall be qualified by training or experience for the duties of their respective positions; and there shall be not less than one hundred othe rinspectors. There shall be, in addition, a statistician, and such clerks, stenographers, and typewriters, messengers and other employees, as the director of the department of public health and charities shall deem necessary, subject to the approval of city councils. None of the foregoing officers or employees shall be engaged in any other business. The city councils, with the approval of the mayor, shall fix their respective salaries. SEC. 3. Duties of officers.—The chief of the division of housing and sanitation shall have the management and direction of all matters coming within the jurisdiction of and pertaining to the division of housing and sanitation. He shall provide and arrange for the inspection of all properties within the city coming under the provisions of this act. He shall keep on file suitable records of such inspection, together with all permits and orders issued pursuant to this act, all of which shall be open to public inspection during business hours.

The director of the department of public health and charities shall have the p_{ower} to amend, revise, or revoke any action taken by he chief of said division in the exercise of the discretionary power vested in him by any of the provisions of this act.

The assistant chief shall assist in the management and control of all matters pertaining to the division of housing and sanitation, and in case of the absence or disability of the chief he shall exercise all the powers of the chief of the division of housing and sanitation.

The supervisors and other inspectors shall, under the direction of their superior officers, inspect all properties within the city as often and at such times as the need shall require, and shall make adequate records and reports of the same, and shall perform such other duties as may properly come within the scope of said division.

SEC. 4. General provisions—Definitions.—Whenever in this act the "present tense" is used, it shall be taken to include the future tense. Wherever in this act the "masculine gender" is used, it shall be taken to include the feminine and neuter genders. Wherever in this act the "singular number" is used, it shall be taken to include the plural. Wherever in this act the word "shall" is used, it is to be taken to be mandatory and not directory.

The word "person," when used in this act, shall be taken to include any association, partnership, or corporation, as well as a natural person.

Wherever in this act the word "converted" is used, it shall be interpreted to mean either a change in the character of occupancy or in construction.

(2) Full meaning of terms used.—Wherever in this act the words "ordinances," "regulations," "bureau of building inspection," "department" or "board," or "bureau of health" occur, they shall be construed as if followed by the words "in cities of the first class."

Wherever in this act the words "is occupied" are used, applying to any building, such words shall be construed as if followed by the words "or is intended, arranged, or designed to be occupied."

Wherever in this act the words "satisfactory" or "approved" are used, they shall be construed as if followed by the words "to" or "by the chief of the division of housing and sanitation."

(3) A tenement.—The term "tenement" shall mean any house or building which, or a portion of which, is occupied as a residence by three or more families, living independently of each other, and doing their cooking on the premises, and having a common right in the halls, stairways, yard, cellar, or water-closets thereof, or some of them; or by two or more families occupying apartments above the first floor, living independently of each other, and having a common right in the halls, stairways. yard, cellar, or water-closets thereof, or some of them; or water-closets thereof, or some of them.

(4) A dwelling.—The term "dwelling" shall mean any house or building not a lodging house within the terms of the act of assembly of July 2, 1895 (Pamphlet Laws, 428). "An act entitled an act to regulate and license public lodging houses in different cities of this Commonwealth," and not a tenement, rooming house, or inn, all or any part of which is occupied as the home or residence of a family, or of two or more families living independently of each other, and having no common right or use in any hall, stairway, cellar, water-closet, or privy; and whether such house is built singly, or as part of a double house, or in conjunction with others in an attached or semidetached row, it shall be deemed a dwelling. (5) A two-family dwelling.—A "two-family dwelling" is any house not a tenement, dwelling, rooming house, or inn, and which is occupied by two families, who use a common entrance or hallway.

(6) A rooming house.—The term "rooming house" shall mean and include any house or building, or portion thereof, not a lodging house within the terms of the act of assembly of July 2, 1895 (Pamphlet Laws, 428), "An act entitled an act to regulate and license public lodging houses in different cities in this Commonwealth," and not a tenement or an inn, and in which persons, either as single individuals or as families, are harbored or received, housed or lodged, for hire or otherwise, for a single day or night or longer periods; provided this shall not include a dwelling where less than 5 persons are so received and lodged, or where 50 per cent or more of the rooms used for sleeping are used solely by the members of the immediate family owning or leasing and occupying the house, and by the domestic servants of such family.

Apartment.—The term "apartment" shall mean a room, or suite of two or more rooms, which is or are occupied as a home for one or more persons.

(7) Grades of buildings.—For the purpose of this act all buildings herein referred to shall be graded according to their use or occupancy. Buildings of the highest or first grade shall include all dwellings, as hereinbefore defined; buildings of the second grade shall include all 2-family dwellings, as hereinbefore defined; buildings of the third and lowest grade shall include all rooming houses and tenements, as hereinbefore defined.

(8) Λ living room.—A "living room," or a room used for "living" purposes, is any room, not a water-closet, bathroom, or other room used solely for storage or closet purposes, and which is used, in whole or in part, for any household purposes.

(9) Λ yard.—A "yard" is an open, unoccupied space on the same lot with a tenement, rooming house, or dwelling, and which space extends in its full width or depth between opposite lot lines.

(10) A court.—A "court" is any open, unoccupied space, other than a yard, on the same lot with a tenement, rooming house, or dwelling.

(11) A sewer.—A "sewer" is a public sower, or a private sewer tributary thereto, and accepted by the bureau of surveys.

(12) A school sink.—A "school sink" is any vault or box used, or designated to be used, to receive urine and fecal matter which is washed to the sewer by means of a steady or intermittent flow of water.

(13) An entrance hall.—An "entrance hall" is a public hall on the first story, admission to which is made from the street or yard, court, or alley.

(14) A public hall.—A "public hall" is a hall, corridor, or passageway not within an apartment.

(15) A stair hall.—A "stair hall" includes the stairs, stair landings, and the portion of any hall through which it is necessary to pass in going between the entrance floor and the roof.

(16) A basement.—A "basement" is a story partly but not more than one-half below the level of the ground surrounding the building, and shall be considered the first story of such building.

(17) A cellar.—A "cellar" is a story more than one-half below the level of the ground surrounding the building.

SEC. 5. Approving plans.—All plans for the erection, construction, or alteration of buildings of the grades referred to in this act, or for the alteration of houses already erected, or other buildings intended for occupancy for any other grade; and all plans for the installation or alteration of heating or ventilating apparatus, lighting system, plumbing, fixtures, cesspools, sinks, or privy wells, besides being submitted to the bureaus now charged with approval of the same, shall be submitted to the chief of the division of housing and sanitation, for his approval of said plans and of the sanitary conditions surrounding the ground over which the proposed building is to be erected; and until such approval is obtained and indorsed on such plans the work of construction or alteration shall not be begun.

SEC. 6. Light and ventilation-Per cent of lot to be occupied.-No building shall be occupied as a tenement unless it shall have appurtenant to it in the rear or at the side and as part of the lot upon which it is located, an open space equal to at least 20 Der cent of the entire area of such lot, which open space shall be unobstructed by any overhanging structure except fire escapes required by law; unless, however, such tene. ment shall be located upon a corner of two streets, neither of which is less than 20 feet in width, in which case said tenement shall have an open space attached to it in the rear or at the side next the adjoining lot, equal in area to at least 10 per cent of the entire area of the lot upon which said tenement is located, which open space shall be unobstructed by any overhanging structure except fire escapes required by law: and any such tenement located upon a lot bounded on three sides by streets, none of which is less than 20 feet in width, may cover the entire area of said lot: Provided. That at least one window, not less than the minimum size hereinafter provided, opening from each of the rooms in such tenement, shall open upon one of the streets. Such open space attached to every tenement shall be at least 8 feet in width throughout its entire length.

No court or open space between tenements, or between wings of a tenement, shall be of a less width than 12 feet, except in buildings erected prior to June 7, 1895, and which are not over three stories in height, where the open space between the walls of the wings of tenements there shall be an open space not less than 5 feet in width, providing the length of such wing or wings is not more than 30 feet, and, for each additional 10 feet in length, there shall be an additional foot in width, provided there is in the rear or at the side of the lot upon which the building is erected an open space equal to at least 20 per cent of the entire lot area, which open space shall be unobstructed by any overhanging structure except fire escapes required by law. If such tenement is situated on a lot which is bounded upon two opposite sides by streets, then at least one end of every such open space shall abut upon one of such streets. Every court or shaft furnishing light or air to any such tenement shall open, upon one side, into a street, or into a yard or open space, except such shafts as are used solely for ventilation of water-closets or bathrooms, which, for the purpose of cleaning same, shall have a door or window giving sufficient access for such purpose on the ground floor leading thereto. Buildings erected as tenements, or physically altered into tenements, prior to June 7, 1895, shall be exempt from the provisions of this section governing the percentage of the lot occupied, the width between wings, and the width of court; and such other buildings shall likewise be exempt as have been listed on the records of the departments of public health and charities, and consecutively occupied as tenements prior to January 1, 1914.

SEC. 7. Alteration of building and open areas.—No yard, court, or open area appurtenant to any building of the grades referred to in this act shall be reduced, through the erection or alteration of any kind of building on the same lot, to a size less than the minimum yard, court, or open area required when new buildings of like grade are constructed.

SEC. 8. Change of occupancy.—No building of a higher grade of occupancy shall be converted to the use of a building of a lower grade of occupancy, except as provided in section 6 of this act, unless it shall be made to conform in all particulars as to safety in structure and requirements in sanitation and health to the class to which the lower grade belongs. No building, not now in one of the grades referred to in this act, shall be converted into any such grade without conforming to all the requirements of this and other acts, and of the rules and regulations relating to such grade.

SEC. 9. Two-family dwellings.—All two-family dwellings, unless otherwise specifically stated in this act, shall be subject to the same requirements as dwellings.

SEC. 10. Increase the height of buildings.—No building of any grade referred to in this act shall be increased in height, if it is situated on a rear lot, alley, court, street, or other passageway 20 feet or less in width.

SEC. 11. Light.—Whenever the windows of a building used for human habitation receive their light from a yard, alley, court, or passageway, the line of which is formed by a fence 6 feet or over in height, wall or building 5 or less feet distant, such fence, wall, or building, facing such yard, alley, court, or passageway, shall be whitewashed or painted white, and shall be maintained in such condition so as to reflect the maximum available light to such windows.

 S_{EC} . 12. Windows.—No room in any tenement, erected or converted since June 7, 1895, shall be occupied for living purposes, unless it has a window-lighting area of at least 12 square feet, the upper half of which surface shall open fully. At least one window, or windows, of required area shall open directly upon a street, yard, or open area not less than that provided for in section 6 of this act. No room in any other building of the grades referred to in this act shall be occupied for living purposes, unless it has a window, or windows, of an approved lighting area opening the outer air. The upper half of all such windows shall open fully.

SEC. 13. Alcoves and alcove rooms.—No part of any room in any building of the grades referred to in this act shall be inclosed or subdivided, in whole or in part, by by a fixed or movable partition, or other contrivance or device, unless such part of the room so inclosed or subdivided shall contain a separate window as herein required for ordinary rooms, and shall have a floor area of not less than 70 square feet.

SEC. 14. Windows in halls .- No tenement erected prior to June 7, 1895, no dwelling converted into a tenement, no two-family dwelling or rooming house, shall be used for human habitation, unless all public halls are lighted on each floor by a window, or windows, of an approved lighting area, opening directly to the outer air, the upper half of which surface opens fully: Provided, however, That wherever any such public hall can not reasonably be so lighted and ventilated, translucent glass panels of at least 4 square feet shall be inserted in the wall or in the doors, or as transoms above the doors, leading to the rooms whose windows open directly to the outer air. Such halls shall have a ventilating skylight of satisfactory area in the top floor, directly over the stairway, and, where such is or may be built in, it shall be an acceptable substitute for windows, either leading to the outer air or to rooms that lead to the outer air, on the top floor. No tenement erected since June 7, 1895, shall be occupied for human habitation, unless the windows in its public halls conform to the requirements of section 3, act of assembly, June 7, 1895 (Pamphlet Laws 178): "A supplement to an act entitled 'An act amending section 1 of article 3 of an act entitled "An act for the better government of cities of the first class in this Commonwealth," approved the 1st day of June, A. D. 1885, regulating the construction, maintenance, and inspection of buildings,' approved the 8th day of June, A. D. 1893, regulating the construction, alteration, and ventilation of tenement houses, and providing for the safety of the inhabitants thereof, and providing penalties for the violation of the same." If after the foregoing provisions have been complied with, such public halls are not adequately lighted in the daytime, the owner, lessee, or conductor of such house shall keep a proper light burning in the hallways, near the stairs, as may be necessary from sunrise to sunset.

SEC. 15. Light in public halls at night.—In every public hall, near the stairs in a tenement or rooming house, an adequate light shall be kept lighted by the conductor from sunset till at least 10 post meridian; and in the entrance hall and the hall of the second floor above an adequate light shall be kept lighted all night. Such light shall be adequately protected by glass shade or wire screen.

SEC. 16. Light in corridors, cellars, etc.—Whenever it is necessary to improve the lighting of any hall, corridor, cellar, basement, or other part of a two-family dwelling,

rooming house, or tenement, used in common by two or more families, in addition to the provisions for this purpose otherwise stated in this act, the chief of the division of housing and sanitation may order the walls and ceiling, or both, to be painted or whitewashed, kalsomined or papered in white or other approved light color.

SEC. 17. Cellar ventilation.—The cellar or space underneath the first floor or basement of every building used for human habitation shall, when feasible, be so ventilated as to secure a constant supply of fresh air, and when feasible shall be lighted by windows.

SEC. 18. Cellar and basement rooms.—No cellar or cellar room shall be used for human habitation. No basement room in any building of the grades referred to in this act shall be used for living purposes, other than laundry, the finished ceiling of which is less than 7 feet above the finished floor level, and the walls of which are not damp proof and waterproof. Such rooms shall have a window area equal to that required in section 12, and it shall not be used for sleeping purposes unless it has along the side containing the window an open area of not less than 2 feet 6 inches wide, extending upward from not less than 6 inches below the level of the floor of such room to the surface of the street. This area shall be drained to the sewer. The tenant of a cellar room and the tenant of a basement not conforming to the above requirements, the agent and his principal renting the same, and the owner, shall each be subject to the penalties as hereinafter provided for the violations of this act.

SEC. 19. Sanitation.—Courts and areas to be drained.—All courts, yards, areas, and alleys about buildings of the grades referred to in this act shall be properly graded so as to receive thorough drainage in all their parts. The chief of the division of housing and sanitation may order such spaces paved, if in his judgment it is necessary, in order to preserve a proper drainage or to maintain satisfactory sanitary conditions.

SEC. 20. Rain leaders.—The rain conductors of all buildings of the grades referred to in this act shall be connected with the sewer, if there is a sewer in the street contiguous thereto, or, if there is no such sewer, as soon as such sewer is laid; but at no time shall the flow therefrom be permitted to go over the sidewalk or upon the adjoining property.

SEC. 21. Rain conductors not be to used as waste pipes.—No fixture, sink, closet, or drain of any kind receiving house sewage shall empty into a rain conductor, nor discharge to a roof draining to a rain conductor.

SEC. 22. Houses to be sever connected.—Every dwelling or rooming house accessible to a sewer shall be connected therewith. All privy vaults, cesspools, and school sinks shall be removed from the premises of any dwelling or rooming house after a sewer has been laid in a contiguous street. No building shall be used as a tenement unless it is sewer connected, and all cesspools, privy vaults, and school sinks shall have been removed from the premises thereof.

SEC. 23. Water-closets.—Every dwelling to which a public sewer and water main is accessible shall have a separate and independent water-closet of a type approved by the plumbing regulations of cities of the first class, thoroughly flushed at all times, in a separate and independent compartment; and all water-closets hereafter installed shall be in a separate compartment, or in a bathroom when feasible, within the dwelling, or attached thereto in such a manner that the same may be entered immediately from the dwelling. The floor and wall surface of such compartment, about and beneath, shall be maintained in good repair and cleanliness. One entrance to at least one water-closet compartment in every dwelling shall be by hall or passageway independent of a room used for sleeping purposes.

SEC. 24. Number and location of water-closets.—In every rooming house there shall be at least one water-closet in a separate compartment for every four rooms or fractional part thereof, approached by an entrance independent of any living room. In each two-family house or tenement there shall be at least one water-closet contained in a separate compartment for each family occupying the premises; except that, where there are apartments of one or two rooms, there shall be at least one watercloset for each two families, located in a separate compartment on the same floor with the apartments it is to serve—if such location is deemed feasible by the chief of the division of housing and sanitation; otherwise, it shall be a place easily accessible to such apartments. Such water-closet shall be approached by at least one entrance independent of a living room. At least one water-closet for each other apartment in such buildings shall have at least one entrance by separate hall or passageway, independent of a room used for sleeping purposes. No water-closet shall be maintained in the cellar or basement of any building, without a permit from the bureau or board of health; but under no circumstances shall the general water-closet accommodations of a rooming house or tenement be permitted in a cellar or basement.

SEC. 25. *Privies.*—Where a sewer is not accessible to a dwelling there shall be a privy vault located in the yard thereof, and constructed in accordance with the laws, ordinances, and rules of the bureau or board of health relating thereto. Such privy vault shall be cleaned to the bottom whenever the contents come within 3 feet of the level of the ground outside, or within 3 feet of the floor of the privy house, if such floor is below the level of the surrounding ground, and shall be corrected with lime by the tenant or occupant of the property whenever it becomes foul.

SEC. 26. Water supply.-Where water mains have been placed in a street, and there is sufficient pressure to permit same, water shall be introduced, and be capable of being drawn in full supply in every dwelling, and in every apartment of two or more rooms in a two-family house, and in a tenement: Provided. That in sparsely populated districts where there is a well upon the premises, and the water therefrom is standard purity required by the board of health, such well may be considered an acceptable substitute for water in dwellings. When one or more apartments consist of but one room, there shall be at least one source of water supply, in an easily accessible place, for every two such apartments. In all rooming houses water shall be introduced, and be capable of being drawn in full supply, in an accessible place on each floor: Provided, That where less than three rooms are on each floor of a rooming house, water may be introduced on every alternate floor. Wherever a water fixture is introduced a sink, and suitable drain properly trapped leading from it, shall also be installed. No such sink in a tenement shall be inclosed with any woodwork. No house, wherever located, shall be occupied as a tenement, unless water is installed in each apartment as provided above.

SEC. 27. *Plumbing.*—All plumbing, water-closets, and the compartments in which they are located, pipes and other like fixtures in dwellings, rooming houses, and tenements, shall be installed and maintained, unless otherwise provided for in this act, in accordance with the plumbing regulations of the cities of the first class. All openings around such plumbing fixtures, pipes, and like facilities and appliances, shall be sealed or made air-tight with plaster, and all defects, obstructions, or leakage emitting or liable to emit gas, sewer air, or excrement of any kind, liquid or solid, shall be repaired and kept tight.

SEC. 28. Cellars to be damp proof and waterproof.—All cellars or spaces beneath the first floor or basement of buildings of the grades referred to in this act shall be damp proof and waterproof, and when, in the opinion of the chief of the division of housing and sanitation, conditions require it, they shall be concreted with good concrete and a finished surface to a depth of not less than 4 inches, and the walls shall be coated with cement or other nonpenetrable surfacing to such a depth as to prevent the incoming of water.

SEC. 29. Occupancy—Overcrowding.—No room in a dwelling, rooming house, or tenement, when used for sleeping purposes, shall be occupied, or be permitted to be occupied, at any one time, by more than would give to each occupant thereof who is over 12 years of age at least 400 cubic feet of air space; nor shall the owner, lessee, or conductor of any dwelling, rooming house, or tenement, or the lessee of any room or apartment therein, permit such room to be occupied in violation of the above provision. Whenever any room has been found to be overcrowded, as defined by the foregoing, the chief of the division of housing and sanitation shall cause a tin placard to be placed upon the door of such room, stating the number of occupants the room may accommodate. Any person removing or defacing such placard shall be guilty of a violation of this act.

SEC. 30. Uninhabitable houses to be vacated or destroyed .- Whenever a building of any of the grades referred to in this act, or any part thereof, for any reason whatsoever. is unfit for human habitation or is dangerous to life and health, the chief of the division of housing and sanitation shall issue an order requiring all persons therein to vacate such building, or part thereof, within not less than 24 hours nor more than 30 days after service of such notice upon the occupants; the reason thereof to be men. tioned in said order, a copy of which shall be served also, at the same time, upon the last registered owner of such property, by leaving the same at the last known resi. dence or address of such owner, or, if such address is not known, by posting the same in a conspicuous place upon such building. And it shall thereafter be unlawful to occupy, or to permit the occupancy of, such house, or any part thereof, until the chief of the division of housing and sanitation is satisfied that the dangers from said house have ceased to exist, or that it is again fit for human habitation. If, in the opinion of the chief of said division, such house can not be made fit for human habitation, he may order it removed. Written notice, containing a description of the house deemed unsafe or dangerous to health, and of the premises upon which it is situated. requiring the same to be removed, shall be duly given to the owner or owners, or one of them: Provided, however, If the owner or owners, or one of them, can not be found. then the notice may be given to the agent in charge of the said property or to an occupant thereof, or, if the premises are vacant, then by posting the notice conspicuously on said premises.

Such notice shall require the owner or owners, or some one on his or their behalf, to certify within three days to the chief of said division his or their assent or refusal to remove the building. If the owner or owners, or some one with authority on his or their behalf, shall, within the time aforesaid, certify his or their assent to the removal of said insanitary, unsafe, or dangerous building, premises, or structure, he or they shall be allowed not less than 24 hours, nor more than 30 days, following the giving of notice of such assent, in which to commence the removal of the same; and he or they shall employ sufficient labor and assistance to remove the same expeditiously. Upon his or their refusal or neglect to comply with any of the requirements of said notice, a further notice shall be given, in like manner, to the person theretofore notified; or, if the person to be served can not be found, such notice shall be posted conspicuously upon said premises; stating that a survey of the premises named in the said notice will be made under the direction of the chief of the bureau of health. the chief of the bureau of building inspection, and the chief of the bureau of surveys, at the time and place therein stated, which time shall not be less than 24 hours nor more than 3 days from the time of the service of said second notice as aforesaid; and the said chiefs shall constitute a board of survey for the purpose, and shall perform the survey within the time stated, and report with promptness and dispatch. In case a majority of said board, after such survey, shall report the building unfit for human habitation, the same shall thereby be condemned, and notice thereof served on the owner in the same manner as is hereinbefore provided for service of notice of survey. If the owner shall fail to proceed as expeditiously as is possible to remove the said building, within 10 days of the service of such notice, the same shall be removed by the chief of the division of housing and sanitation, and a lien for the cost of such removal shall be filed therefor, and collected as municipal claims are now or may hereafter be by law a lien and collectible, or as provided for in section 55 of this act.

SEC. 31. Wall paper.—Whenever the paper on the ceiling or walls of a room in any building of the grades referred to in this act has become loosened, so as to collect and hold dust, the same shall be removed, the walls thoroughly cleansed, and new wall paper, kalsomine, paint, or other satisfactory substitute shall be put on. No wall paper shall be placed upon the walls of a room, where there has been a case of contagious or infectious disease, until all paper thereon has been removed and the walls thoroughly cleansed by some satisfactory disinfectant.

SEC. 32. Animals and fowls in buildings.—No horse, cow, calf, swine, sheep, or goat shall be kept or slaughtered in a dwelling, rooming house or tenement or any part thereof; nor shall any other animal or fowl deemed objectionable by the chief of the division of housing and sanitation be kept or slaughtered in any such building; nor shall any of the aforesaid animals or such fowl be kept in the yard of any such building, or the lot thereof, or the property adjoining, without the person desiring to keep the same, first having obtained a permit from the bureau or board of health. Application for such permit shall be accompanied by a fee of \$1; and such permit, when granted, shall expire not later than the calendar year for which it is issued. Whenever, by reason of the congestion of buildings or people in any area, the presence of such animals or such fowls shall be deemed by the bureau or board of health prejudicial to health, or a common nuisance, it may refuse to issue any such permit for any property within said area.

SEC. 33. Storage of certain goods forbidden.—No dwelling, rooming house, or tenement, or any part thereof, occupied as such, shall be used as a place of storage, keeping, or handling of feed, hay, straw, excelsior, cotton, paper stock, feathers, or rags, or for any matter or thing dangerous or detrimental to health or life, except as hereinafter provided; nor shall any such building, or any adjacent or contiguous property receive, store, or keep dung or manure of any kind, except a stable, where such cleanings from the stalls may be stored, for a period of not longer than seven days, in a water-tight sanitary bin, built wholly inside the building line of the property upon which it is situated: *Provided*, That in sparsely populated districts such stable cleanings may be kept for a longer period, if kept according to rules and regulations governing the same established by the board of health, and for this purpose the board of health shall be and is hereby empowered to establish such rules and regulations.

SEC. 34. Manufacturing in houses.—No part of any dwelling, rooming house, or tenement shall be used by the tenant, members of his family, or others, for manufacturing purposes, or for other than domestic work, without a permit from the bureau or board of health, and the permit, when issued, shall expire not later than the calendar year for which it is issued. No such permit shall be granted if such use would create dust, foul odors, or undue noise, liable to affect injuriously the health or comfort of the tenants, occupants, or neighbors, or for any reason would affect injuriously the health and safety of those engaged in such manufacturing or other work. The permit may be revoked by the bureau or board of health at any time, for the same reason for which it may refuse to issue same. No such room or rooms, when used for manufacturing purposes, shall be occupied at any one time by more persons than would give to each occupant at least 400 cubic feet of air space.

SEC. 35. Janitor.—In a tenement house occupied by six or more families in which the owner or conductor does not reside there shall be a janitor, housekeeper, or other responsible person, who shall reside in said house and have charge of the same if the chief of the division of housing and sanitation shall so require.

[Sections 36 to 40, inclusive, relate to fire escapes and the prevention of fires.]

SEC. 41. Maintenance—Cleanliness.—The occupant or tenant of every dwelling and of each apartment in a two-family dwelling, the lessee of every rooming house, and the conductor of every tenement, shall keep the same and every part thereof, and the yards and courts and shafts exclusively belonging thereto, free from all accumulations of dirt, filth, garbage, or other refuse matters. The owner of every such building, when notified by the chief of the division of housing and sanitation, shall see that every part thereof, and all cellars, halls, passages, walls, areas, yards, courts, and spaces appurtenant thereto, are kept free from all accumulations of dirt, filth, garbage, or other refuse matters. Any person who shall cause or permit any filth, refuse, or perishable matter to be cast into a shaft, court, or area or yard in or about such building, or shall commit any other nuisance in or about such building, shall be subject to a fine as hereinafter provided for violations of this act.

SEC. 42. Garbage and ash receptacles.—Every owner or tenant occupying a dwelling or an apartment in a two-family house, the lessee or conductor of every rooming house, and the conductor of every tenement house, shall provide for each apartment under his supervision a suitable nonabsorbent, nonleakable, covered receptacle for garbage. He shall provide a receptacle of an approved standard for ashes. No receptacle, either for garbage or ashes, shall be filled to within 2 inches of the top. All tenants or occupants of buildings of the foregoing classes shall securely bundle all rubbish, waste paper, and like refuse, in such manner as to prevent it from causing a nuisance upon the property or upon the street when the collectors are taking it away. No garbage chutes shall be constructed, maintained, or used within or about any of the above-mentioned grades of houses. Contractors or others removing refuse or other waste from such premises shall so handle it as to prevent it from escaping or becoming a nuisance on or to other properties or the public street.

SEC. 43. Repairs.—Every building of the grades referred to in this act, and all parts thereof, shall be kept in good repair and the walls damp proof. All rain water shall be so drained and carried from such building as to prevent its dripping to the ground, or causing dampness in the walls, ceilings, yards, courts, of other areas, or in those adjoining properties.

SEC. 44. Bureau or board of health to make rules.—It shall be the duty of the bureau or board of health, and it is hereby empowered, to make such additional rules and regulations governing the use, occupancy, and sanitation and maintenance of the buildings of the grades referred to in this act, the ground surrounding the same, and of unoccupied lands as may from time to time be deemed necessary. All such rules and regulations shall be promulgated by advertising, three times each in two newspapers published in cities of the first class, notice that such rules and regulations shall be printed, and where copies thereof may be had. Such rules and regulations shall be printed, and shall be furnished free, upon application, by the bureau of health.

SEC. 45. Provisions for enforcing the act—Licenses.—On and after January 1, 1914, no building shall be occupied or permitted to be occupied as a two-family dwelling, rooming house or tenement unless the owner or lessee of such two-family dwelling or rooming house or the conductor of such tenement shall have first applied for and obtained the required license as hereinafter provided, which license shall expire not later than the end of the calendar year for which it was issued, irrespective of the date of its issuance, and shall not be transferable. Whenever the interest of such licensee in the property for the occupancy of which the license was issued shall cease, or the property shall have been brought within one of the other grades herein mentioned by reason of a change in use or construction, said license the license shall nevertheless be valid for a period of 30 days from the date of such death, in favor of his legal representative or of the person to whom the house passes by law, but in no case shall such 30 days extend said license beyond the end of the calendar year for which it was issued.

SEC. 46. Applications.—Every application for any of the licenses required by this act shall be in a form approved by the bureau or board of health, and shall state the name and address of the applicant, the nature and extent of his interest in the property for which the license is desired; and, if the applicant is not the owner or agent thereof, then the application shall also state the name and address of the owner or his agent, the location of the building, the use to which it is to be put, whether a two-family dwelling, rooming house, or tenement, and the number of rooms to be occupied. together with such other information as may be required by the said bureau or board; and it shall be accompanied by a fee of \$1 for each such two-family dwelling, \$2 for each rooming house, and for a tenement such fee shall be \$1 for each apartment that is occupied, which fee shall cover the cost of the investigation.

SEC. 47. The chief of the division of housing and sanitation and his duly accredited inspectors shall have the right, and are hereby empowered and directed, to enter and examine at all reasonable hours all houses or other premises which come within the provisions of this act. Such inspectors when making such inspections shall wear a prescribed uniform, and shall exhibit a suitable badge, to be provided by said division, for their further identification. No person shall refuse, or cause to be refused, to the said chief or to any duly authorized and uniformed inspector of such division, after he shall have exhibited his said badge, admittance to such house, other building, or premises; nor shall any person in any way hinder such chief or any such inspector or inspectors in the performance of his or their duty as herein provided.

SEC. 48. Granting licenses.—The bureau or board of health shall, without further charge, grant to the applicant an occupancy license for the occupancy of the two-family dwelling, rooming house, or tenement mentioned in the application, and which shall have been found, after a thorough inspection, to comply in all respects with the provisions of this act and of all laws, ordinances, rules, and regulations applicable to such building, and the use to which it is intended to be put.

SEC. 49. What licenses shall specify.—Each license shall clearly specify the name and address of the person to whom it is issued; and, in addition, L'such person is other than the owner, the name and address of such owner, and of his agent, if any; the location of the building, whether it is to be used as a two-family dwelling, rooming house, or tenement; the number of rooms and the maximum number of occupants for each sleeping room, and the date of the expiration of the license.

SEC. 50. *Record of licenses.*—The bureau or board of health shall keep a public record of all licenses issued under the provisions of this act. The original application shall be preserved for a period of one year, and shall be open to examination by the public, without charge, during business hours.

SEC. 51. *Revocation of licenses.*—The bureau or board of health shall have the power to revoke any license, if the person to whom the license has been granted has violated any of the provisions of this act, or of the laws, ordinances, and rules of the bureau or board of health.

SEC. 52. Appeals.—Any person whose application for a license has been refused, or whose license has been revoked, shall have the right to appeal, within 15 days, to the court of common pleas of the proper county: *Provided*, *however*, That such appeal shall not operate to supersede any decision of the chief of the division of housing and sanitation pending the entry of a final order by said court, unless said appeal is directed to operate as a supersedeas by said court, at a preliminary hearing to be held at the time and in the manner provided by its rules for application for preliminary injunctions.

SEC. 53. Unlawful to own and occupy, or to rent, certain houses without a license.— On and after the 1st day of January, 1914, it shall be unlawful for any person to let, rent, lease, to be occupied, or conduct, any two-family, rooming house or tenement, in any city of the first class, unless he has secured a license therefor as hereinbefore provided, and unless he at all times displays it in a conspicuous place upon the wall within, and close to the outer entrance to, the house mentioned in said license.

SEC. 54. *Penalties for violation.*—Any person who shall violate any of the provisions of this act, or of any reasonable rule or regulation of the bureau or board of health authorized by this act, shall be guilty of a misdemeanor, and upon conviction shall be fined not less than \$5 or more than \$50, for the first offense; for a second or subsequent offense, by a fine of not less than \$25, or more than \$200, or by imprisonment for not more than 60 days, or by both, at the discretion of the court; and whenever any person shall have been notified by the chief of the division of housing and sanitation, or by the service of a summons in a prosecution, that he is violating such provision, he shall be punished by like penalties, in addition, for each and every week that such violation shall have continued after such notification or service of summons.

SEC. 55. Service of notice and order.—Whenever notice is given requiring compliance with the provisions of any section of this act, the same shall be served upon the person required to make such correction, or his agent, unless otherwise hereinbefore provided, by mailing a copy to the residence, if known, of such person or his agent, and on the same day by posting a copy in a conspicuous place upon the premises affected, which notice shall not be removed or defaced while the condition mentioned therein exists. All such notices shall be complied with within five days after posting the same upon the premises affected, and upon failure to do so the bureau or board of health may contract to have the necessary work done, and the costs thereof shall be made a lien against such property and collectible in like manner as now provided by law: *Provided, however*, That if there shall be no funds at the disposal of such bureau or board for the aforesaid purpose, then the bureau or board may contract to have such work done, and the lien therefor shall be marked to the use of the contractor doing the work and shall be collectible by such contractor as is now provided by law in similar cases.

SEC. 56. Enforcement—Private prosecution; procedure.—Any person shall have the right to institute prosecution for violations of this act by stating, upon oath or affirmation, the facts alleged as a violation: *Provided*, That any person other than a public officer who shall institute a prosecution which shall fail to result in a conviction shall be liable for the costs of such prosecution, if, in the opinion of the court, there shall not have been reasonable grounds for instituting the prosecution.

SEC. 57. Should any part of this act be construed to be invalid or unenforceable, the remaining parts of the act so far as they are valid or capable of enforcement shall stand, with the same force and effect as if the parts found to be invalid or unenforceable had been omitted.

SEC. 58. Other acts repealed.—All acts, or parts of acts, inconsistent with this act, be, and the same are hereby, repealed; but no such acts, or parts of acts, shall be considered as inconsistent with this act merely because its provisions, or any of them cover or relate to the subject or subjects of this act, if it does not conflict with or interfere with the enforcement of any of the provisions of this act.

Marriage—Prohibited in Certain Cases—Licenses. (Act 458, July 24, 1913.)

SECTION 1. Be it enacted, etc., That no license to marry shall be issued except upon written and verified application to the clerk of the orphans' court. Such application shall contain a statement of the full Christian name and surname, color, occupation, birthplace, residence, and ages of the parties; whether the marriage contemplated is the first, second, or other marriage; and that neither of the contracting parties is afflicted with a transmissible disease; together with the full Christian name and surname, residence, color, occupation, and birthplace of their parents, including the maiden name of the mother; together with such other facts as may be necessary to determine whether any legal impediment to the proposed marriage exists. Such application shall be recorded by the clerk, together with the license and certificate of marriage, in a book provided for that purpose, which book shall be a public record.

SEC. 2. Applications for license to marry shall be uniform throughout the State; and it is hereby made the duty of the State department of health to furnish a form therefor to the several clerks at once upon the approval of this act: *Provided*, That said State department of health may revise said forms, so furnished, from time to time, as may be advisable.

SEC. 3. No license to marry shall be issued where either of the contracting parties is an imbecile, epileptic, of unsound mind, or under guardianship as a person of unsound mind; nor to any male person who is or has been, within five years, an inmate of any county asylum or home for indigent persons, unless it satisfactorily appears that the cause of such condition has been removed, and that such male applicant is physically able to support a family; or if, at the time of making application, either of the contracting parties is under the influence of an intoxicating liquor or narcotic drug; and no license shall be valid for a longer period than 60 days from the date of issue.

SEC. 4. In those cases, when the right to a license is not made to appear, the clerk shall refuse to issue the same. At once, upon such refusal, he shall certify the proceeding to the proper orphans' court, without formality or expense to the applicants, who shall be notified by him of such action. Such application shall thereupon be, at the earliest practicable time, heard by the judge of said court, without a jury, in court or in chambers, during the term or in vacation, as the case may be; and his finding that a license ought to issue or ought not to issue shall be final, and the clerk shall act in accordance therewith; the true intent of this section being to secure for the applicants a hearing by said judge, without affirmative action by said applicants, and to give notice to them of such hearing, its time and place, without delay or expense.

SEC. 5. All acts or parts of acts conflicting with the provisions of this act be, and the same are hereby, repealed: *Provided*, That nothing in this act shall be construed to authorize the marriage of persons not of legal age, without the consent of parents or guardians, as now provided by law.

Industrial Diseases-Prevention of-Blowers Required. (Act 447, July 24, 1913.)

SECTION 1. Be it enacted, etc., That all persons, companies, or corporations operating any factory or workshop where emery wheels or emery belts of any description are used, either solid emery, leather, leather-covered, felt, canvas, linen, paper, cotton, or wheels or belts rolled or coated with emery or corundum, or cotton wheels used as buffs, shall provide the same with blowers or similar apparatus which shall be placed over, beside, or under such wheels or belts in such a manner as to protect the person or persons using the same from the particles of dust produced and caused thereby, and to carry away the dust arising from or thrown off by such wheels or belts while in operation directly to the outside of the building or to some receptacle placed so as to receive and confine such dust: *Provided*, That grinding machines upon which water is used at the point of the grinding contact shall be exempt from the provisions of this act: And provided, That this act shall not apply to factories or workshops where men are not employed continuously at such wheels or belts more than 3 hours in 24 hours.

SEC. 2. It shall be the duty of any person, company, or corporation operating any such factory or workshop to provide or construct such appliances, apparatus, machinery, or other things necessary to carry out the purpose of this act, as set forth in the preceding section, as follows: Each and every wheel shall be fitted with a sheet of case iron, or hood or hopper, of such form, and so applied to such wheel or wheels, that the dust or refuse therefrom will fall from such wheels, or will be thrown into such hood or hopper by centrifugal force, and be carried off by the current of air into a suction pipe attached to same hood or hopper.

SEC. 3. This act shall become operative on the 1st day of January, 1914.

SEC. 4. The inspectors of the department of labor and industry are hereby authorized to enter and inspect all factories and workshops, for the purpose of enforcing the provisions of this act.

SEC. 5. Any person or persons, or company, or managers or directors of any company or corporation, who shall have the charge or management of any factory or workshop, who shall fail to comply with the provisions of this act, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than \$100 and not exceeding \$300.

Eggs-When Unfit for Food to be Denatured. (Act 43, Apr. 11, 1913.)

SECTION 1. Be it enacted, etc., That it shall be unlawful for any person, firm, or corporate body, by himself, herself, itself, or themselves, or by his, her, its, or their agents, servants, or employees, to sell, offer for sale, expose for sale, or have in DOSsession with intent to sell, eggs that are unfit for food, within the meaning of an act. entitled "An act for the protection of the public health, by prohibiting the sale offering for sale, exposing for sale, or having in possession with intent to sell, of eggs unfit for food, as therein defined, and prohibiting the use of such eggs in the prepara. tion of food products; providing penalties for the violation thereof, and providing for the enforcement thereof," approved the 11th day of March, A. D. 1909, for any Durpose, use, cause, or reason whatsoever, unless the same shall have first been dena. tured with a sufficient quantity of kerosene to render all of the same unfit for use in the preparation of food and food products; and further providing that the shells of all such ergs that may be unfit for food, as hereinbefore mentioned, shall first be removed or broken, by smashing or otherwise, so as to permit a free impregnation of the whole of the egg substance by the denaturing fluid; and all persons violating any of the provisions hereof shall be guilty of a misdemeanor, and subject to the same penalties as provided in the act to which this is a supplement.

MUNICIPAL ORDINANCES, BULES, AND REGULATIONS PER-TAINING TO PUBLIC HEALTH.

CLEVELAND, OHIO.

Bakeries-Sanitary Regulation of. (Reg. Bd. of H., July 28, 1913.)

A resolution amending and supplementing title 6, part 5, of the Rules and Regulations of the Board of Health of the City of Cleveland, Ohio.

SECTION 1. The provisions of this title shall apply to any place used for producing, mixing or compounding, or baking, for storing or selling breads, biscuit, crackers, rolls, cake, macaroni, pie, or any food product of which flour or meal is the principal ingredient, and any place where the said food products are manufactured shall be deemed a bakeshop. The provisions of this title shall apply also to places, rooms, or buildings where candy, fruit juices, extracts, canned fruit, or any of the products of fruit or vegetables are manufactured, prepared, stored, or sold. No manufacturer of food products included in this section shall carry on his business without a certificate of inspection from the board of health of the city of Cleveland.

SEC. 2. No bakeshop shall connect by door or window with any other room or compartment whatsoever, unless the same be used for storage of flour or other ingredients of bakers' products, and the connection shall be through a vestibule, having a door at its entrance and exit; and no bakeshop, candy factory, or manufactory of food products shall be located in any cellar or basement or within 25 feet of any privy, cesspool, barn, barnyard, or runway, or place where domestic animals are housed or kept.

SEC. 3. Any place used as a bakeshop, candy factory, or manufactory of food products shall be provided with floors of closely joined hardwood or other materials impervisus to moisture which can be thoroughly cleaned.

SEC. 4. Every owner, person, firm, or corporation in charge of any bakeshop, candy factory, or manufactory of food products shall keep the floors, side walls, ceilings, woodwork, fixtures, tools, machinery, and utensils in a thoroughly clean and sanitary condition, and shall provide for the purpose of ventilation and light at least 1 square foot of window space for each 4 square feet of floor space.

SEC. 5. The doors and window openings of every bakeshop, candy factory, or manufactory of food products shall from May 1 to September 30, inclusive, be provided with sound screens of mesh sufficiently fine to keep out flies and other insects. The side walls and ceilings of every bakeshop, candy factory, or manufactory of food products shall be well plastered or sheathed with metal, wood, or tile. All plastered walls or ceilings shall be kept lime washed or calcimined or shall be painted with oil paint, and all woodwork in every bakeshop, candy factory, or manufactory of food products shall be kept well oiled or painted and washed clean.

SEC. 6. Every bakeshop, candy factory, or manufactory of food products shall be provided with adequate plumbing, including suitable washstands and water-closets. No water-closet shall be entered from or shall be in direct communication with the bakeshop, candy factory, or manufactory of food products. Washstands may be located in the water-closet compartment or in a dressing room.

SEC. 7. No person shall sleep in a bakeshop, candy factory, or manufactory of food products, the place where flour, meal, or other ingredients of food products are handled or stored.

SEC. 8. No domestic animals shall be permitted in a bakeshop, candy factory, or manufactory of food products, or any place where flour, or meal, or any ingredients of food products are stored. Every person, firm, or corporation owning or controlling a bakeshop, candy factory, or manufactory of food products shall provide in said bakeshop, candy factory, or manufactory of food products at least two rat or mouse traps, and shall bait said traps daily and shall remove rats or mice caught therein, and shall thoroughly smoke and reset and rebait said traps after the catching of each rat or mouse. No person, firm, or corporation owning or controlling a bakeshop shall use any poisonous substance whatsoever for the purpose of killing or exterminating rats, mice, or vermin in said bakeshop.

SEC. 9. Any person, firm, or corporation owning or controlling or managing any bakeshop shall require that all persons employed in such bakeshops, candy factories, or manufactories of food products shall be provided with clean and washable aprons or garments while employed in the manufacture or production of such food products, and shall require that said aprons or garments be kept in a clean and sanitary condition, and shall provide a dressing room, separate from the bakeshop and place where flour and meal and bakery products are stored.

SEC. 10. No attendant or other person shall expectorate on the floor, side walls, or any place in a bakeshop, candy factory, or manufactory of food products. Smoking, snuffing, or chewing tobacco is forbidden in a bakeshop, candy factory, or manufactory of food products. Notices forbidding persons to use tobacco or expectorate on the floors or side walls shall be posted in every bakeshop, candy factory, or manufactory of food products.

SEC. 11. No person who has tuberculosis, syphilis, gonorrhea, or other communicable disease shall work in a bakeshop, candy factory, or manufactory of food products, and no person in charge of such bakeshop, candy factory, or manufactory of food products shall permit a person so infected to be employed. It shall be the duty of the person, firm, or corporation owning or operating a bakeshop, candy factory, or manufactory of food products to report to the board of health in writing the name and address of each individual engaged or about to be engaged for service in such bakeshop, candy factory, or manufactory of food products, for the purpose of medical examination.

SEC. 12. All bakestuffs or bakery products, candy, fruits, or fruit juices, extracts, and other food products intended for human consumption shall be covered in such a manner that the same can not be contaminated by dust, dirt, or flies while being conveyed or transported through the streets of the city of Cleveland, or when placed upon exhibition for sale in bakeshops, markets, stores, or shops; and no driver, agent, or other person employed by a person, firm, or corporation operating a bakeshop shall deliver to any dealer any breadstuffs in package or container and permit the same to be placed outside of the premises of the consignee unless the said container be placed upon a platform at least 2 feet above the sidewalk.

SEC. 13. All food products enumerated in section 1 of this title when on sale in a butcher shop, meat market, grocery, or other place not a bakeshop shall be kept in a dust-proof show case or cabinet free from all possible contamination.

SEC. 14. All ingredients used in the preparation, production, manufacture, or sale of any of the food products enumerated in section 1 of this title shall comply in all respects with the pure-food laws of the United States and of the State of Ohio.

SEC. 15. No particles, scraps, droppings, or wastes of food products falling to the floor of a bakeshop, candy factory, or manufactory of food products shall be recovered and sold or offered for sale for human consumption.

SEC. 16. Any breads, biscuit, crackers, rolls, cake, macaroni, pie, or any food product of which flour or meal is the principal ingredient, or any candy, fruit juices, extracts, canned fruit, or any of the products of fruit or vegetables, manufactured, for sale or offered for sale, not in accord with the provisions of this title may be seized and destroyed by the board of health, its agents, or employees. SEC. 17. It shall be the duty of any person knowing or having knowledge of the existence of conditions in conflict with the provisions of these regulations to report the fact to the board of health of the city of Cleveland.

SEC. 18. Whoever violates or obstructs or interferes with the execution of any of the foregoing orders or willfully or illegally omits to obey such orders shall be fined any sum not exceeding \$100.

COLORADO SPRINGS, COLO.

Common Towels-Prohibited in Public Places. (Ord. Dec. 10, 1913.)

SECTION 1. That no person, firm, or corporation shall hang or place, or cause or permit to be hung or placed, any towel, or other material which could be used for the purpose of a towel, in any place in any store, building, hotel, restaurant, church, hall, factory, theater, or other public place where more than one person could use the same for said purposes, provided that this ordinance shall not apply to paper towels which are to be discarded after use by one individual, or towels of such size that they can properly be used but once, and if placed in sufficient quantity to accommodate all persons who may make use of them.

SEC. 2. Any violation of this ordinance shall be punished by a fine of not exceeding \$50.

Milk and Milk Products—Must be from Tuberculin-Tested Herds. (Ord. Dec. 17, 1913.)

SECTION 1. That section 2 of an ordinance entitled "An ordinance prohibiting the sale of milk from cows not tuberculin tested and not in bottles or original packages and only after inspection of place and permit granted," passed December 28, 1908, hereby is amended to read as follows:

"SEC. 2. No milk or skimmed milk shall be sold or offered for sale in Colorado Springs except from cows that have been tuberculin tested and passed at least once every six months by a licensed veterinary in a manner approved by the department of public health and sanitation, unless on the last previous test no tuberculosis was present in the herd or in the herds from which new cows were obtained, in which event the test may be postponed an additional six months.

"No cream, butter, or buttermilk shall be sold or offered for sale in Colorado Springs except from cows that have been tuberculin tested and passed by a licensed veterinary, as provided in the preceding paragraph, unless the cream has been pasteurized in a manner satisfactory to the department of public health and sanitation. The veterinary shall furnish the owner a certificate of health for all cows so tuberculin tested and passed by him. If any cow or cows are found to be affected with tuberculosis the veterinary shall report the fact to the State board of stock inspection commissioners, and he shall also file in writing with the department of public health and sanitation of this city, within five days after such inspection, a full report on blanks furnished by said department of the result of all such tests."

COLUMBUS, GA.

Communicable Diseases—Notification of Cases—Quarantine—School Attendance. (Ord. Mar. 5, 1913.)

That every physician, nurse, parent, or other person in charge of any patient in the city of Columbus, who is suffering with diphtheria, scarlet fever, smallpox, cerebrospinal meningitis, typhoid fever, pulmonary tuberculosis, pellagra, or tracoma, shall immediately notify the health officer after becoming aware of the existence of such diseases, giving the name of the disease, the name, age, sex, and color of the person suffering therefrom, and setting forth by street and number of the house, room, or other place in which said patient can be found. Every physician or other person, as set forth above, shall make separate reports for each case occurring in the same family or in the same dwelling place.

Death or recovery shall be reported to the health officer. But no person shall certify knowingly or negligently that any patient has recovered from any of the aforesaid diseases until such patient is in condition to be free from danger of communicating the disease to other persons.

Quarantine and isolation to be established in certain cases.—Immediately upon receiving notice of the existence of scarlet fever, diphtheria, smallpox, or cerebrospinal meningitis the health officer shall investigate the same, and shall take such measures as hereinafter provided to prevent the spreading of such disease. The health officer shall establish or cause to be established proper quarantine at the dwelling place, provided house quarantine can be carried out without danger to the general public; otherwise the patent or patients must be removed to the hospital for contagious diseases.

In case of house quarantine a warning card shall be placed on the front and rear entrances, that anyone coming to either door will be warned of the presence of the disease within; provided, that where the family lives above a storeroom the card shall not be placed on the store door; provided, there is one entrance separate from store.

No unauthorized person shall tear down or in any way deface any placard or signal or warning placed under the direction of the health department.

No person who has been in contact with a person having any of the last above. mentioned diseases, except the attending physician or health officer, shall leave the premises or come in contact with any other than the patient, unless properly disinfected and permitted to do so by the health officer. The members of the family who work out must either board and room at another house or stop work and stay at the house quarantined. The health officer may, after personal investigation of the premises wherein a contagious case or cases exist, issue a written permit to wage earners to enter and leave the premises during the period of quarantine, providing that he finds that such modification of quarantine will not endanger the public health. Neither this nor any other modification of quarantine will be permitted, excepting with the written consent of the health officer, and no modification will be permitted or allowed in case of any wage earner who is engaged in the sale of wearing apparel. bedding, articles of food or drink, candy, cigars, or works in a laundry. No person from any dwelling placarded for any of the above-mentioned diseases shall take any book or magazine to or from the public library, or any Sunday school library, or any circulating library of any kind. It shall be the duties of the managers of public libraries to have all books known to have been in infected houses thoroughly disinfected before being again placed in circulation, or the same shall be destroyed if deemed necessary by the health officer.

Milk men must empty milk delivered to infected houses into covered receptacles placed outside the door of such premises. They must not enter such premises, nor accept money or ticket therefrom, until the house has been fumigated and the bottles have been sterilized. If bottles have been delivered they must not be taken from the house until the case is terminated and the bottles sterilized. Grocerymen and other persons delivering merchandise are forbidden to enter such premises, or remove packages, money, or other articles from the house.

Laundrymen are forbidden to enter such premises, or to remove any clothing therefrom, until such have first been boiled or otherwise sterilized. No one shall remove anything from such premises except by permission of the health officer.

No one shall enter such premises except the physician and the health officer, only by permission.

No cat, dog, or other domestic animal, shall be allowed to run in and out of the house during the quarantine period. Representatives of the health department shall visit the premises from time to time, as they see fit, to observe the efficiency of the quarantine, and for such purposes shall have the right of entering any time.

The minimum period of quarantine in cases of scarlet fever shall be 30 days, with such additional time as may be necessary for the complete recovery of the case.

No case under any circumstances shall be released until desquamation has absolutely and entirely ceased, and until nose and ear discharges have healed. The minimum period of quarantine in diphtherea shall be 14 days, where there has been antitoxin used, with such additional time as may be necessary for the complete recovery of the disease.

The minimum period of quarantine of smallpox shall be 20 days, with such additional time as may be necessary for the complete recovery of the disease. No patient shall be discharged until desquamation has entirely ceased.

The minimum time of quarantine for cases of cerebrospinal meningitis shall be 14 days, with such additional time as may be necessary for the complete recovery of the case.

Raising the quarantine.—Upon receipt of notice from any physician in attendance of the complete recovery of any person affected with any of the above-mentioned diseases, the health officer may terminate the quarantine or isolation, provided that the minimum time of quarantine has elapsed. He shall remove the quarantine and cause the premises to be fumigated and the patients and the attendants to be disinfected.

The fumigation of the premises shall be done only by the sanitary inspector or his assistant, and by the instruction of the health officer.

Exclusion of children from school.—The superintendent of the public schools shall be notified immediately of the existence of any contagious disease among school children. When any child is taken from any school building ill with any of the contagious diseases enumerated in this ordinance, the room from which the child was taken shall be fumigated within 24 hours. Children excluded from school on account of the following diseases will be given certificates from the health officer, recommending admission to school as follows: Scarlet fever, 10 days after quarantine is terminated; diphtheria, after the termination of quarantine; smallpox, 15 days after quarantine is terminated; cerebro-spinal meningitis, when recovery is complete. Contacts residing in the same dwelling place as the patient to be excluded from school.

The board of health and the health officer shall have the power from time to time to make such regulations for the prevention of contagious diseases as they shall deem necessary.

All previous ordinances for the control of contagious diseases are hereby revoked.

Penalty.—Any person who shall violate any clause, provision, requirement, or regulation of this ordinance, or who shall fail, neglect, or refuse to com ply with any such provision, requirement, or clause, as herein provided for, or any person who shall interfere with or in any manner resist any officer or agent of the city in the discharge of his duty, as herein defined, shall be guilty of a misdemean or and, upon conviction, be subject to a fine by the recorder of not more than the sum of \$100 for each and every violation.