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THE FEDERAL ANTINARCOTIC LAW.

The so-called Harrison antinarcotic act, which becomes effective March 1, 1915, is published in full on pages 573 to 577 of this issue of the Public Health Reports.

This law affects not only dealers in narcotic drugs, but also medical practitioners. The following are some of the requirements which are of especial interest to physicians:

After March 1, 1915, it will be necessary for "every person" who "produces, imports, manufactures, compounds, deals in, dispenses, sells, distributes, or gives away opium or coca leaves or any compound, manufacture, salt, derivative, or preparation thereof" to register with the collector of internal revenue of his district and pay an annual tax of \$1.

Section 8 makes it unlawful for persons who have not registered to have in their possession any of the drugs named in the act.

The Commissioner of Internal Revenue is authorized to prepare rules and regulations for carrying the provisions of the act into effect. The following is an extract from these regulations:

DISPENSING OF DRUGS BY PHYSICIANS, DENTISTS, OR VETERINARY SURGEONS.

ART. 10. Under the exempting provisions of section 2 of the act, no written order is required for the "dispensing or distribution of any of the aforesaid drugs to a patient by a physician, dentist, or veterinary surgeon, registered under this act, in the course of his professional practice only." A record, however, is required to be kept of all such drugs so dispensed or distributed (except such as may be dispensed or distributed to a patient, upon whom such physician, dentist, or veterinary surgeon shall personally attend—i. e., *personally visit*) and must show:

1. The date when any such drug is dispensed or distributed;
2. The kind and quantity dispensed or distributed in each case; and
3. The name and residence of the patient to whom such drug was dispensed or distributed. [For form of prescriptions, see art. 12.]

The record so kept must be preserved for a period of two years from the date of dispensing or distributing, and will be subject to inspection as provided in section 5 of the act. Each physician, dentist, and veterinary surgeon must supply himself with a suitable blank book for such record.

DRUGS DISPENSED UNDER PRESCRIPTION.

ART. 11. A like exemption to that above noted is made as to drugs dispensed or distributed under and in pursuance of a written prescription issued by a physician, dentist, or veterinary surgeon, duly registered under this act. But all such prescriptions covering such drugs, not specifically exempt by section 6 of the act, must be dated and signed as of the day when issued; must be preserved for a period of

two years from the time when filled, and must be readily accessible to the inspecting officers above referred to.

* * * * *

ART. 12. Under the authority conferred by section 1 of the act named, for the issuing of regulations necessary for carrying the provisions of the act into effect, physicians and surgeons writing any such prescriptions are hereby required to sign their name in full to the same, to state therein their registry number and the location of their office, and the name and address of the person for whom such prescriptions are written. Druggists and apothecaries must refuse to fill any such prescription unless signed as herein required; nor must prescriptions for such drugs be filled by any druggist or apothecary, if he has reason to suspect that it was fraudulently issued or obtained.

The dispensing of such drugs by druggists or apothecaries, except on physician's original prescriptions, or on original orders issued to persons who have duly registered, will be in violation of the act. Refilling of prescriptions or orders is therefore prohibited.

By section 6 of the act preparations containing only a small quantity of the drugs are excepted.

The penalty for violation or failure to comply with any of the provisions of the act is a fine of not more than \$2,000 or imprisonment for not more than five years or both such fine and imprisonment.

AGE DISTRIBUTION OF TYPHOID FEVER.

The ages at which typhoid fever is most common, as indicated by the cases reported in the States of Minnesota, Michigan, and Pennsylvania, are shown in the accompanying table. The Michigan and Pennsylvania cases are for the year 1913, while the Minnesota reports cover the years 1912, 1913, and 1914. The data for the table were furnished by the departments of health for these States. The table shows for each five-year age group the number of cases reported.

Age distribution of typhoid fever in cases reported in Pennsylvania, Michigan, and Minnesota.

Ages of patients in years.	Number of cases reported.					
	Minnesota.			Pennsylvania, 1913.	Michigan, 1913.	Minnesota, Pennsylvania, and Michigan, 1913.
	1912	1913	1914			
Under 5.....	23	46	62	481	93	620
5 to 9.....	79	119	115	1,524	264	1,907
10 to 14.....	92	94	110	1,433	249	1,826
15 to 19.....	84	160	170	1,698	286	2,153
20 to 24.....	132	255	232	1,668	368	2,291
25 to 29.....	89	185	182	1,069	279	1,533
30 to 34.....	57	145	114	749	194	1,088
35 to 39.....	38	94	102	546	137	777
40 to 44.....	29	61	64	400	116	577
45 to 49.....	28	37	31	270	79	386
50 to 54.....	19	29	43	207	58	294
55 to 59.....	13	12	23	119	42	173
60 to 64.....	6	8	13	147	20	211
65 to 70.....	6	2	15		17	
Over 70.....	2	1	7		16	
Total.....	607	1,257	1,283	10,361	2,218	13,836
Age not stated.....	24	47	116	159	32	238
Total cases.....	721	1,304	1,399	10,520	2,250	14,074

Chart 1 shows for each State, for the year 1913, the percentage of the total reported cases occurring in each 5-year age group. It will be noted that the percentage of cases in the age group "5 to 9 years" is larger than the percentage reported in the age groups "under 5 years" and "10 to 14 years." The percentage of cases then rises in the succeeding age group, "15 to 19 years." In Michigan and Minnesota the percentage of cases continued to increase and was highest in the age group "20 to 24 years," while in Pennsylvania the percentage was highest in the age group "15 to 19 years." In the succeeding age groups the percentage fell rapidly.

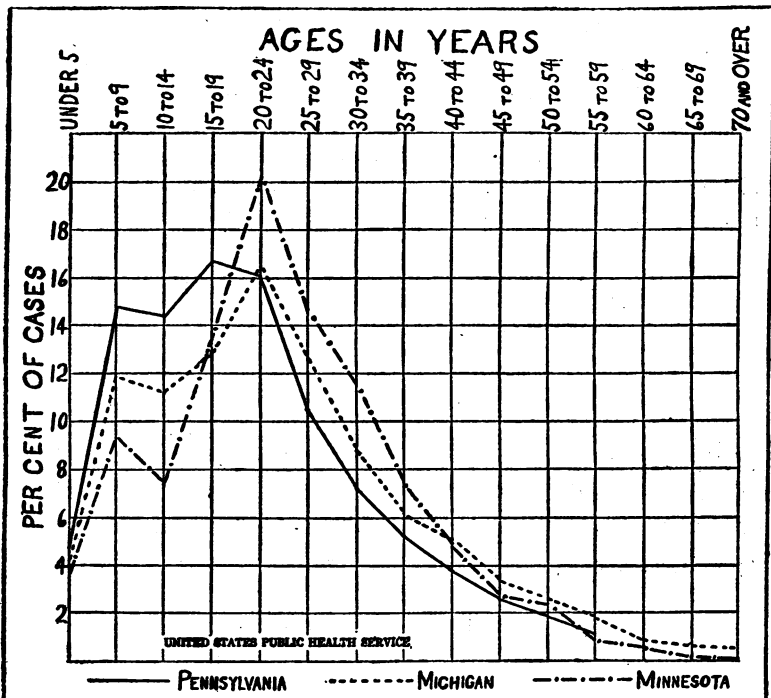


CHART 1.—Age distribution of typhoid fever in cases reported in Pennsylvania, Michigan, and Minnesota during the calendar year 1913

In order to ascertain the age susceptibility and incidence, the ratio of reported cases to the number of individuals in each of the 5-year age groups was approximated for the year 1913 for the combined reported cases in the three States, assuming that the aggregate population of these States had an age distribution similar to the standard million of the States originally in the registration area for deaths, according to the census of April 15, 1910. The standard million was obtained from the Bureau of the Census.

Chart 2 shows the comparative ratio of incidence of the disease in the several age groups. The essential difference between this chart and chart 1 is the absence of the distinct peak which appears in the curves for Michigan and Minnesota at the age group "20 to 24 years."

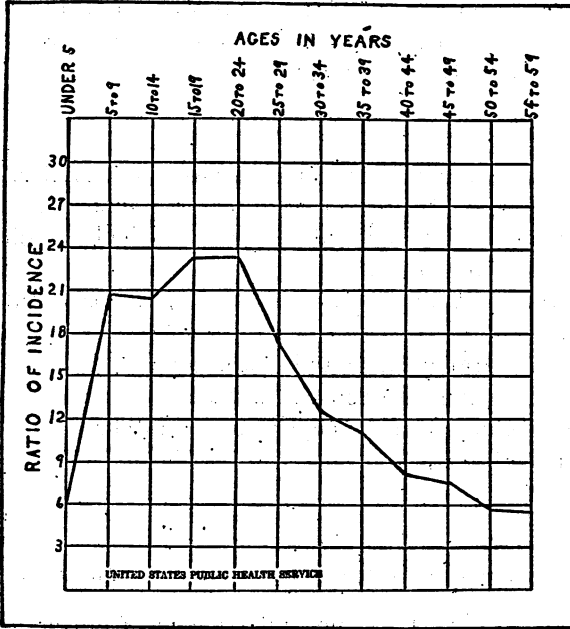


CHART 2.—Ratio of reported cases to population in each 5-year age group.

It is to be borne in mind that the figures and charts are based upon reported cases and that the distribution of such cases may vary to some extent from the distribution of the disease itself. It may be that typhoid fever is more generally recognized (possibly more readily so) between the ages of 5 and 25. It is within the bounds of possibility that the disease may exist to a greater extent than is indicated by the figures here given in other age groups, but not be so frequently recognized. If the disease is overlooked in this way, however, the probabilities are that it is in the age group under 5 years.

MALARIA CONTROL.

DRAINAGE AS AN ANTIMALARIAL MEASURE.

By J. A. A. LE PRINCE, Sanitary Engineer, United States Public Health Service.

Satisfactory drainage as applied to mosquito control is quite different from the usual meaning of the term "drainage." Lands drained for agricultural purposes not infrequently produce mosquito-breeding places.

For mosquito eradication, not only must the land be properly drained, but the drainage ditches must be so planned, constructed, and cared for that they will not become a source or propagating place of mosquitoes.

As a general rule shallow water is more favorable to mosquito production than deep water. A depth of an inch is sufficient; therefore, in order to prevent mosquito breeding we must remove all the water, or make conditions unfavorable.

Drainage.

The mistake is frequently made of constructing ditches chiefly for disposing of storm water, no provision being made for subsequent conditions when the normal water line is reached, which condition may favor mosquito propagation.

Drainage as an antimosquito measure may be discussed under the following heads:

1. Training natural streams and water courses.
2. Open ditches and intercepting ditches.
3. The installation of permanent lining in ditches.
4. Subsurface drains.
5. Filling.
6. Proper maintenance.

Training and Treatment of Small Streams and Natural Water Courses.

Many persons think that mosquitoes come from stagnant water only, but as a matter of fact mosquito larvæ are often found in large numbers in streams having a fairly good current. Of course, along the shallow banks of streams and irregularities in the course of streams where eddies may form, the velocity is markedly decreased. In most streams many places occur where the water is almost, if not absolutely, without current. It is in these places that mosquito propagation is found to occur.

A stream should be made to have steep banks directly above and below the flow line, uniform grade and width, and a straight course, and be free from grass, sticks, stones, or other obstructions that would interfere with the current. These conditions are seldom found in nature, but the nearer a stream approaches them the less will mosquito breeding be found.

Accordingly, we may straighten the course in places when this can be done advantageously, and regrade the bottom in parts, so as to confine the water course within narrow banks and insure an increase of the current even where the amount of water to be drained is low.

There are at times difficulties in effecting proper regrading, particularly at places where streams widen out. This may be overcome by reconstructing a channel with boards or stone and filling in behind

it. Sharp bends and places where storm water may scour out and erode the banks may be advantageously treated in this way.

When stone is used the crevices should be filled with small stone and roughly cemented over in order that no pockets or places will remain where water may collect protected against the natural enemies of mosquito larvæ, such as top-minnows, and from the current.

Where the bottom of the ditch is soft, so that there is a tendency to the formation of large pockets in the stream channel, stone may be rammed into place that will prevent further extension of the excavation.

It sometimes happens that soft rock or indurated clay occurs in the bed of a stream. This can be easily cut and a new channel made.

Natural water courses which dry soon after storms frequently have depressions or "pot holes" along their courses, where water may remain and thus produce favorable breeding places for mosquitoes. All such holes should be brought back to grade by filling in with stone so that the water will drain off. The top layer of stone should be well "chinked," tamped, and graded so that water will not remain on it, and be examined after one or two storms to correct any defect that may appear.

Use of Open Ditches or Drains.

There are two principles to be observed in the construction of ditches or drains for antimosquito work:

- (a) They should be as few as possible.
- (b) They should have clean-cut, sloping edges, narrow bottoms, and straight courses, if possible.

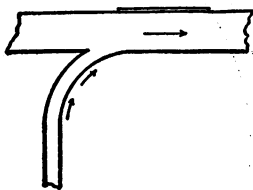


FIG. 1.—Junction of branch ditch and main ditch.

(a) The object to be attained must be kept in mind. Where ditching is required for removal of water, the location to be drained, the fall, and direction should be considered in order that there may be as few and short ditches as possible. This will make for a reduction in first cost, and, especially, for maintenance.

Construct the main ditch first, then install the laterals. A few rain showers may indicate where additional ditches are essential. If there is any doubt as to the necessity for cutting some lateral ditch, do not install it.

(b) Having determined on the location of the ditches, the lines should be marked by stakes, and a cord used in the field in order that the laborers may dig true to line. Sharp bends should be avoided wherever possible. Branch ditches should join main ditches at an acute angle or curve in order to lessen depositing of silt, sand, and debris at the junction point. (See fig. 1.)

In average soils the slopes of the sides of ditches should be about 45°. In sand and soft mud the slope is flatter, while in hard clay

and soft rock it may be almost vertical. In cases where ditches are run across the slope of a ridge the upper side of the ditch must be flatter than the lower side, if there is underground water close to the surface.

For constructing small ditches a tiling spade should be used for finishing off and cutting the bottom. The bottom of a ditch should be made narrow to insure rapid flow. It is more advantageous to have a normal water flow confined within narrow banks and consequently a greater depth of water. This will favor a more rapid current and lessen the possibility of the formation of shallow side pools or pockets.

Where pipe is to be installed in a portion of a ditch, as is the case in constructing a culvert at a road crossing, there the grade of the ditch should be increased; otherwise sedimentation of silt or other materials is likely to take place and cause an obstruction to the current. A screen of vertical rods should be provided at the entrance of such pipe, and at the point of discharge the bottom of the earth ditch should be lined for a distance of about 6 feet with flat stone or lumber, so as to prevent erosion and the formation of a pocket.

Permanent Lining of Ditches.

The lining of ditches is employed in cases where maintenance of open earth ditches is expensive.

Lined ditches are more permanent, easily cleaned, require less inspection, and are ultimately less costly. At some of the settle-

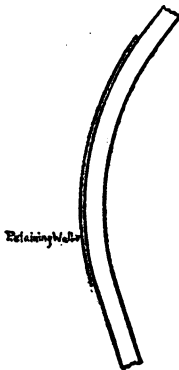


FIG 2.—Retaining wall used at sharp curve of concrete-lined ditch.

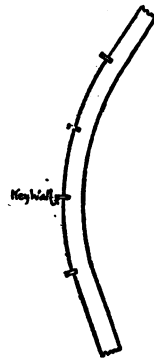


FIG. 3.—Key walls used at outside edge of sharp curve of concrete-lined ditch. To prevent storm water leaving ditch.

ments in the Panama Canal Zone it was found that a large saving was made by lining certain ditches and parts of ditches with concrete as against repeated regrading, cleaning, and oiling of open earth ditches.

The materials which may be used for lining are concrete, stone with cement mortar, or lumber; the two former, of course, being more expensive but more permanent in character.

It is not always necessary to line the entire ditch. The lining of the bottom and sides up to 3 inches above the normal water line for small ditches will answer all purposes. It is not essential that the lining have a smooth or fancy finish, which adds to the cost. A ditch may be roughly lined with flat stone, chinking in the interspaces with small stone and then sealing this roughly with cement mortar.

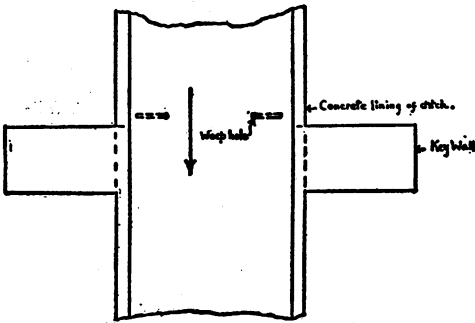


FIG. 4.—Plan of key wall.

by storm water, particularly at sharp curves or bends of ditches, the outer wall lining should be raised to meet the condition, or the ditch may be widened, or key walls installed. (See figs. 2 and 3.) Key walls are also applicable and will prevent the side scour and under scour of linings of straight ditches of heavy grades. The key wall should extend 6 inches to a foot or more into the ground below the bottom ditch lining. (See figs. 4 and 5.) Branch ditches should enter lined ditches at an acute angle or on a curve with a sharp grade near the junction. (See figs. 1 and 6.) In all cases weep holes, or seepage holes, sloping toward the center or bottom of the ditch and located just above the key wall, should be provided.

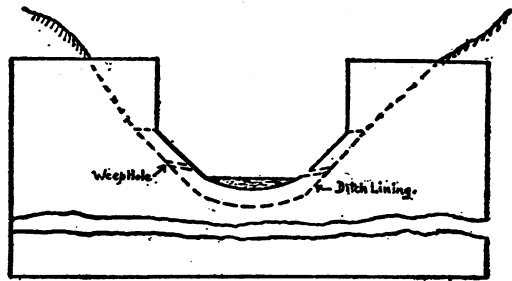


FIG. 5.—Cross section of key wall

This is required to prevent the effect of currents which may be under or behind the concrete ditch lining. (See figs. 4 and 5.)

Weep holes should be made in side walls before the concrete has set. They should be used wherever water might be behind the lining.

When larger ditches, of 24 inches width or more, are lined, then the side walls should be higher and proportionally thicker.

V-shaped linings are undesirable. As a rule, linings should be U-shaped with sloping sides. (See figs. 5, 6, and 7.)

In wide ditches the bottom should slope toward the center and the side walls may often be almost vertical.

Subsoil Drainage.

Drain tiles are used for this purpose, ranging in size from 3 inches to 12 inches in diameter and in 1 and 2 foot lengths. Such tiling is placed underground, end to end, and covered with earth.

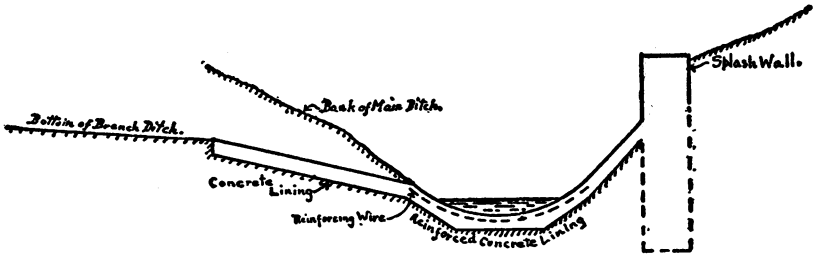


FIG. 6.—Cross section showing junction of concrete-lined ditch and a branch ditch.

Subsurface drainage, in connection with mosquito control, is used for two purposes:

(a) To lower the water table or ground water so that pools of surface water will be absorbed more rapidly by the soil.

(b) To intercept seepage planes and prevent seepage water from hillsides reaching and collecting on the surface of the ground.

(a) Where tiling is used for lowering the water table, the tile lines are located up and down the slope and generally spaced from 50 to 150 feet apart, according to depth, character of soil, and local conditions. When laid within 2 feet of the surface the parallel lines may in some instances have to be as close as 20 feet apart. As a rule, tile laid near the surface drains surface water more rapidly than if laid deeper, but does not drain as large an area.

From 2 to 4 feet is the depth generally used.

Very flat grades are permissible if the work is well executed by experienced tile layers, but where grade is available a slope of 12 inches or more per 400 feet is desirable. The tiles are laid in the bottom of a perfectly graded



FIG. 7. Concrete lining in ditch bottom.

narrow trench, so that the ends abut each other closely, and are then covered with clay or earth. Tile lines discharging into streams or ditches should be so planned as to have the outlet above high water.

This method of drainage is extensively used for agricultural purposes. It aerates the soil, increases its fertility, and removes the water standing on the surface.

(b) In using tile drainage for intercepting seepage, a different principle is involved.

Underground water will frequently seep to the surface and form wet areas. These are termed "seepage outcrops," and may be found on hill sides, near the base of hills, and in valleys.

In placing or using tile for intercepting this underground flow of water, the ditch is located above the line of outcrop at time of maximum flow, approximately at right angles to the flow, and given a



FIG. 8.—Cross section intercepting tile drain.

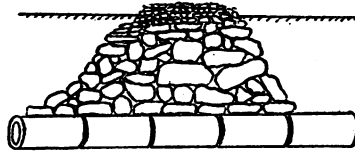


FIG. 9.—Longitudinal section intercepting tile drain.

grade of not less than one-half of 1 per cent or 1 foot in 200 feet. The tile is to be laid with open joints, or about $\frac{1}{8}$ to $\frac{1}{4}$ inch apart, and the trench filled in with such stone as may be available. The layer of stone close to the ground surface should be made of small-sized stone and should extend 2 or 3 inches above the surface. (See figs. 8 and 9.) Branch tile lines should join main line at an acute angle or on a curve. (See figs. 10 and 11.) This form of tile drain is

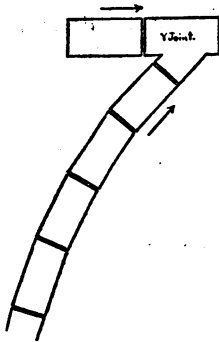


FIG. 10.—Plan of junction of tile lines.

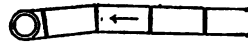


FIG. 11.—Side view. Junction of two tile lines showing "Y joint" and grades.

designed to be used only when the lands above it are covered with vegetation.

It is not intended that open ditches, house drains, or waters heavily charged with sediment shall discharge into or on to this type of drain.

All subsurface tiling should, of course, be protected where traffic or roads pass over it.

Inspections should be made to see that the outlets do not become clogged with silt or other form of deposit. Several metal rods

placed vertically at the outlet will prevent access of small animals which might die in the tile line. The outlet must be so located that it will at all times discharge freely. (See figs. 12 and 13.)

The advantage of subsurface drain, as compared to the open ditches, is that it is self-cleaning, maintains itself, permits of rapid inspection, needs very little attention, requires no oiling, and permits of no exposure of water accessible to mosquitoes.

Filling.

Collections of water that can not be economically drained should be filled when practicable. This may often be accomplished to advantage by the oiling squad when maintenance work is temporarily

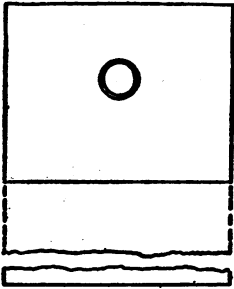


FIG. 12.—Wall at outlet of tile drain.

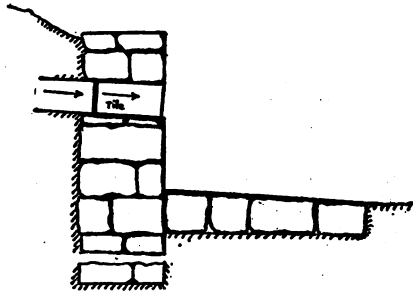


FIG. 13.—Cross section of outlet of tile drain.

reduced. Wet areas that are most expensive to control properly should be eliminated first.

Shallow water in areas that are too low to be drained is concentrated by filling, and the remaining body of water is easier to control. Areas kept wet by seepage water can seldom be satisfactorily treated by making a shallow fill of earth.

In making fills with earth or clay, care is taken not to leave depressions on the surface of the fill that may hold water, and the bottoms of "borrow pits" should be made self-draining. Fills made of waste should not be so left that water containers, such as tin cans, etc., are left exposed.

Porous material, such as cinders, are very good for filling ground. In the vicinity of lumber mills, waste, sawdust and shavings are available in quantity, and when used for filling should extend several inches above the surface of the ground.

Maintenance of Ditches.

Ditches that are properly maintained are those which are kept in proper condition and free from mosquito larvæ at the lowest cost.

Due to local topography, character of soil, depth, presence of vegetation, etc., some open ditches or parts thereof may be relatively expensive to maintain.

Obstructions, rough banks which are out of alignment, silting of channels near ditch junctions, vegetation in the ditch or extending into the water from the banks, and algæ, all assist in forming suitable resting or hiding places for mosquito larvæ.

Ditches should be kept to the established grade and of proper cross section, free of obstructions, vegetable growth, and algæ. They should be treated with oil, larvacide, or copper sulphate when and where necessary. Copper sulphate is used for destroying algæ. They should be inspected at proper intervals. The cleaning and grading must be so performed as to interfere as little as possible with the established grade and cross section. The work must be performed with particular care where the ditch is in soft ground.

In dry periods a ditch may become a series of stagnant pools. A small temporary channel may then be made to concentrate and drain off this water. For this purpose a tile spade or hoe is used to advantage. When conditions allow, a channel on a muddy bottom may be rapidly made by dragging a small log or other suitable object downstream in the ditch bed.

Sharp rains will destroy these temporary ditches in soft material and growth of vegetation will become troublesome.

When the banks of streams in pastures are flat and soft both above and below the flow line, hoof-print impressions are made by cattle if not guarded against. The stream should be protected by a fence where necessary. A barrel without bottom may be installed at a place where it will remain filled with water for the stock to drink.

In the spring of each year all ditches and propagation areas should be put in proper condition before the first new crop of mosquitoes appears.

The inspector who is to direct the field work should be carefully selected. He must be relied upon to make frequent and thorough inspection of all parts of ditches, and his judgment is often to be accepted as to the relative importance of work to be done. He must see that all defects are promptly corrected, that work be both thorough and as inexpensive as conditions allow, and that no mosquito larvæ mature. His work is not easy. Unless he is deeply interested in the work his services will be of little value. Much better results may be obtained if the person in charge of the mosquito control shows that the efforts of the inspector are being recognized. It is a part of the inspectors' duty to so train the laborers that they will not make the usual mistakes of excavating below grade, placing excavated material on the high side of ditches, widening ditches, allowing defects to pass unnoticed, etc.

Records of work performed, material expended, etc., should be properly tabulated and kept up to date. Reference to the working

map on which all propagation areas are marked and numbered, and to cost-sheet records, will indicate whether any change of method of procedure is advisable and whether or not the work is more costly than is necessary. These records will also enable the health officer in charge to make improvements intelligently.

Campaigns for mosquito control in any locality will generally succeed or fail according to whether or not the person or persons directing the work take the trouble to understand and become interested in the details pertaining to the field work. Much depends upon the frequent and intelligent inspection of the work as actually being done in the field. Some mosquito-control work has been undertaken which would have been far more successful if those directing the work had spent more time out in the field where the work was thought to be progressing satisfactorily. The officers who direct mosquito control, in considering costs must keep in mind the unit and total cost of the work during a long or definite period of time and not think only of the present season.

RAT PROOFING THE PUBLIC DOCKS OF NEW ORLEANS.

A REPORT ON ITS POSSIBILITY AND COST.

By H. P. LETTON, Sanitary Engineer, United States Public Health Service.

The State of Louisiana has taken over practically the entire river front of New Orleans for the good of the general public. The control of this property is vested in the Board of Commissioners of the Port of New Orleans, popularly known as the Dock Board. This board has very extensive powers. It may issue bonds for the construction and operation of warehouses, wharves, and landings, may expropriate property, and in short may take any practical and necessary step for increasing the efficiency and economy of the port's facilities. The board is appointed by the governor and serves without pay.

The public wharves extend from Louisiana Avenue to Pauline Street, their total length being 4.82 miles. They are continuous except for ferry landings at Esplanade Avenue, Canal Street, Terpsichore Street and Jackson Avenue, these breaks aggregating 0.30 miles. In about three-fourths of their length the wharves are covered by steel sheds, which have an aggregate length of 3.77 miles. These sheds rest either wholly on the wharf proper or partly on the wharf and partly on the land back of the wharf. Above Louisiana Avenue and extending to Napoleon Avenue, a distance of about a mile, are the Stuyvesant Docks owned by the Illinois Central Railroad. These docks are discussed in a separate report. Above Napoleon Avenue there are being constructed a reinforced concrete wharf

and cotton warehouses, which will form part of the public dock system.

The wharves proper are built on the river slope of the levee and consist of a timber floor resting on a piling substructure. The floor of the wharf is about 19 feet above mean low water. At the rear of the wharf is a sheet piling bulkhead 8 inches in thickness and extending to a depth from the wharf floor of from 20 to 40 feet. This bulkhead acts as a wave breaker to prevent washing of the levee and as a retaining wall to support an earth fill in the rear of the wharf. With the exception of the floor planking on all the wharves, all but 0.46 mile are built of creosoted material. In the rear of the bulkhead the floor is built of untreated material, and for the most part rests on timber cribs which raise it about 2 feet above the ground. In many cases, however, the floor rests directly on the ground, being fastened to sills imbedded in the earth. In most of the sheds the earth fill behind the bulkhead comes very near the floor elevation, but in a few cases there is a depth of from 10 to 15 feet next to the bulkhead, and the ground slopes back a distance of about 40 feet before reaching a point near the floor level. The distance from the floor to the earth in front of the bulkhead, known as the "batture," varies from 4 to 18 feet. Along the greater part of the wharves, however, it is from 10 to 15 feet. A clear idea of the construction can be obtained from drawing 1.

The space below the floor behind the bulkhead constitutes almost an ideal rat harbor. It is dry and dark, which makes it favorable for the harboring and breeding of the *Mus norvegicus*. The floor is for the most part laid with three-fourths-inch openings between the boards. In many cases these openings are larger, and throughout the whole system of shed floors there are thousands of convenient holes which will allow the passage of rats to the floor of the sheds. Along the rear of the sheds there is an open space, as shown in figure 1. In several of the sheds sloping driveways lead in from the street, and these are also open at the sides. The supply of food is abundant. Numerous commodities, such as flour, oil cake, rice, wheat, and other grains are handled in sacks. These sacks are continually being broken or torn by hooks, and much food falls through the cracks in the floor to the ground beneath. At the Erato Street, Press Street, and Pauline Street sheds large quantities of fruit, mostly bananas, are handled, and there is a considerable waste, which forms food for rats. The space below the floor is of special importance as regards plague, as the large amount of dusty matter there is ideal for the breeding of fleas.

At those docks having the shed entirely on the wharf the only harboring places for rats are in the earth behind the bulkhead or in openings around where the bulkhead joins the floor.



FIG. 1.—TYPICAL WHARF AND SHED AS SEEN FROM RIVER.

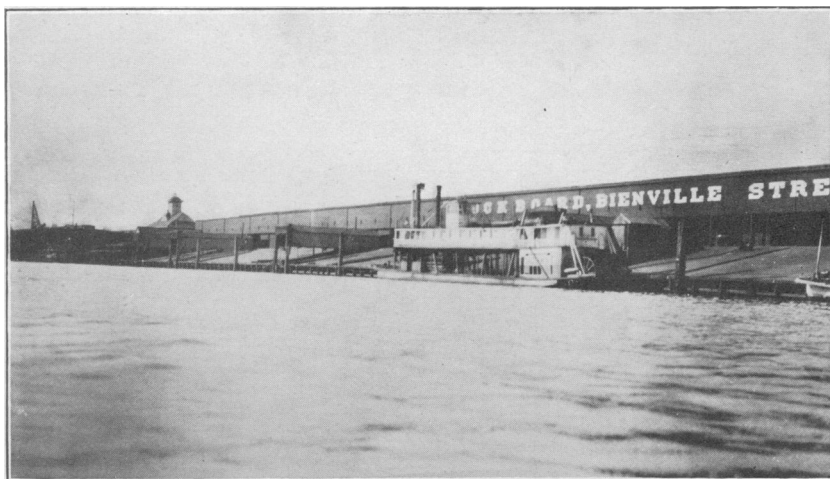


FIG. 2.—APRON OR STEAMBOAT WHARF.

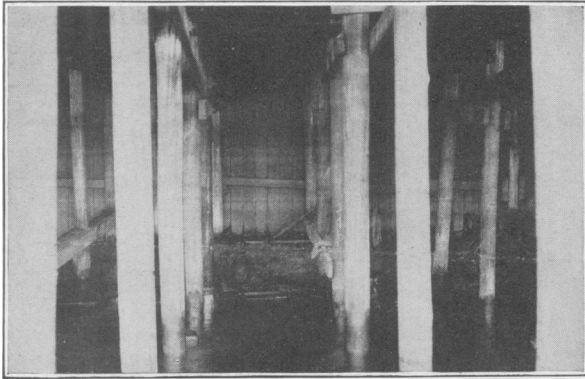


FIG. 3.—VIEW BENEATH WHARF SHOWING PILING, BULKHEAD, AND BATTURE.

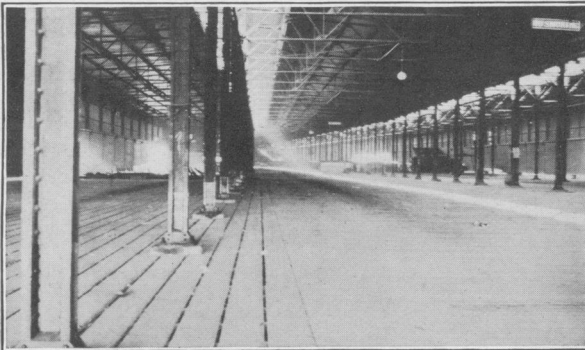


FIG. 4.—INTERIOR VIEW OF SHED SHOWING OPENINGS IN FLOOR. THE BULKHEAD IS ON THE RIGHT SIDE OF THE DRIVEWAY NEAR THE ROW OF COLUMNS.

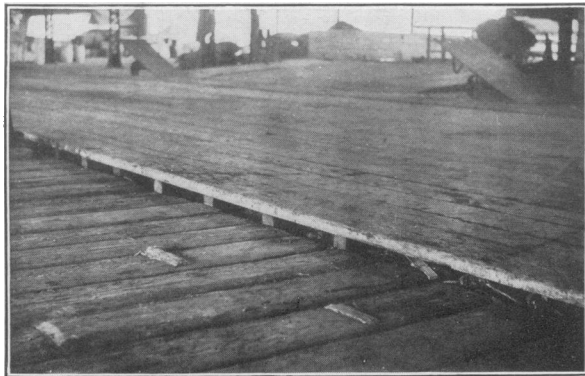


FIG. 5.—VIEW SHOWING OPENINGS IN SHED FLOOR.

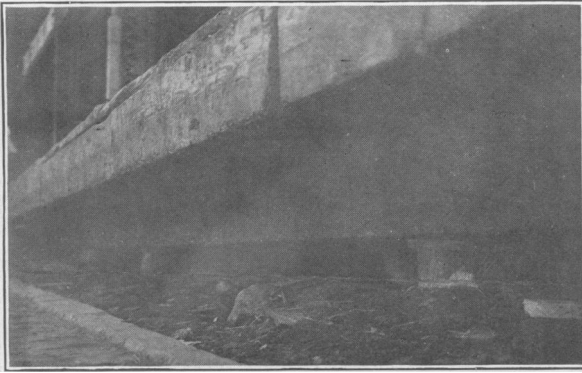


FIG. 6.—REAR OF SHED SHOWING OPENINGS BENEATH FLOOR.

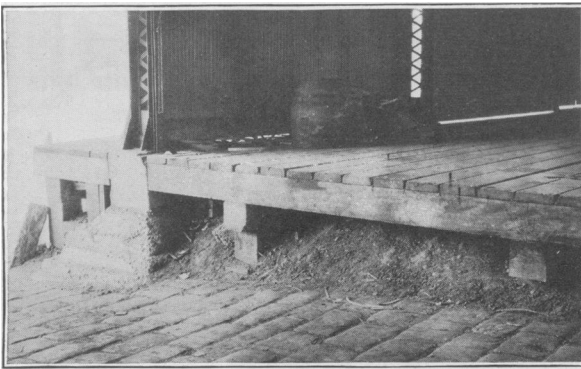


FIG. 7.—DRIVEWAY SHOWING OPENING BENEATH FLOOR.

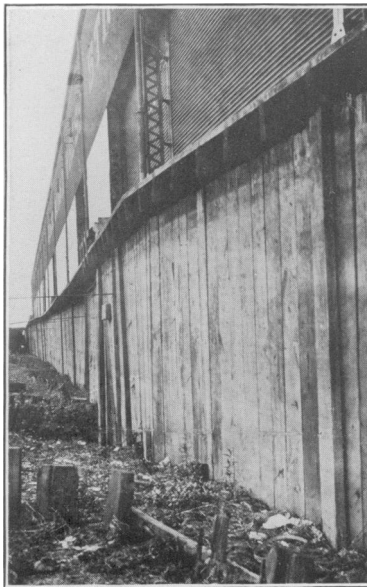


FIG. 8.—BULKHEAD IN REAR OF PRESS STREET DOCK, SHOWING IRREGULARITIES DUE TO EARTH MOVEMENT.

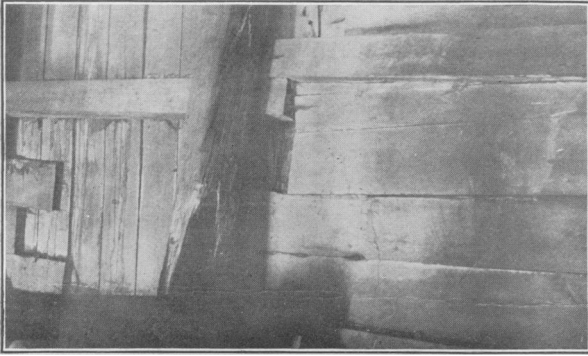


FIG. 9.—VIEW SHOWING PATCHED AND ROTTED CONDITION OF DUMAINE STREET BULKHEAD.

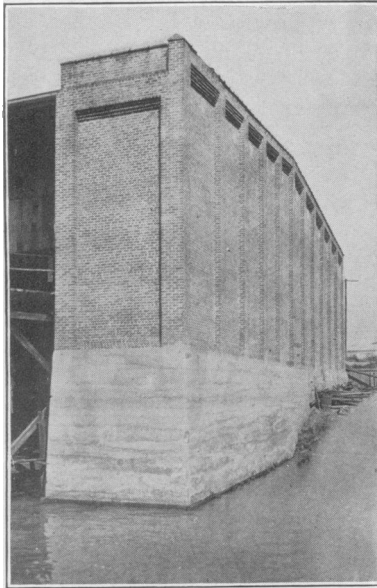
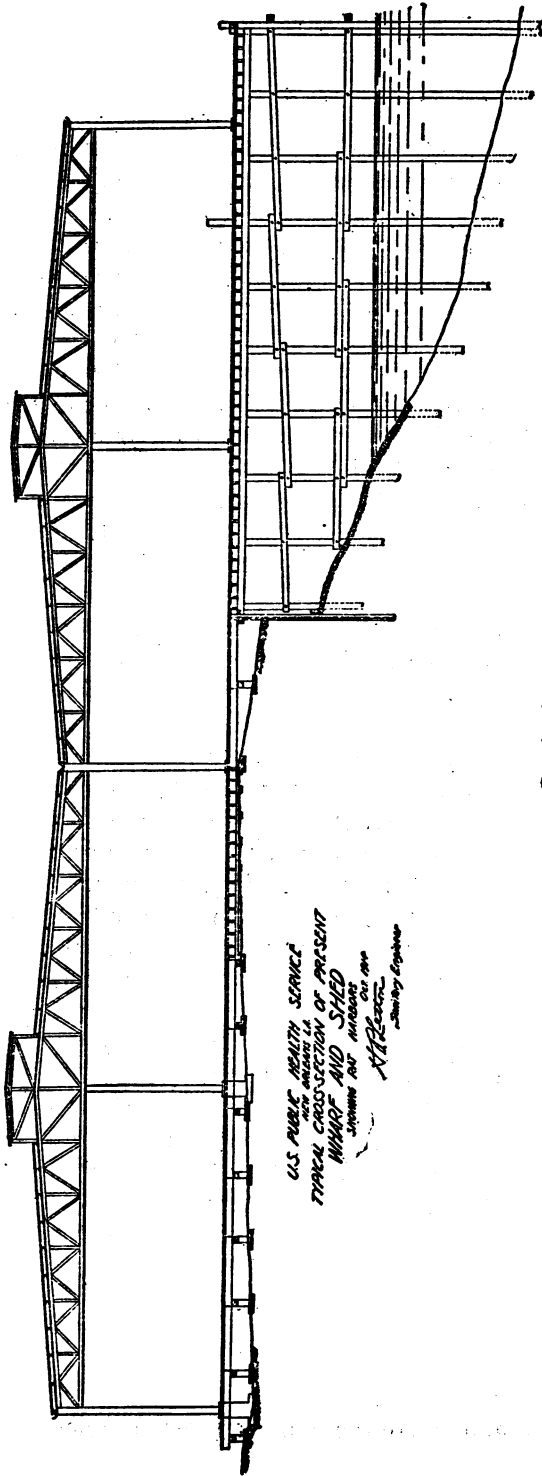


FIG. 10.—FIRE WALL AT LOWER END OF STUYVESANT DOCKS. THIS IS A GRAVITY CONCRETE WALL SUPPORTED ON PILING.



U.S. PUBLIC HEALTH SERVICE
NEW BRUNSWICK, N.J.
TYPICAL CROSS SECTION OF PRESENT
WHARF AND SHED
JANUARY 20, 1918
M. E. GIBSON
Civil Engineer

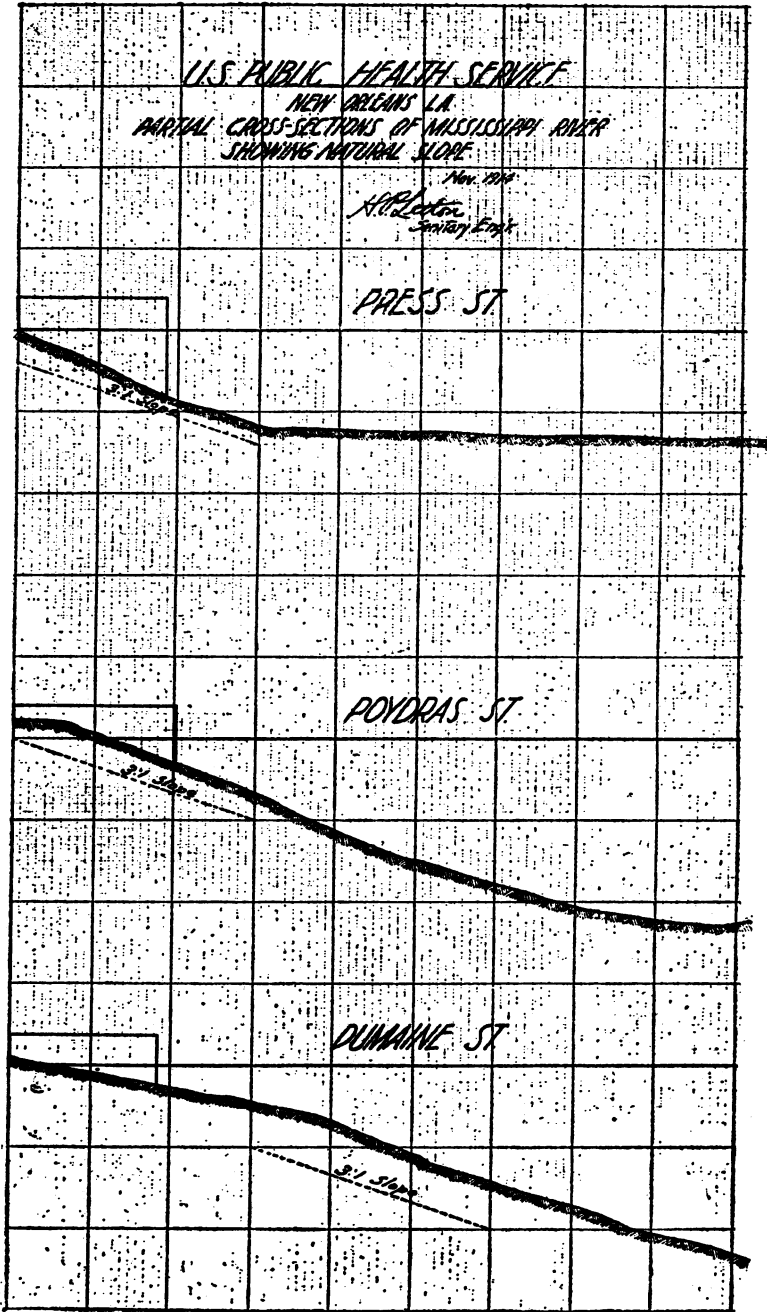
Drawing 1.

As a general rule, rats will not burrow in the batture because it is generally quite wet or muddy. In a few cases, however, the batture runs to within a few feet of the floor, and in such cases it is dry except during extreme high water, and undoubtedly harbors some rats. In other cases there is an old bulkhead in front of the present one, extending several feet above the batture, and the earth between these bulkheads probably contains rats.

The necessary steps for making the docks practically rat proof are self-evident, and it is only the ways and means which require discussion. The essential factors are as follows: (1) The space beneath the floor back of the bulkhead must be eliminated and a rat-proof floor and protecting wall along the rear constructed. (2) There must be a rat-tight bulkhead making a tight fit with the floor. (3) The floor of the wharf proper out to the edge of low water should be made tight. (4) Rat-proof walls should be constructed at the ends of certain wharves from the bulkhead to low water to prevent the access of rats beneath the wharf except by going over the face.

It became evident early in the investigation that most of the work which would be required in the rat proofing of the wharves would be of great economic value to them. The wooden floors behind the bulkhead have a relatively short life. In fact, in a few sheds where the floors were laid on mud sills only four years ago they have become so rotten that the renewal of large areas is necessary. By replacing the present floor with one of concrete or asphalt the initial cost would be greater, but the annual cost would be much smaller. The fire risk would also be considerably decreased, as the only easily combustible material would be the wharf proper. Another fact of extreme importance to the shippers is the lessened cost of handling freight over smoother floors. In many places where at present three men are required to move a truck, two would be sufficient with smooth floors. As proof of this saving it may be said that following the rat proofing of a railroad warehouse by the installation of a concrete floor, the official in charge stated that there would be a saving of \$5,000 per year in labor of handling freight. Since the cost of the work was only \$10,000, its saving can easily be seen. Another point of special importance to shippers is the fact that there would be much less loss of material with tight smooth floors than with the present ones. That this loss is an important one can be seen by going beneath the Poydras Street Dock after one or more coffee ships have unloaded their cargo. A concrete or asphalt floor could be easily swept or washed clean and would not be dusty, as are the present floors.

The problem of putting into the dock structures any permanent and nonelastic substance, as concrete, is greatly complicated by the fact that the foundations are extremely unstable. The docks, as stated, are built on the river slope of the levee. The soil is alluvium, which is extremely fine and which when saturated with water takes



Drawing 2.

on the characteristics of a liquid. Its natural slope is about 3 : 1, as is seen from the cross sections shown in drawing 2. During periods of high water the current beneath the wharves is practically nil, and at such times there is a large amount of sediment deposited at that point. When the river falls, this deposited material tends to take on its natural slope, with the result that the wharf itself is sometimes moved out. The greater part of the piling, being unbraced for half or more of its length, has very little power to resist a lateral movement. This tendency to move is very much aggravated by the fact that in most of the wharves the earth behind the bulkhead is piled almost to the floor level, thus making the bulkhead act as a retaining wall. Following a period of high water, when the fill behind the bulkhead is saturated with water, the outward pressure on the bulkhead which is counteracted by the wharf is very great.

That there has been a movement of this kind at some of the docks is very evident, its effect being most noticeable at the Press Street, Toulouse Street, Celeste Street, and Mandeville Street sheds.

It is evident that, in order to prevent the movement of the wharves, either the bulkhead must be tied back to the levee so as not to press against the wharf or the load must be removed from the bulkhead by excavating in the rear.

The present bulkhead is for the most part in good condition, and except for occasional openings where an old pile or other obstruction was encountered in driving it is practically rat proof, since a rat will not gnaw through 8 inches of wood. Keeping in mind, however, the idea of permanent construction, an investigation was made as to the feasibility of a concrete bulkhead. Because of the nature of the problem it was thought probable that some form of reinforced-concrete sheet piling would be the most feasible type of construction to serve the purpose. Piling of any kind can not be used for replacing the present bulkhead because the sheds do not give sufficient headroom for driving. At those wharves where the bulkhead is in poor condition, as at Dumaine Street, it will shortly be necessary to remove the shed and rebuild the entire wharf, and at such points a concrete bulkhead could be used if its construction is possible from an economic standpoint.

A complete study of the possibilities of concrete sheet piling was made, and it was found that the construction of a stable wall of this kind was out of the question because of its cost. The design of a gravity wall of plain concrete supported by wooden piling cut off below the low-water line, similar to the fire walls at the Stuyvesant Docks, was then considered, and it was found that a wall of this kind could be built for about three to four times the cost of constructing the present type of bulkhead. Although a wall of this type would be practically permanent, while the present type has a life of

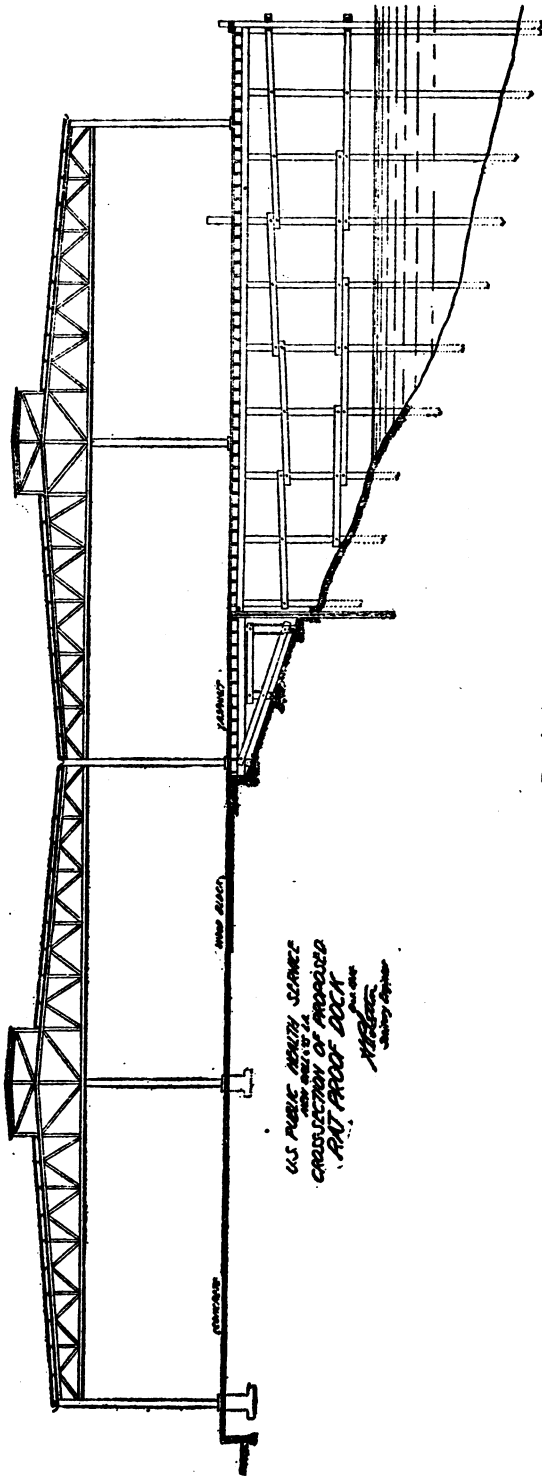
only about 30 years, the annual cost of interest plus sinking fund would be considerably greater.

If we assume that the present bulkhead is to be left intact, as must be the case at present at most of the docks, then the problem of removing the load from it must be taken up. The plan proposed for this was suggested by the engineer of the Dock Board, but his idea has been more or less modified by the writer to make it conform to rat-proofing requirements. It is in brief as follows: Next to the bulkhead the earth is to be removed for a depth of about 12.5 feet and from here is to slope back on a 3:1 grade, a horizontal distance of 30 feet. This excavation will in almost every case reduce the lateral thrust on the bulkhead and wharf to a negligible amount. It is proposed that on this slope there be constructed a framed timber structure in bents 10 feet apart resting on timber spread-footings; this structure to be built wholly of creosoted material and to be well braced. The details of the bents are shown in drawing 3. It is proposed that on the floor which covers the substructures there be laid a coating of asphalt or mastic approximately 2 to 2.5 inches thick which shall have its top at the same elevation as the floor of the present wharf, and which shall make a tight joint with this floor and with the top of the bulkhead. In lieu of using asphalt the Dock Board prefers to use wood blocks creosoted by the Reuping process. The reason for this change is that there is some difference of opinion about the lasting quality of the asphalt.

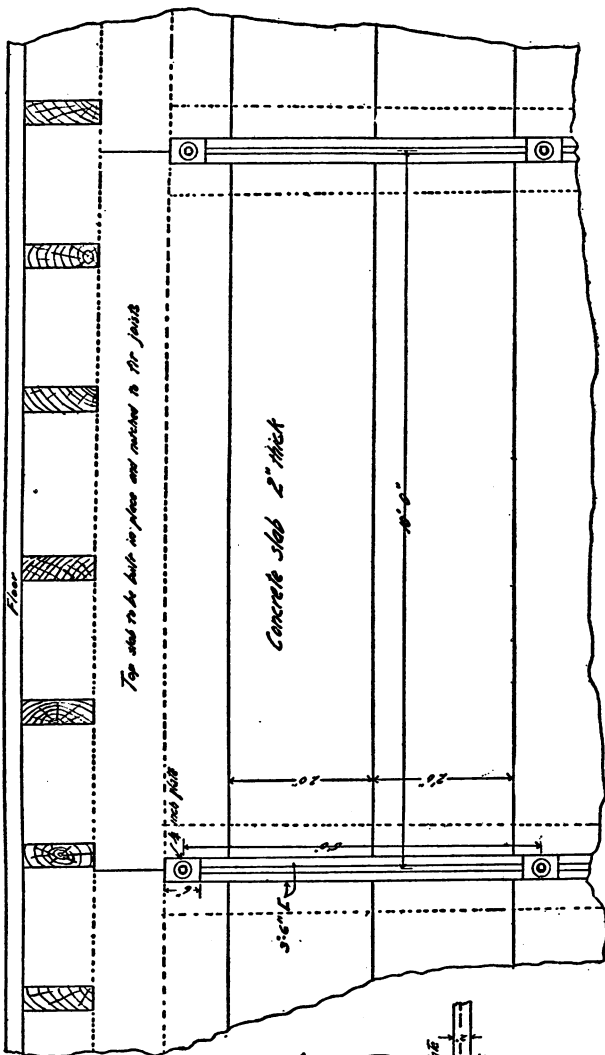
Along the land side of this structure there is to be a concrete wall extending from the floor level to a depth of about 2 feet below the surface of the earth, as shown in drawing 3. At the ends of each shed the earth is not to be excavated the full depth, but will slope on a 3:1 grade toward the center of the shed until it merges with the regular excavation. At the ends of the shed a wall similar to that behind the timber framework will run from that wall to the bulkhead and will make a tight joint with it. This construction will make a closed box which will be rat-tight. By dividing it by light cross walls into sections it could be easily fumigated at any time desired, thus killing all rats which had effected an entrance in any manner.

It is proposed to construct a concrete wall extending from the floor level to 2 feet into the ground along the ends and rear of the sheds, this wall also to extend in along the sides of any sloping driveways. The area between these walls and the wall back of the timber structure is to be filled with earth, and on this is to be laid a floor of concrete or asphalt macadam. It is proposed to lay a driveway through the length of the shed of creosoted wood blocks on a concrete base.

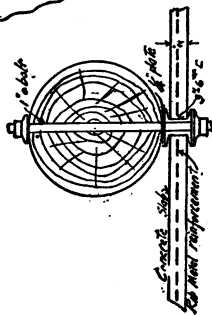
A cross section of a dock reconstructed in accordance with the foregoing plan is shown in drawing 4.



Drawing 1.



U.S. PUBLIC HEALTH SERVICE
 NEW DRAWING IN
 PROPOSED CURTAIN WALL
 AT ENDS OF WARDENS
 Nov 1914
 H. R. R. R.
 Sanitary Engineer



Drawing 5.

In order to prevent to a large extent the access of rats to the bature in front of the bulkhead, there should be constructed curtain walls at the ends of certain wharves. It is proposed for this purpose to use thin slabs of reinforced concrete held in place by I beams, as shown in drawing 5.

The following table gives the estimated cost of rat proofing the entire water front which is served by the public wharves:

Name of dock.	Estimated cost.	Name of dock.	Estimated cost.
Pauline Street.....	\$1,718.64	Julia Street.....	\$100,663.00
Louisa Street.....	6,598.90	St. Joseph Street.....	4,774.00
Clouet Street.....	66,951.72	Erato Street.....	12,211.32
Press Street.....	200.00	Robin Street.....	105,547.25
Mandeville Street.....	6,581.66	Celeste Street.....	55,383.91
Governor Nicholls.....	330.00	St. Andrew Street.....	4,891.31
Lugger Landing.....	4,196.28	First Street.....	95,594.91
Dumaine Street.....	119,066.77	Sixth Street.....	53,130.45
Toulouse Street.....	28,545.13	Eighth-Harmony.....	75,079.86
Blenville Street.....	11,497.81		
Poydras Street.....	42,394.10	Grand total.....	817,467.27
Girod Street.....	31,188.19		

Conclusions and Recommendations.

From what has already been said it is believed that the public docks of the city of New Orleans, La., can be treated in such a manner that they will be for all practical purposes rat proof. The cost of the work will not be excessive. Almost all of the necessary changes will be of material benefit in other ways than rat proofing and will greatly enhance the value of the docks. A considerable part of the work would have to be done ultimately regardless of necessity for rat proofing.

It is recommended that the work be urged as fast as conditions will permit, and that the reconstruction be begun at those docks over which most of the foodstuff is handled.

PLAGUE-PREVENTION WORK.

CALIFORNIA.

The following report of plague-prevention work in California for the week ended January 30, 1915, has been received from Passed Asst. Surg. Hurley, of the United States Public Health Service, in charge of the work:

San Francisco, Cal.

RAT PROOFING.

New buildings:	
Inspections of work under construction..	278
Basements concreted (25,517 square feet).....	39
Floors concreted (19,606 square feet)....	26
Yards, passageways, etc. (21,526 square feet).....	91
Total area of concrete laid (square feet)..	67,649
Class A, B & C (fireproof) buildings:	
Inspections made	40
Roof and basement ventilators, etc., screened.....	1,855
Wire screening used (square feet).....	9,000
Openings around pipes, etc., closed with cement.....	7,531
Sidewalk lens lights replaced.....	3,400
Old buildings:	
Inspections made.....	545
Wooden floors removed.....	43
Yards and passageways, planking removed.....	18

Old buildings—Continued.

Cubic feet new foundation walls installed.....	8,764
Concrete floors installed (33,719 square feet).....	53
Basements concreted (14,450 square feet).....	27
Yards and passageways, etc., concreted (17,655 square feet).....	85
Total area concrete laid (square feet).....	70,823
Floors: rat proofed with wire cloth (10,673 square feet).....	10
Buildings razed.....	22
New garbage cans stamped approved.....	130
Nuisances abated.....	330

OPERATIONS ON THE WATERFRONT.

Vessels inspected for rat guards.....	24
Reinspections made on vessels.....	12
New rat guards procured.....	9
Defective rat guards repaired.....	1
Vessels on which cargo was inspected.....	2

	Condition.	Rat evidence.
Steamers President and Queen, from Seattle: 210 cases salmon, milk, maple sir-up, household goods, etc..... 800 sacks flour, wheat, meal, hickory nuts, and potatoes. ¹	O. K.	None.

¹ Evidence of rats found in potatoes.

Rats trapped on wharves and water front.....	26
Rats trapped on vessels.....	18
Traps set on wharves and water front.....	168
Traps set on vessels.....	60
Vessels trapped on.....	11
Poisons placed on water front (pieces).....	3,600
Bait used on water front and vessels, bacon (pounds).....	6
Amount of bread used in poisoning water front (loaves).....	12
Pounds of poison used on water front.....	6

RATS COLLECTED AND EXAMINED FOR PLAGUE.

Collected.....	231
Examined.....	213
Found infected.....	0

RATS IDENTIFIED.

Mus norvegicus.....	84
Mus rattus.....	63
Mus alexandrinus.....	53
Mus musculus.....	31

Squirrels collected and examined for plague.

Contra Costa County.....	31
San Benito County.....	8
Alameda County.....	1
Total.....	40

Ranches inspected and hunted over.

Contra Costa County.....	10
San Benito County.....	3
Total.....	13

Record of plague infection.

Places in California.	Date of last case of human plague.	Date of last case of rat plague.	Date of last case of squirrel plague.	Total number rodents found infected since May, 1907.
Cities:				
San Francisco.....	Jan. 30, 1908	Oct. 23, 1908	(¹)	398 rats.
Oakland.....	Aug. 9, 1911	Dec. 1, 1908	(¹)	126 rats.
Berkeley.....	Aug. 28, 1907	(¹)	(¹)	None.
Los Angeles.....	Aug. 11, 1903	(¹)	Aug. 21, 1903	1 squirrel.
Counties:				
Alameda (exclusive of Oakland and Berkeley).....	Sept. 24, 1909	Oct. 17, 1909 ²	Aug. 7, 1914	286 squirrels, 1 wood rat.
Contra Costa.....	May 17, 1914	(¹)	Oct. 23, 1914	1,565 squirrels.
Fresno.....	(¹)	(¹)	Oct. 27, 1911	1 squirrel.
Merced.....	(¹)	(¹)	July 12, 1911	5 squirrels.
Monterey.....	(¹)	(¹)	Apr. 10, 1914	6 squirrels.
San Benito.....	June 4, 1913	(¹)	Sept. 26, 1914	36 squirrels.
San Joaquin.....	Sept. 18, 1911	(¹)	Aug. 26, 1911	18 squirrels.
San Luis Obispo.....	(¹)	(¹)	Jan. 29, 1910	1 squirrel.
Santa Clara.....	Aug. 31, 1910	(¹)	July 23, 1913	25 squirrels.
Santa Cruz.....	(¹)	(¹)	May 17, 1910	3 squirrels.
Stanislaus.....	(¹)	(¹)	June 2, 1911	13 squirrels.

¹ None.² Wood rat.

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

LOUISIANA—NEW ORLEANS.

The following report of plague-prevention work at New Orleans for the week ended February 6, 1915, has been received from Surg. Corput, of the United States Public Health Service, in charge of the work:

OUTGOING QUARANTINE.		DESTINATION AND NUMBER OF RAILROAD CARS INSPECTED FOR WEEK ENDED FEB. 6—CON.	
Vessels fumigated with sulphur.....	46	Carolina, North.....	10
Vessels fumigated with carbon monoxide....	21	Carolina, South.....	4
Vessels fumigated with hydrocyanic gas....	1	Colorado.....	15
Pounds of sulphur used.....	5,477	Florida.....	41
Coke consumed in carbon-monoxide fumi- gation (pounds).....	40,500	Georgia.....	32
Pounds of potassium cyanide used in hydro- cyanic-gas fumigation.....	102 ¹	Idaho.....	1
Pounds of sodium carbonate used in hydro- cyanic-gas fumigation.....	120	Illinois.....	185
Pounds of sulphuric acid used in hydro- cyanic-gas fumigation.....	104	Indiana.....	27
Clean bills of health issued.....	33	Iowa.....	5
Foul bills of health issued.....	8	Kentucky.....	11
OVERLAND FREIGHT INSPECTION.		Louisiana.....	963
Cars inspected, found in good order; per- mitted to load.....	2,473	Massachusetts.....	2
Cars ordered repaired before loading.....	1,207	Michigan.....	9
Total cars inspected.....	3,680	Mississippi.....	327
DESTINATION AND NUMBER OF RAILROAD CARS INSPECTED FOR WEEK ENDED FEB. 6.		Missouri.....	60
Alabama.....	83	Nebraska.....	3
Arizona.....	4	New Mexico.....	5
Arkansas.....	15	New York.....	17
California.....	17	Ohio.....	42
		Oklahoma.....	4
		Oregon.....	8
		Tennessee.....	122
		Texas.....	162
		Virginia.....	8
		West Virginia.....	2
		Washington.....	11
		Wisconsin.....	8
		Canada.....	7

FIELD OPERATIONS.	
Rats trapped.....	7,097
Premises inspected.....	10,309
Notices served.....	1,665
BUILDINGS RAT PROOFED.	
By elevation.....	190
By marginal concrete wall.....	191
By concrete floor and wall.....	288
By minor repairs.....	316
Square yards of concrete laid.....	10,685
Total buildings rat proofed.....	985
Total buildings rat proofed to date.....	20,271

BUILDINGS RAT PROOFED—continued.	
Number of abatements.....	182
Number of abatements to date.....	18,790
LABORATORY OPERATIONS.	
Rodents examined.....	4,008
Mus norvegicus.....	1,829
Mus rattus.....	143
Mus alexandrinus.....	223
Mus musculus.....	3,965
Unclassified.....	1,466
Putrid.....	121
Total rodents received at laboratory.....	7,616
Number of suspicious rats.....	18
Plague rats confirmed.....	1

Rodent cases.

Case No.	Address.	Captured.	Diagnosis confirmed.	Treatment of premises.
228	Stuyvesant docks, wharf 7.....	Jan. 27	Feb. 5	Intensive trapping.

Total number of rodents captured to Feb. 6.....	257,111
Total number of rodents examined to Feb. 6.....	<u>204,629</u>

Total cases of rodent plague to Feb. 6, by species:

Mus musculus.....	4
Mus rattus.....	15
Mus alexandrinus.....	8
Mus norvegicus.....	<u>201</u>
Total rodent cases to Feb. 6.....	228

WASHINGTON—SEATTLE.

The following reports of plague-prevention work at Seattle have been received from Surg. Lloyd, of the United States Public Health Service, in charge of the work:

WEEK ENDED JAN. 23, 1915.

RAT PROOFING.	
New buildings inspected.....	53
Basements concreted, new buildings (15,438 square feet).....	16
Floors concreted, new buildings (40,280 square feet).....	18
Yards, etc., concreted, new structures (2,240 square feet).....	6
Sidewalks concreted (square feet).....	11,581
Total concrete laid, new structures (square feet).....	69,530
New buildings elevated.....	5
New premises rat proofed, concrete.....	34
Old buildings inspected.....	4
Old buildings rat proofed, concrete.....	1
Old premises rat proofed, otherwise.....	1
Openings screened, old buildings.....	45
Doors rat proofed.....	2
Wire screening used (square feet).....	5,280
Buildings razed.....	4
WATER FRONT.	
Vessels inspected and histories recorded.....	12
Vessels fumigated.....	1
Sulphur used, pounds.....	750

WATER FRONT—continued.	
New rat guards installed.....	18
Defective rat guards repaired.....	10
Fumigation certificates issued.....	1
Canal Zone certificates issued.....	3
Port sanitary statements issued.....	49
LABORATORY AND RODENT OPERATIONS.	
Dead rodents received.....	26
Rodents trapped and killed.....	384
Rodents recovered after fumigation.....	3
Total.....	<u>413</u>
Rodents examined for plague infection.....	326
Rodents proven plague infected.....	0
Blocks poisoned.....	14
Poison distributed, pounds.....	36
CLASSIFICATION OF RODENTS.	
Mus rattus.....	3
Mus alexandrinus.....	61
Mus norvegicus.....	288
Mus musculus.....	58
Unclassified.....	3

The usual day and night patrol was maintained to enforce rat guarding and fending.

Rodents examined in Bellingham.

Mus norvegicus trapped.....	22
Mus norvegicus found dead.....	1
Total.....	23
Rodents examined for plague infection.....	23
Rodents proven plague infected.....	0

WEEK ENDED JAN. 30, 1915.

RAT PROOFING.		WATER FRONT.	
New buildings inspected.....	64	Vessels inspected and histories recorded....	9
Basements concreted, new buildings (24,704 square feet).....	19	Vessels fumigated.....	2
Floors concreted, new buildings (45,930 square feet).....	21	Sulphur used, pounds.....	750
Yards, etc., concreted, new structures (12,680 square feet).....	11	New rat guards installed.....	27
Sidewalks concreted, (67,410 square feet)....		Defective rat guards repaired.....	10
Total concrete laid, new structures (150,774 square feet).....		Fumigation certificates issued.....	1
New buildings elevated.....	14	Canal zone certificates issued.....	3
New premises rat proofed, concrete.....	42	Port sanitary statements issued.....	43
Old buildings inspected.....	5	LABORATORY AND RODENT OPERATIONS.	
Old buildings rat proofed.....	1	Dead rodents received.....	20
Floors rat proofed, old buildings (8,750 square feet).....	3	Rodents trapped and killed.....	403
Premises otherwise rat proofed, old buildings.	4	Rodents recovered after fumigation.....	20
Openings screened, old buildings.....	78	Total.....	443
Wooden floors removed, old buildings.....	2	Rodents examined for plague infection.....	347
Wire screening used (5,000 square feet).....		Rodents proven plague infected.....	0
Buildings razed.....	3	Poison distributed, pounds.....	15
		CLASSIFICATION OF RODENTS.	
		Mus rattus.....	8
		Mus alexandrinus.....	101
		Mus norvegicus.....	286
		Mus musculus.....	68
		Other species.....	21

The usual day and night patrol was maintained to enforce rat guarding and fending.

Rodents examined in Bellingham.

Mus norvegicus trapped.....	17
Mus norvegicus found dead.....	2
Mus alexandrinus trapped.....	5
Mus rattus trapped.....	3
Mus musculus trapped.....	3
Total.....	30
Rodents examined for plague infection.....	34
Rodents found plague infected.....	0

PREVALENCE OF DISEASE.

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

IN CERTAIN STATES AND CITIES.

CEREBROSPINAL MENINGITIS.

City Reports for Week Ended Jan. 30, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Boston, Mass.		1	Milwaukee, Wis.	3	2
Buffalo, N. Y.	1	1	New Orleans, La.	1	2
Cambridge, Mass.	1		New York, N. Y.	2	7
Chicago, Ill.	2	3	Pittsburgh, Pa.	1	
Cincinnati, Ohio.	2	2	Providence, R. I.	1	
Columbus, Ohio.	1		Richmond, Va.		1
Elgin, Ill.		1	St. Louis, Mo.		1
Lexington, Ky.		1	Seattle, Wash.	1	
Manchester, N. H.	1	1	Washington, D. C.		1

DIPHTHERIA.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 564.

ERYSIPELAS.

City Reports for Week Ended Jan. 30, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Baltimore, Md.		1	New Castle, Pa.	1	
Binghamton, N. Y.	1		New York, N. Y.		5
Boston, Mass.		1	Palo Alto, Cal.	1	
Buffalo, N. Y.	6		Philadelphia, Pa.	18	2
Chicago, Ill.	24	7	Pittsburgh, Pa.	6	1
Cincinnati, Ohio.	6		Pittsfield, Mass.	1	
Cleveland, Ohio.	4		Providence, R. I.		1
Detroit, Mich.	1	2	Reading, Pa.	2	
Everett, Mass.		1	Rochester, N. Y.	4	1
Lancaster, Pa.	2		Rock Island, Ill.	1	
Los Angeles, Cal.	2	2	St. Louis, Mo.	13	
Lynn, Mass.		1	San Francisco, Cal.	5	
Milwaukee, Wis.	2		Seattle, Wash.	1	
Newark, N. J.		1	Toledo, Ohio.		1

LEPROSY.

Porto Rico—San Juan.

During the week ended January 30, 1915, a case of leprosy was notified at San Juan, P. R.

MEASLES.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 564.

PELLAGRA.**City Reports for Week Ended Jan. 30, 1915.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Charleston, S. C.....		1	Richmond, Va.....		1
Florence, S. C.....	1		Salt Lake City, Utah.....	4	
Nashville, Tenn.....		1	Washington, D. C.....	1	
New Orleans, La.....	1				

PNEUMONIA.**City Reports for Week Ended Jan. 30, 1915.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Aburn, N. Y.....	7		Manchester, N. H.....	1	1
Binghamton, N. Y.....	17	2	Norfolk, Va.....	3	3
Braddock, Pa.....	1		Newport, Ky.....	2	2
Cairo, Ill.....	6		Philadelphia, Pa.....	43	56
Chicago, Ill.....	174	96	Pittsburgh, Pa.....	28	33
Cleveland, Ohio.....	25	20	Reading, Pa.....	1	
Duluth, Minn.....	1	1	Rochester, N. Y.....	2	4
Grand Rapids, Mich.....	2	7	San Diego, Cal.....	1	1
Harrisburg, Pa.....	1	5	San Francisco, Cal.....	18	15
Kalamazoo, Mich.....	3	2	Schenectady, N. Y.....	9	3
Lexington, Ky.....	4	2	South Bend, Ind.....	1	
Los Angeles, Cal.....	13	9	Wilmington, N. C.....	3	2

RABIES.**City Reports for Week Ended Jan. 30, 1915.**

During the week ended January 30, 1915, 1 death from rabies was notified at Lexington, Ky., and 1 at Marinette, Wis.

SCARLET FEVER.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 564.

SMALLPOX.**California—Imperial County.**

Acting Asst. Surg. Richter reported by telegraph February 13, 1915, that during the week ended February 13, 1915, 4 cases of smallpox were notified in Imperial County, Cal.

Kansas—Doniphan County.

Collaborating Epidemiologist Crumbine reported by telegraph February 12, 1915, that 30 cases of smallpox had been notified from a sudden outbreak of the disease in Doniphan County, Kans.

SMALLPOX—Continued.

Minnesota.

Collaborating Epidemiologist Bracken reported by telegraph during the period from February 10 to 16, 1915, that smallpox had been notified in Minnesota as follows: In Blue Earth County, Mankato, 16 cases; Mapleton, 2 cases; Vernon Center Township, 1 case; Brown County, Springfield, 5 cases; Carlton County, Cloquet, 16 cases; Chippewa County, Montevideo, 1 case; Hennepin County, Minneapolis, 3 cases; Hope County, Glenwood Township, 1 case; Hubbard County, Akeley Township, 1 case; Isanti County, Cambridge, 5 cases; Le Sueur County, Waterville, 2 cases; Lyon County, Lynd Township, 4 cases; Mower County, Waltham Township, 1 case; Murray County, Belfast Township, 3 cases; Ottertail County, German Township, 2 cases; Pipestone County, Elmer Township, 1 case; Grange Township, 7 cases; Jasper, 1 case; Redwood County, Sundown Township, 1 case; Rock County, Martin Township, 1 case; Sibley County, Arlington, 1 case; Winthrop, 5 cases; Stearns County, St. Cloud, 1 case; Sauk Center, 1 case; Todd County, Browerville, 4 cases; Hartford Township, 4 cases; Wabasha County, Plainview, 4 cases.

Texas—Laredo.

Acting Asst. Surg. Hamilton reported by telegraph that 16 cases of smallpox were notified at Laredo, Tex., February 15, 1915.

City Reports for Week Ended Jan. 30, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Brownsville, Tex.....	3	.....	Muncie, Ind.....	4	.....
Butte, Mont.....	2	.....	Nashville, Tenn.....	1	.....
Charleston, S. C.....	1	.....	New Orleans, La.....	1	.....
Cincinnati, Ohio.....	1	.....	Portland, Oreg.....	2	.....
Cleveland, Ohio.....	2	.....	Racine, Wis.....	2	.....
Covington, Ky.....	6	.....	Rochester, N. Y.....	1	.....
Detroit, Mich.....	13	.....	Rock Island, Ill.....	10	.....
Gales urg, Ill.....	1	.....	St. Louis, Mo.....	2	.....
Grand Rapids, Mich.....	1	.....	Salt Lake City, Utah.....	4	.....
Knoxville, Tenn.....	8	.....	San Diego, Cal.....	1	.....
La Crosse, Wis.....	1	.....	Seattle, Wash.....	1	.....
Little Rock, Ark.....	1	.....	Springfield, Ill.....	1	.....
Milwaukee, Wis.....	21	.....	Zanesville, Ohio.....	1	.....
Moline, Ill.....	1	.....		

TETANUS.

City Reports for Week Ended Jan. 30, 1915.

During the week ended January 30, 1915, tetanus was notified by cities as follows: Chicago, Ill., 1 case; Providence, R. I., 1 death; Toledo, Ohio, 1 death.

TUBERCULOSIS.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 564.

TYPHOID FEVER.

Michigan—Alpena.

The State Board of Health of Michigan reported by telegraph that 50 cases of typhoid fever were notified in Alpena, Mich., during the period from January 1 to the date of the telegram, February 13, 1915.

City Reports for Week Ended Jan. 30, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Baltimore, Md.....	6		Newark, N. J.....	2	
Berkeley, Cal.....	1		New Bedford, Mass.....	1	
Boston, Mass.....	4		New Britain, Conn.....	1	
Buifalo, N. Y.....	2	1	New Orleans, La.....	10	2
Charleston, S. C.....	1		New York, N. Y.....	33	4
Chicago, Ill.....	10	1	Norristown, Pa.....	1	
Cleveland, Ohio.....	7	1	Philadelphia, Pa.....	6	
Cum erland, Md.....	1		Pittsburgh, Pa.....	5	1
Detroit, Mich.....	6		Pittsfield, Mass.....	1	
Duluth, Minn.....	1		Providence, R. I.....	1	1
Galveston, Tex.....	3		Reading, Pa.....	1	
Grand Rapids, Mich.....	12		Rochester, N. Y.....	4	
Harrisburg, Pa.....	1		Rutland, Vt.....	4	
Haverhill, Mass.....	2		Saginaw, Mich.....	3	
Kalamazoo, Mich.....		1	St. Louis, Mo.....	4	1
Kansas City, Kans.....	1		Salt Lake City, Utah.....	1	
Lancaster, Pa.....	1		San Francisco, Cal.....	1	2
Los Angeles, Cal.....	1		South Bend, Ind.....	2	
Lowell, Mass.....	1		Steeltown, N. Y.....	3	
Lynchburg, Va.....	4	1	Toledo, Ohio.....		1
Lynn, Mass.....	2		Washington, D. C.....	2	
Marquette, Wis.....	2		Wheeling, W. Va.....	4	1
Milwaukee, Wis.....	3	1	York, Pa.....	1	
Mobile, Ala.....	1		Zanesville, Ohio.....	7	
Moline, Ill.....	1				

DIPHThERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

City Reports for Week Ended Jan. 30, 1915.

Cities.	Population as of July 1, 1914 (estimated by United States Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants:										
Baltimore, Md.....	579,590	196	39	4	2		39	1	35	20
Boston, Mass.....	733,302	226	45	2	56	1	60	1	46	27
Chicago, Ill.....	2,393,325	671	152	17	123		71	1	249	89
Cleveland, Ohio.....	639,431	155	40	2	11		19		29	14
Detroit, Mich.....	537,650	154	39	1	1		32		15	7
New York, N. Y.....	5,333,537	1,460	346	34	454	5	197	9	432	190
Philadelphia, Pa.....	1,657,810	478	80	13	157	5	15	1	128	40
Pittsburgh, Pa.....	564,478	161	31	3	80	2	48	3	12	10
St. Louis, Mo.....	734,667	228	94	6	17		22	1	36	14
From 300,000 to 500,000 inhabitants:										
Buffalo, N. Y.....	454,112	151	19	3	4		40	1	23	10
Cincinnati, Ohio.....	402,175	146	19		1		13		31	14
Los Angeles, Cal.....	438,914	119	12		45	1	25		37	26
Milwaukee, Wis.....	417,054	106	30	3	6		13	3	18	21
Newark, N. J.....	389,106	90	35	1	10		22		50	15
New Orleans, La.....	361,221	148	32	4	2		2		40	25
San Francisco, Cal.....	448,502	142	47	2	151		6		22	17
Seattle, Wash.....	313,029	60			1		3		20	8
Washington, D. C.....	353,378	133	9		24		16		23	13
From 200,000 to 300,000 inhabitants:										
Columbus, Ohio.....	204,567	67	3				6		4	7
Jersey City, N. J.....	293,921	69	28	2	4		26		12	5
Portland, Oreg.....	260,601		5		3		9		4	3
Providence, R. I.....	245,090	73	23	1	7	1	9	1	4	7
Rochester, N. Y.....	241,513	58	7		14		5		7	6

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

City Reports for Week Ended Jan. 30, 1915—Continued.

Cities.	Population as of July 1, 1914 (estimated by United States Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 100,000 to 200,000 inhabitants:										
Cambridge, Mass.	110,357	30	8	8	8	6	5	4	5	4
Camden, N. J.	102,465	59	5	5	15	13	1	12	3	3
Dayton, Ohio	123,794	35	2	2	23	5	5	15	4	3
Fall River, Mass.	125,443	35	4	4	3	2	2	1	1	1
Grand Rapids, Mich.	123,227	31	2	2	2	2	1	1	1	1
Lowell, Mass.	111,004	31	2	2	2	4	4	1	1	1
Nashville, Tenn.	114,899	36	2	2	7	3	3	1	1	1
New Bedford, Mass.	111,230	28	3	3	1	4	4	3	3	3
Reading, Pa.	103,361	32	4	4	1	7	7	3	3	3
Richmond, Va.	134,917	60	3	3	2	3	3	2	2	2
Salt Lake City, Utah	109,530	26	1	1	2	111	4	1	1	1
Springfield, Mass.	100,375	32	3	3	1	3	3	5	3	3
Tacoma, Wash.	103,418	57	6	6	7	6	6	1	1	1
Toledo, Ohio	184,126	41	6	6	1	7	4	1	1	1
Trenton, N. J.	106,831	41	6	6	1	1	4	5	3	3
Worcester, Mass.	157,732	46	10	10	1	3	3	5	3	3
From 50,000 to 100,000 inhabitants:										
Altoona, Pa.	56,553	7	4	4	7	2	2	3	3	3
Atlantic City, N. J.	53,952	7	1	1	7	2	2	5	5	5
Bayonne, N. J.	65,271	21	4	4	4	12	1	2	2	2
Berkeley, Cal.	52,105	9	3	3	44	1	1	5	5	5
Binghamton, N. Y.	52,191	21	3	3	2	4	4	4	4	4
Brockton, Mass.	64,043	15	2	2	2	2	2	4	4	4
Charleston, S. C.	60,121	27	1	1	1	1	1	3	3	3
Covington, Ky.	55,896	89	3	3	1	3	3	1	1	1
Duluth, Minn.	89,331	23	4	4	2	2	2	4	4	4
Harrisburg, Pa.	69,493	25	8	8	2	2	2	2	2	2
Johnstown, Pa.	64,642	25	2	2	1	2	2	2	2	2
Kansas City, Kans.	94,271	27	2	2	1	1	1	2	2	2
Little Rock, Ark.	53,811	27	1	1	1	1	1	3	3	3
Lynn, Mass.	98,207	18	5	5	1	4	4	4	4	4
Manchester, N. H.	75,635	23	6	6	1	1	1	3	3	3
Mobile, Ala.	55,573	25	1	1	1	1	1	1	1	1
New Britain, Conn.	50,612	7	7	7	1	1	1	1	1	1
Norfolk, Va.	86,540	10	1	1	2	1	1	7	7	7
Passaic, N. J.	66,276	23	2	2	1	1	1	1	1	1
Pawtucket, R. I.	56,901	17	1	1	2	2	2	1	1	1
Saginaw, Mich.	53,988	12	2	2	71	5	5	1	1	1
Schenectady, N. Y.	90,503	19	1	1	1	2	2	3	3	3
South Bend, Ind.	65,114	16	1	1	38	4	4	2	2	2
Springfield, Ill.	57,972	31	1	1	3	3	3	7	7	7
Wilkes-Barre, Pa.	73,660	17	5	5	3	2	2	1	1	1
From 25,000 to 50,000 inhabitants:										
Alameda, Cal.	26,330	9	3	3	3	3	3	1	1	1
Auburn, N. Y.	36,509	23	2	2	2	4	4	1	1	1
Aurora, Ill.	33,022	7	4	4	5	3	3	1	1	1
Austin, Tex.	33,218	8	5	5	3	1	1	1	1	1
Brookline, Mass.	31,138	7	1	1	3	1	1	1	1	1
Butte, Mont.	41,731	20	1	1	1	1	1	3	3	3
Chelsea, Mass.	32,452	10	2	2	10	2	2	2	2	2
Chicopee, Mass.	28,057	10	1	1	1	1	1	2	2	2
Danville, Ill.	30,847	3	3	3	1	4	4	2	2	2
East Orange, N. J.	39,852	2	2	2	1	1	1	2	2	2
Elgin, Ill.	27,485	5	1	1	1	1	1	1	1	1
Elmira, N. Y.	37,816	7	2	2	6	12	4	4	4	4
Everett, Mass.	37,381	7	2	2	1	6	6	1	1	1
Fitchburg, Mass.	40,507	15	8	8	1	2	2	1	1	1
Galveston, Tex.	40,289	23	2	2	3	4	4	2	2	2
Haverhill, Mass.	47,071	15	3	3	1	4	4	2	2	2
Kalamazoo, Mich.	45,812	22	1	1	1	15	15	1	1	1
Knoxville, Tenn.	37,924	1	1	1	1	1	1	1	1	1
La Crosse, Wis.	31,367	4	4	4	1	1	1	1	1	1
Lancaster, Pa.	49,685	23	1	1	1	2	2	3	3	3
Lexington, Ky.	38,819	16	1	1	1	1	1	1	1	1
Lynchburg, Va.	31,830	16	1	1	2	8	8	3	3	3
Malden, Mass.	48,979	11	5	5	11	3	3	1	1	1
Medford, Mass.	25,240	6	1	1	11	3	3	1	1	1

17 cases in 1 house.

FOREIGN REPORTS.

CUBA.

Plague—Habana.

Two cases of plague were notified at Habana February 12, 1915. The cases occurred at a distance from each other and in the old part of the city. The total number of cases notified from February 9 to 16, 1915, was 3, with 3 deaths.

GREECE.

Typhus Fever—Saloniki.

During the week ended January 9, 1915, 2 deaths from typhus fever were notified at Saloniki.

JAPAN.

Communicable Diseases.

Communicable diseases were notified in Japan, exclusive of the island of Taiwan, during the month of November, 1914, as follows:

Diseases.	Cases.	Deaths.	Total since Jan. 1, 1914.	
			Cases.	Deaths.
Cholera.....			5	4
Diphtheria.....	2,055	514	15,863	3,987
Dysentery.....	2,662	572	25,566	5,431
Paratyphoid fever.....	641	77	6,531	724
Plague.....			82	69
Scarlet fever.....	121	10	1,150	70
Smallpox.....	18	6	468	108
Typhoid fever.....	3,211	661	32,839	5,972
Typhus fever.....	211	1	7,292	1,223

¹ Nagasaki-ken.

² Five cases in Iwate-ken, 6 cases with 1 death in Amori-ken.

MEXICO.

Smallpox—Monterey.

An epidemic of smallpox was reported at Monterey, Mexico, February 10, 1915.

RUSSIA.

Plague—Moscow.

During the two weeks ended December 26, 1914, 2 cases of plague were notified at Moscow.

Typhus Fever.

Typhus fever has been notified in Russia as follows: Moscow, two weeks ended December 26, 1914, 5 cases; Petrograd, week ended December 19, 1914, 7 cases with 1 death; Vladivostok, week ended December 19, 1914, 12 cases with 2 deaths.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.**Reports Received During Week Ended Feb. 19, 1915.¹****CHOLERA.**

Places.	Date.	Cases.	Deaths.	Remarks.
Dutch East Indies:				
Banca—				
Muntok.....	Dec. 6-12.....	11	7	
Celebes—				
Menado.....	Nov. 22-Dec. 5....	101	99	
Java—				
Batavia.....	Nov. 29-Dec. 19...	22	20	
Sumatra—				
Palembang.....	Nov. 22-Dec. 12...	79	72	
Telok Betong.....	.....do.....	22	20	
Germany:				
Posen—				
Zirka.....	Jan. 5-16.....	5	.....

YELLOW FEVER.

Brazil:				
Rio de Janeiro.....	Dec. 20-26.....	1	.....

PLAGUE.

Brazil:				
Bahia.....	Jan. 3-9.....	1	1	
Rio de Janeiro.....	Dec. 20-26.....	1	.....
China:				
Shanghai.....	Dec. 28-Jan. 2.....	.....	2	Among natives.
Cuba:				
Habana.....	Feb. 12-16.....	2	2	
Russia:				
Moscow.....	Dec. 12-26.....	2	.....

SMALLPOX.

Arabia:				
Aden.....	Dec. 24-30.....	3	3	
Australia:				
New South Wales—				
Sydney.....	Dec. 25-Jan. 7....	6	.....
Austria-Hungary:				
Austria—				
Vienna.....	Dec. 28-Jan. 9....	44	15	
Hungary—				
Fiume.....	Jan. 4-10.....	1	.....
Brazil:				
Rio de Janeiro.....	Dec. 20-26.....	54	19	
Canada:				
Manitoba—				
Winnipeg.....	Jan. 24-30.....	1	.....

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

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received During Week Ended Feb. 19, 1915—Continued.****SMALLPOX—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Canada—Continued.				
Ontario—				
Hamilton.....	Jan. 1-31.....	3		
Sarnia.....	Jan. 31-Feb. 6.....	1		
Toronto.....	Jan. 24-30.....	2		
China:				
Shanghai.....	Dec. 28-Jan. 9.....	4	6	Deaths among natives.
Greece:				
Patras.....	Jan. 4-17.....		3	Epidemic Jan. 17.
Saloniki.....	Jan. 2-9.....		2	
Italy:				
Turin.....	Jan. 4-10.....	2		
Mexico:				
Aguascalientes.....	Jan. 25-31.....		2	
Monterey.....	.....			Epidemic Feb. 19.
Newfoundland:				
St. John's.....	Jan. 23-29.....	1		
Portugal:				
Lisbon.....	Jan. 9-15.....	1		
Russia:				
Moscow.....	Dec. 20-26.....	13	4	
Petrograd.....	Dec. 13-19.....	45	9	
Spain:				
Barcelona.....	Jan. 10-22.....		8	
Seville.....	Dec. 1-31.....		1	
Valencia.....	Jan. 17-23.....	53	3	
Turkey in Asia:				
Beirut.....	Jan. 3-9.....	6	2	

Reports Received from Dec. 26, 1914, to Feb. 12, 1915.**CHOLERA.**

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary:				
Austria.....				Total Sept. 15-Dec. 5: Cases, 3,467; deaths, 937.
Do.....				Total Nov. 18-Dec. 22: Cases, 741; deaths, 133.
Bohemia.....				Total Sept. 23-Dec. 5: Cases, 176; deaths, 56.
Bosnia-Herzegovina.....				Total Oct. 4-10: Case, 1.
Coast land—				
Trieste.....	Nov. 15-21.....	5		
Croatia-Slavonia.....				Total Oct. 4-10: Case, 1; death, 1.
Galicia.....				Total Sept. 23-Dec. 5: Cases, 2,047; deaths, 733.
Kracow.....	Oct. 4-Dec. 5.....	109	4	
Lisko.....	Sept. 23-Nov. 7.....	355	186	
Przemysl.....	Nov. 1-14.....	132	3	
Lower Austria.....				Total Sept. 1-Dec. 5: Cases, 473; deaths, 67.
Vienna.....	Sept. 1-Dec. 5.....	386	42	
Moravia.....				Total Sept. 15-Dec. 5: Cases, 362; deaths, 93.
Brunn.....	Sept. 15-Nov. 21.....	18	3	
Silesia.....				Total Sept. 23-Dec. 5: Cases, 283; deaths, 39.
Styria.....				Sept. 23-28: Cases, 55; deaths, 18.
Graz.....	Oct. 3-Nov. 14.....	10		
Upper Austria.....	Oct. 4-Nov. 7.....	3		
Hungary.....				Total Sept. 15-Nov. 30: Cases, 3,024; deaths; not yet reported.
Do.....				Total Nov. 18-Dec. 22: Cases, 452; deaths not reported.
Budapest.....	Dec. 25-31.....	1		
Ceylon:				
Colombo.....	Sept. 5.....	1	1	
China:				
Nanking.....	Nov. 15-21.....			Present.
Wuchow.....	Nov. 27.....			Do.

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

Reports Received from Dec. 26, 1914, to Feb. 12, 1915—Continued.

CHOLERA—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Dutch East Indies:				
Celebes—				
Menado.....	Oct. 18-Nov. 21...	324	310	
Java—				
Batavia.....	Oct. 25-Nov. 28...	335	321	
Sumatra—				
Lainpong.....	Nov. 8-11.....	27	7	
Meneals.....	Oct. 18-Nov. 7.....	65	69	
Palembang.....	Oct. 18-Nov. 21.....	94	74	
Telok Belong.....	Nov. 14-21.....	25	24	
Germany.....				Total Nov. 8-Jan. 16: Cases, 54.
Brandenburg.....	Dec. 6-23.....	4	1	Vicinity of Frankfort on the
Torgau.....	Jan. 5-16.....	1	1	Oder.
Posen.....	Dec. 20-26.....	2	2	At Birnbaum.
Silesia.....	Nov. 8-Dec. 26.....	46	3	In 23 localities.
Rosent erg.....	Jan. 5-16.....	1	1	
India:				
Bombay.....	Nov. 1-Dec. 12.....	7	1	
Calcutta.....	Nov. 1-28.....	1	42	Oct. 25-31: Deaths, 17. Not pre-
Madras.....	Nov. 8-Dec. 19.....	149	106	viously reported.
Rangoon.....	Sept. 1-Nov. 30.....	5	2	
Indo-China.....				Jan. 1-Aug. 31: Cases, 259; deaths,
				148. Aug. 1-31: Cases, 18;
				deaths, 15.
Cambodia—				
Pnum Penh.....	Aug. 1-31.....	1	1	
Cochin China—				
Baria.....	do.....	6	6	And vicinity, Nov. 3-23: Cases,
Cholon.....	do.....	9	7	20; deaths, 10.
Saigon.....	do.....	1	1	Total, Jan. 1-Dec. 20: Cases, 154;
Laos—				deaths, 79.
Fakse.....	do.....	1	1	
Japan:				
Kyoto fu.....	Oct. 1-31.....	1	1	
Philippine Islands:				
Manila.....	Oct. 25-Dec. 12.....	44	22	
Russia:				
Moscow.....	Nov. 8-14.....	1	1	
Siam:				
Bangkok.....	Sept. 27-Nov. 28.....	1	8	
Straits Settlements:				
Singapore.....	Oct. 4-10.....	1	1	

YELLOW FEVER.

Brazil:				
Rio de Janeiro.....	Dec. 13-19.....	1	1	In a person arriving on the s. s. Vestris, having stopped 3 days in Bahia, en route from Portugal.
Ecuador:				
Guayaquil.....	Nov. 1-30.....	1	1	
Venezuela:				
Caracas.....	Dec. 31.....	1	1	

PLAGUE.

Brazil:				
Bahia.....	Nov. 16-Jan. 2.....	12	10	
Pernambuco.....	Oct. 11-Nov. 30.....	1	5	
Rio de Janeiro.....				Jan. 5: Case, 1.
Ceylon:				
Colombo.....	Oct. 25-Dec. 12.....	20	19	
China:				
Canton.....				June 12-July 12: Cases, 325.
Shanghai.....	Dec. 6-12.....	1	1	
Cuba:				
Havana.....	Feb. 9.....	1	1	
Dutch East Indies:				
Provinces.....				Total, Oct. 1-Nov. 30: Cases,
Kediri.....	Oct. 1-Nov. 30.....	730	678	2,562; deaths, 2,278.
Madioen.....	do.....	128	110	
Paseroean.....	do.....	1,405	1,211	
Surabaya.....	do.....	299	279	

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

Reports Received from Dec. 26, 1914, to Feb. 12, 1915—Continued.

PLAGUE—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Ecuador:				
Duran.....	Nov. 1-Dec. 31....	9	4	
Guayaquil.....	.....do.....	236	91	
Milaero.....	Dec. 1-31.....	1	1	
Sanborondon.....	Nov. 1-Dec. 31....	4	3	
Egypt:				
Alexandria.....	Nov. 5-28.....	1	1	
Port Said.....	Oct. 22-Dec. 16....	7	7	
Greece:				
.....	.....	.....	.....	Sept. 12, present in Drama and Kavala.
India:				
Bassein.....	Jan. 4-Dec. 5.....	13	10	Not previously reported.
Bombay.....	Nov. 1-Dec. 12....	7	6	
Karachi.....	Nov. 8-Dec. 12....	7	6	
Madras.....	Nov. 22-Dec. 12....	6	6	
Rangoon.....	Sept. 1-Nov. 30....	99	91	
Japan:				
Tokyo.....	Dec. 29-Jan. 4.....	1	1	
Indo-China:				
.....	.....	.....	.....	Jan. 1-Aug. 31: Cases, 1,780; deaths, 1,413. Aug. 1-31: Cases, 155; deaths, 121.
Anam—				
Phanrang.....	Aug. 1-31.....	8	7	
Phanitet.....	.....do.....	4	1	
Cambodia—				
Pnum Penh.....	.....do.....	41	39	
Cochin China—				
Cholon.....	.....do.....	26	11	
Sai'on.....	.....do.....	23	15	And vicinity Nov. 3-30: Cases, 5.
Kouanz-Teheou-Wan.....	.....do.....	45	45	
Libia (Tripoli)				
.....	.....	.....	.....	Present in Derna and Marsa Susa among native laborers.
Mauritius				
.....	Nov. 6-12.....	14	.....
Persia:				
Belessavar.....	Oct. 30-Nov. 9....	80	80	On Caspian coast.
Kasri Shireen.....	Dec. 12.....	1	.....
Peru:				
Salavery.....	Dec. 29-Jan. 4.....	1	1	Nov. 17-23: Cases, 2; deaths, 1. Dec. 14: Cases, 10 in hospital at Trujillo.
Russia:				
Moscow.....	Dec. 6-12.....	2	.....
Senegal:				
Dakar.....	Dec. 5.....	.....	.....	Present.
Straits Settlements:				
Singapore.....	Nov. 1-28.....	3	3	
Turkey in Asia:				
Basdad.....	Nov. 1-Dec. 3.....	11	9	
Union of South Africa:				
Queenstown.....	Feb. 5.....	.....	.....	Present.
Zanzibar				
.....	Oct. 25-31.....	2	3	

SMALLPOX.

Arabia:				
Aden.....	Nov. 5-Dec. 23....	8	10	
Argentina:				
Rosario.....	Oct. 1-31.....	.....	1	
Australia:				
New South Wales—				
Penrith.....	Dec. 11-17.....	1	.....
Sydney.....	Dec. 11-24.....	4	.....	Total Nov. 13-19: Cases, 7 in the metropolitan area and 2 in the country districts.
Queensland—				
Brisbane.....	.....	.....	.....	Nov. 19, in Colmslie quarantine station, 1 case from s. s. Kano Na from Melbourne, via Sydney.
Austria-Hungary:				
Hungary—				
Fiume.....	Dec. 6-Jan. 3.....	2	1	
Brazil:				
Pernambuco.....	Oct. 1-Nov. 30....	.....	40	
Rio de Janeiro.....	Nov. 1-Dec. 19....	582	174	
Sao Paulo.....	Nov. 9-15.....	2	.....
Bulgaria:				
Sofia.....	June 30-Nov. 28....	121	2	

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

Reports Received from Dec. 26, 1914, to Feb. 12, 1915—Continued.

SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Canada:				
Ontario—				
Sarnia.....	Dec. 13-Jan. 30....	4	.....
Toronto.....	Dec. 6-Jan. 16....	11	.....
Windsor.....	Jan. 17-23.....	1	.....	Jan. 13: Cases, 4 from Grand Trunk ferryboat Lansdowne.
Quebec—				
Montreal.....	Dec. 28-Jan. 9....	4	.....
Quebec.....	Dec. 13-Jan. 16....	3	.....
Canary Islands:				
Tenerife—				
Santa Cruz.....	Dec. 6-26.....	.....	2	
Ceylon:				
Colombo.....	Oct. 25-Dec. 12....	80	19	
China:				
Hongkong.....	Nov. 22-28.....	1	1	
Newchwang.....	.....	.....	.....	Nov. 22, present.
Shanghai.....	Nov. 9-Dec. 27....	10	37	Deaths among natives.
Tientsin.....	Dec. 6-12.....	.....	1	
Dutch East Indies:				
Borneo.....	Nov. 8-14.....	50	30	Oct. 18-24: Cases, 112; deaths, 44, mainly in Pontianak.
Java.....	.....	.....	.....	In the western part, including Batavia, Oct. 18-Nov. 21: Cases, 2,607; deaths, 424.
Batavia.....	Oct. 18-Nov. 21....	166	44	
Surabaya.....	Nov. 1-7.....	1	.....
Egypt:				
Alexandria.....	Nov. 19-Jan. 7....	61	16	
France:				
Havre.....	Dec. 20-26.....	1	.....
Paris.....	Nov. 15-Dec. 26....	4	2	
Germany:				
.....	.....	.....	.....	Nov. 15-Dec. 19: Cases, 14.
Great Britain:				
Cardiff.....	Nov. 30-Dec. 5....	5	.....
Liverpool.....	Dec. 19.....	1	.....
Greece:				
Kavala.....	Nov. 22-28.....	5	.....
Patras.....	Nov. 23-Jan. 3....	.....	11	Dec. 6: Epidemic.
Saloniki.....	Nov. 15-Jan. 2....	61	46	
India:				
Bombay.....	Nov. 1-Dec. 12....	45	11	
Calcutta.....	Oct. 25-Nov. 28....	.....	37	
Madras.....	Nov. 1-Dec. 19....	9	7	
Rangoon.....	Oct. 1-31.....	2	2	
Italy:				
Turin.....	Dec. 21-Jan. 3....	2	.....
Japan:				
Nagasaki-ken.....	Oct. 1-31.....	25	4	Jan. 1-Oct. 31: Cases, 450; deaths, 102, exclusive of Taiwan.
Taiwan.....	Oct. 25-Dec. 5....	8	.....
Mexico:				
Agua Calientes.....	Dec. 7-Jan. 10....	.....	7	
Chihuahua.....	Nov. 30-Dec. 26....	19	10	
Juarez.....	Dec. 4.....	.....	.....	Prevalent.
Matatlan.....	Dec. 9-Jan. 12....	18	8	
Monterey.....	Dec. 14-20.....	.....	2	
Salina Cruz.....	Nov. 1-7.....	1	.....
Tampico.....	Dec. 1-31.....	.....	6	Prevalent among the military.
Vera Cruz.....	Dec. 1-Jan. 17....	.....	16	Jan. 5: Epidemic.
Norway:				
Christiansand.....	Nov. 1-30.....	7	.....
Stavanger.....	Nov. 30-Dec. 5....	1	.....	Including report, vol. 29.
Portugal:				
Lisbon.....	Nov. 22-Jan. 2....	11	.....
Russia:				
Moscow.....	Nov. 8-Dec. 12....	23	2	
Odessa.....	Oct. 25-Nov. 18....	10	1	
Do.....	Nov. 30-Dec. 19....	53	7	
Petrograd.....	Oct. 25-Dec. 12....	169	43	
Riza.....	Oct. 11-Dec. 12....	69	.....
Spain:				
Barcelona.....	Nov. 22-Dec. 18....	.....	24	
Madrid.....	Nov. 1-Dec. 31....	5	4	
Valencia.....	Nov. 15-Jan. 16....	351	15	
Straits Settlements:				
Singapore.....	Oct. 10-Nov. 28....	5	2	
Sweden:				
Stockholm.....	Dec. 13-19.....	.....	1	
Switzerland:				
Basel.....	Nov. 7-Jan. 2....	18	.....
Turkev in Asia:				
Befrut.....	Nov. 1-Jan. 2....	53	16	
Halfa.....	Nov. 2-Dec. 6....	14	6	
Zanzibar.....	Nov. 14-21.....	.....	7	

SANITARY LEGISLATION.

UNITED STATES LAWS AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

Opium, Coca Leaves, and Preparations Thereof—Registration of Persons Selling, Dispensing, or Giving Away Required. (Act of Congress Dec. 17, 1914.)

That on and after the 1st day of March, 1915, every person who produces, imports, manufactures, compounds, deals in, dispenses, sells, distributes, or gives away opium or coca leaves or any compound, manufacture, salt, derivative, or preparation thereof, shall register with the collector of internal revenue of the district his name or style, place of business, and place or places where such business is to be carried on: *Provided*, That the office, or if none, then the residence of any person shall be considered for the purposes of this act to be his place of business. At the time of such registry and on or before the 1st day of July, annually thereafter, every person who produces, imports, manufactures, compounds, deals in, dispenses, sells, distributes, or gives away any of the aforesaid drugs shall pay to the said collector a special tax at the rate of \$1 per annum: *Provided*, That no employee of any person who produces, imports, manufactures, compounds, deals in, dispenses, sells, distributes, or gives away any of the aforesaid drugs, acting within the scope of his employment, shall be required to register or to pay the special tax provided by this section: *Provided further*, That the person who employs him shall have registered and paid the special tax as required by this section: *Provided further*, That officers of the United States Government who are lawfully engaged in making purchases of the above-named drugs for the various departments of the Army and Navy, the Public Health Service, and for Government hospitals and prisons, and officers of any State government, or of any county or municipality therein, who are lawfully engaged in making purchases of the above-named drugs for State, county, or municipal hospitals or prisons, and officials of any Territory or insular possession or the District of Columbia or of the United States who are lawfully engaged in making purchases of the above-named drugs for hospitals or prisons therein shall not be required to register and pay the special tax as herein required.

It shall be unlawful for any person required to register under the terms of this act to produce, import, manufacture, compound, deal in, dispense, sell, distribute, or give away any of the aforesaid drugs without having registered and paid the special tax provided for in this section.

That the word "person" as used in this act shall be construed to mean and include a partnership, association, company, or corporation, as well as a natural person; and all provisions of existing law relating to special taxes, so far as applicable, including the provisions of section thirty-two hundred and forty of the Revised Statutes of the United States, are hereby extended to the special tax herein imposed.

That the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, shall make all needful rules and regulations for carrying the provisions of this act into effect.

SEC. 2. That it shall be unlawful for any person to sell, barter, exchange, or give away any of the aforesaid drugs except in pursuance of a written order of the person to whom such article is sold, bartered, exchanged, or given, on a form to be issued in blank for that purpose by the Commissioner of Internal Revenue. Every person who shall accept any such order, and in pursuance thereof shall sell, barter, exchange, or give away any of the aforesaid drugs, shall preserve such order for a period of two years in such a way as to be readily accessible to inspection by any officer, agent, or employee of the Treasury Department duly authorized for that purpose, and the State, Territorial, District, municipal, and insular officials named in section five of this act. Every person who shall give an order as herein provided to any other person for any of the aforesaid drugs shall, at or before the time of giving such order, make or cause to be made a duplicate thereof on a form to be issued in blank for that purpose by the Commissioner of Internal Revenue, and in case of the acceptance of such order, shall preserve such duplicate for said period of two years in such a way as to be readily accessible to inspection by the officers, agents, employees, and officials hereinbefore mentioned. Nothing contained in this section shall apply—

(a) To the dispensing or distribution of any of the aforesaid drugs to a patient by a physician, dentist, or veterinary surgeon registered under this act in the course of his professional practice only: *Provided*, That such physician, dentist, or veterinary surgeon shall keep a record of all such drugs dispensed or distributed, showing the amount dispensed or distributed, the date, and the name and address of the patient to whom such drugs are dispensed or distributed, except such as may be dispensed or distributed to a patient upon whom such physician, dentist, or veterinary surgeon shall personally attend; and such record shall be kept for a period of two years from the date of dispensing or distributing such drugs, subject to inspection, as provided in this act.

(b) To the sale, dispensing, or distribution of any of the aforesaid drugs by a dealer to a consumer under and in pursuance of a written prescription issued by a physician, dentist, or veterinary surgeon registered under this act: *Provided, however*, That such prescription shall be dated as of the day on which signed and shall be signed by the physician, dentist, or veterinary surgeon who shall have issued the same: *And provided further*, That such dealer shall preserve such prescription for a period of two years from the day on which such prescription is filled in such a way as to be readily accessible to inspection by the officers, agents, employees, and officials hereinbefore mentioned.

(c) To the sale, exportation, shipment, or delivery of any of the aforesaid drugs by any person within the United States or any Territory or the District of Columbia or any of the insular possessions of the United States to any person in any foreign country, regulating their entry in accordance with such regulations for importation thereof into such foreign country as are prescribed by said country, such regulations to be promulgated from time to time by the Secretary of State of the United States.

(d) To the sale, barter, exchange, or giving away of any of the aforesaid drugs to any officer of the United States Government or of any State, territorial, district, county, or municipal or insular government lawfully engaged in making purchases thereof for the various departments of the Army and Navy, the Public Health Service, and for Government, State, territorial district, county, or municipal or insular hospitals or prisons.

The Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, shall cause suitable forms to be prepared for the purposes above mentioned, and shall cause the same to be distributed to collectors of internal revenue for sale by them to those persons who shall have registered and paid the special tax as required by section one of this act in their districts, respectively; and no collector shall sell any of such forms to any persons other than a person who has registered and paid the special tax as required by section one of this act in his district.

The price at which such forms shall be sold by said collectors shall be fixed by the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, but shall not exceed the sum of \$1 per hundred. Every collector shall keep an account of the number of such forms sold by him, the names of the purchasers, and the number of such forms sold to each of such purchasers. Whenever any collector shall sell any of such forms, he shall cause the name of the purchaser thereof to be plainly written or stamped thereon before delivering the same; and no person other than such purchaser shall use any of said forms bearing the name of such purchaser for the purpose of procuring any of the aforesaid drugs, or furnish any of the forms bearing the name of such purchaser to any person with intent thereby to procure the shipment or delivery of any of the aforesaid drugs. It shall be unlawful for any person to obtain by means of said order forms any of the aforesaid drugs for any purpose other than the use, sale, or distribution thereof by him in the conduct of a lawful business in said drugs or in the legitimate practice of his profession.

The provisions of this act shall apply to the United States, the District of Columbia, the Territory of Alaska, the Territory of Hawaii, the insular possessions of the United States, and the Canal Zone. In Porto Rico and the Philippine Islands the administration of this act, the collection of the said special tax, and the issuance of the order forms specified in section two shall be performed by the appropriate internal-revenue officers of those governments, and all revenues collected hereunder in Porto Rico and the Philippine Islands shall accrue intact to the general governments thereof, respectively. The courts of first instance in the Philippine Islands shall possess and exercise jurisdiction in all cases arising under this act in said islands. The President is authorized and directed to issue such Executive orders as will carry into effect in the Canal Zone the intent and purpose of this act by providing for the registration and the imposition of a special tax upon all persons in the Canal Zone who produce, import, compound, deal in, dispense, sell, distribute, or give away opium or coca leaves, their salts, derivatives, or preparations.

SEC. 3. That any person who shall be registered in any internal-revenue district under the provisions of section 1 of this act shall, whenever required so to do by the collector of the district, render to the said collector a true and correct statement or return, verified by affidavit, setting forth the quantity of the aforesaid drugs received by him in said internal-revenue district during such period immediately preceding the demand of the collector, not exceeding three months, as the said collector may fix and determine; the names of the persons from whom the said drugs were received; the quantity in each instance received from each of such persons, and the date when received.

SEC. 4. That it shall be unlawful for any person who shall not have registered and paid the special tax as required by section 1 of this act to send, ship, carry, or deliver any of the aforesaid drugs from any State or Territory or the District of Columbia, or any insular possession of the United States, to any person in any other State or Territory or the District of Columbia or any insular possession of the United States: *Provided*, That nothing contained in this section shall apply to common carriers engaged in transporting the aforesaid drugs, or to any employee acting within the scope of his employment, of any person who shall have registered and paid the special tax as required by section 1 of this act, or to any person who shall deliver any such drug which has been prescribed or dispensed by a physician, dentist, or veterinarian required to register under the terms of this act, who has been employed to prescribe for the particular patient receiving such drug, or to any United States, State, county, municipal, district, Territorial, or insular officer or official acting within the scope of his official duties.

SEC. 5. That the duplicate-order forms and the prescriptions required to be preserved under the provisions of section 2 of this act, and the statements or returns filed in the office of the collector of the district, under the provisions of section 3 of this act,

shall be open to inspection by officers, agents, and employees of the Treasury Department duly authorized for that purpose; and such officials of any State or Territory, or of any organized municipality therein, or of the District of Columbia, or any insular possession of the United States, as shall be charged with the enforcement of any law or municipal ordinance regulating the sale, prescribing, dispensing, dealing in, or distribution of the aforesaid drugs. Each collector of internal revenue is hereby authorized to furnish, upon written request, certified copies of any of the said statements or returns filed in his office to any of such officials of any State or Territory or organized municipality therein, or the District of Columbia, or any insular possession of the United States as shall be entitled to inspect the said statements or returns filed in the office of the said collector, upon the payment of a fee of \$1 for each 100 words or fraction thereof in the copy or copies so requested. Any person who shall disclose the information contained in the said statements or returns or in the said duplicate-order forms, except as herein expressly provided, and except for the purpose of enforcing the provisions of this act, or for the purpose of enforcing any law of any State or Territory or the District of Columbia, or any insular possession of the United States, or ordinance of any organized municipality therein, regulating the sale, prescribing, dispensing, dealing in, or distribution of the aforesaid drugs, shall on conviction be fined or imprisoned as provided by section 9 of this act. And collectors of internal revenue are hereby authorized to furnish upon written request, to any person, a certified copy of the names of any or all persons who may be listed in their respective collection districts as special taxpayers under the provisions of this act, upon payment of a fee of \$1 for each 100 names or fraction thereof in the copy so requested.

SEC. 6. That the provisions of this act shall not be construed to apply to the sale, distribution, giving away, dispensing, or possession of preparations and remedies which do not contain more than 2 grains of opium, or more than one-fourth of a grain of morphine, or more than one-eighth of a grain of heroin, or more than 1 grain of codeine, or any salt or derivative of any of them, in 1 fluid ounce, or, if a solid or semisolid preparation, in 1 avoirdupois ounce; or to liniments, ointments, or other preparations which are prepared for external use only, except liniments, ointments, and other preparations which contain cocaine or any of its salts or alpha or beta eucaine or any of their salts or any synthetic substitute for them: *Provided*, That such remedies and preparations are sold, distributed, given away, dispensed, or possessed as medicines and not for the purpose of evading the intentions and provisions of this act. The provisions of this act shall not apply to decocainized coca leaves or preparations made therefrom, or to other preparations of coca leaves which do not contain cocaine.

SEC. 7. That all laws relating to the assessment, collection, remission, and refund of internal-revenue taxes, including section 3229 of the Revised Statutes of the United States, so far as applicable to and not inconsistent with the provisions of this act, are hereby extended and made applicable to the special taxes imposed by this act.

SEC. 8. That it shall be unlawful for any person not registered under the provisions of this act, and who has not paid the special tax provided for by this act, to have in his possession or under his control any of the aforesaid drugs; and such possessor or control shall be presumptive evidence of a violation of this section, and also of a violation of the provisions of section 1 of this act: *Provided*, That this section shall not apply to any employee of a registered person, or to a nurse under the supervision of a physician, dentist, or veterinary surgeon registered under this act, having such possession or control by virtue of his employment or occupation and not on his own account; or to the possession of any of the aforesaid drugs which has or have been prescribed in good faith by a physician, dentist, or veterinary surgeon registered under this act; or to any United States, State, county, municipal, District, Territorial, or insular officer or official who has possession of any said drugs, by reason of his official duties, or to a warehouseman holding possession for a person registered and who has paid the taxes under this act; or to common carriers engaged in transporting such drugs: *Provided*

further; That it shall not be necessary to negative any of the aforesaid exemptions in any complaint, information, indictment, or other writ or proceeding laid or brought under this act; and the burden of proof of any such exemption shall be upon the defendant.

SEC. 9. That any person who violates or fails to comply with any of the requirements of this act shall, on conviction, be fined not more than \$2,000 or be imprisoned not more than five years, or both, in the discretion of the court.

SEC. 10. That the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, is authorized to appoint such agents, deputy collectors, inspectors, chemists, assistant chemists, clerks, and messengers in the field and in the Bureau of Internal Revenue in the District of Columbia as may be necessary to enforce the provisions of this act.

SEC. 11. That the sum of \$150,000, or so much thereof as may be necessary, be, and hereby is, appropriated, out of any moneys in the Treasury not otherwise appropriated, for the purpose of carrying into effect the provisions of this act.

SEC. 12. That nothing contained in this act shall be construed to impair, alter, amend, or repeal any of the provisions of the act of Congress approved June 30, 1906, entitled "An act for preventing the manufacture, sale, or transportation of adulterated or misbranded, or poisonous, or deleterious foods, drugs, medicines, and liquors, and for regulating traffic therein, and for other purposes," and any amendment thereof, or of the act approved February 9, 1909, entitled "An act to prohibit the importation and use of opium for other than medicinal purposes," and any amendment thereof.

STATE LAWS AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

NEW YORK.

Spitting—Forbidden in Public Buildings and Conveyances. (Chap. 7, Reg. Public Health Council, Dec. 8, 1914.)

REGULATIONS 1. *Spitting in public places forbidden.*—Spitting upon the floor of public buildings or buildings used for public assemblage, or upon the floors or platforms or any part of any railroad or trolley car or ferry boat, or any other public conveyance, is forbidden.

This regulation shall take effect throughout the State of New York, except in the city of New York, on the 1st day of March, 1915.

Common Towels—Prohibited in Public Places. (Chap. 7, Reg. Public Health Council, Dec. 18, 1914.)

REG. 2. *Common towel forbidden.*—No person, firm, or corporation owning, in charge of, or in control of any lavatory or wash room in any hotel, lodging house, restaurant, factory, store, office building, railway or trolley station, or public conveyance by land or water shall provide in or about such lavatory or wash room any towel for common use. The term "common use" in this regulation shall be construed to mean for use by more than one person without cleansing.

This regulation shall take effect throughout the State of New York, except in the city of New York, on the 1st day of March, 1915.

Common Drinking Cups and Common Eating Utensils—Forbidden in Public Places. (Chap. 7, Reg. Public Health Council, Dec. 18, 1914.)

REG. 3. *Common drinking cups and drinking and eating utensils forbidden.*—The use of common drinking cups and of common drinking or eating utensils in any public place or public institution, or in any hotel, saloon, lodging house, theater, factory, school or public hall, or on any railway or trolley car or ferryboat, or in any railway or trolley station or ferryhouse, or the furnishing of any such common drinking cup or drinking or eating utensil for common use in any such place is prohibited.

The term "common use" in this regulation shall be construed to mean for use by more than one person without adequate cleansing.

This regulation shall take effect throughout the State of New York, except in the city of New York, on the 1st day of March, 1915.

Barbers, Manicures, and Chiropedists—Sanitary Precautions. (Chap. 7, Reg. Public Health Council, Dec. 18, 1914.)

REG. 4. *Barbers and barber shops.*—Every barber or other person in charge of any barber shop shall keep such barber shop at all times in a clean and sanitary condition.

No person shall act as a barber who is affected with a venereal disease in the communicable stage or with any communicable disease enumerated in this code, in an acute form, or with any communicable disease of the skin.

The hands of the barber shall be washed with soap and water before serving each customer.

Brushes and combs shall frequently be cleansed with soap and water.

Shaving mugs and brushes shall be thoroughly rinsed after each use thereof.

There shall be a separate clean towel for each customer. The head rest shall be covered by a clean towel or paper.

Alum or other material used to stop the flow of blood shall be applied in powdered or liquid form only.

After the handling of a customer affected with any eruption, or whose skin is broken out, or is inflamed or contains pus, the hands of the barber shall be immediately disinfected. This shall be done by thorough washing with soap and water, followed by rinsing in alcohol (70 to 80 per cent) or in a solution of corrosive sublimate (1 to 1,000).

The instruments used for a customer affected with any of the above named disorders shall be made safe immediately after such use by washing with soap and water and dipping for one minute in a 10 per cent solution of commercial (40 per cent) formalin; or dipping for three minutes in alcohol (70 to 80 per cent).

No cup or brush which has been used in the shaving of a customer affected with any of the above infectious disorders of the face shall be used for another customer unless the cup shall have been emptied and cleaned by boiling water and furnished with fresh soap, and the brush has been sterilized by a three-minute exposure to alcohol (70 to 80 per cent), or to a corrosive sublimate solution (1 to 1,000).

This regulation shall take effect throughout the State of New York, except in the City of New York, on the 1st day of March, 1915.

REG. 5. *Manicures and chiropodists.*—The utensils and instruments employed by manicurists and chiropodists in pursuit of their occupations shall be kept in a clean and sanitary condition.

After serving customers affected with a visible skin disease the hands and instruments of the operators shall be immediately cleaned and sterilized.

This regulation shall take effect throughout the State of New York, except in the City of New York, on the 1st day of March, 1915.

REG. 6. *Copies of regulations 4 and 5 to be posted.*—Every barber or other person in charge of any barber shop or place where manicuring or chiropody is done shall post a copy of regulations 4 and 5 of this chapter in a conspicuous place therein.

This regulation shall take effect on the 1st day of March, 1915, throughout the State of New York, except in the city of New York and in such cities in which the posting of local regulations in such shops or places is required on January 1, 1915.

Local Health Officers—Monthly Reports to State Commissioner of Health. (Chap. 7, Reg. Public Health Council, Dec. 18, 1914.)

REG. 7. *Local health officers to file monthly reports with State commissioner of health.*—Local health officers shall submit monthly reports to the State commissioner of health on forms to be prescribed by him. The first report shall be due on February 1, 1915.

This regulation shall take effect throughout the State of New York, except in the city of New York, on the 1st day of January, 1915.

VERMONT.

Foodstuffs—Inspection—Condemnation of Unwholesome. (Act Jan. 29, 1915.)

SECTION 1. Section 5478 of the public statutes, as amended by section 3 of No. 159 of the acts of 1908, is hereby amended so as to read as follows:

"SEC. 5478. A member or officer of the State board of health, director, chemist, or inspector of the State laboratory of hygiene, or a local health officer in his own town, may inspect the carcasses of slaughtered animals intended for food, and meat, fish, vegetables, produce, fruit, or provisions, and for such purpose may enter any building, inclosure, or other place in which said carcasses or articles are stored, kept, or exposed for sale. If such carcasses or articles are designated for food for man, and are found tainted, diseased, corrupted, decayed, unwholesome, or from any cause unfit for food, the local board of health or such member or officer of the State board of health, director, chemist, or inspector of the State laboratory of hygiene shall seize the same and cause it to be forthwith destroyed or disposed of otherwise than for food."

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

ALLENTOWN, PA.

Foodstuffs—Meat and Milk—Inspection and Sale. (Ord. May 27, 1914.)

SECTION 1. That no person shall, within the limits of the city of Allentown, sell or offer for sale meat, milk, and their products which are impure, adulterated, unwholesome, or otherwise unfit for human consumption.

SEC. 2. The terms "meat, milk, and their products" shall apply to the milk and flesh of cattle, sheep, swine, goats, poultry, and fish, and their products thereof, also game, used for human consumption.

SEC. 3. The councilman in charge of the department of public safety is hereby authorized to appoint by the advice and with the consent of the other councilmen, a competent person to act as inspector of meat and milk and their products, whose duty it shall be to see that the provisions pertaining to this subject that are, or may hereafter be, adopted by the council under this ordinance, are strictly complied with and enforced. The qualifications of the said inspector who must have a knowledge of the animals in health and disease and the chemistry of milk, shall immediately after his appointment be certified by the mayor to the State live stock sanitary board, and the board shall be requested to confer on the said inspector the authority as defined by the acts of the general assembly approved May 25, 1907, and May 25, 1895, in relation to the inspection of milk and meats.

SEC. 4. The inspector shall at least once every month, or as often as required, make a report to the superintendent of public safety of his work. He may be removed for inability, misconduct, or neglecting duty on the recommendation of the superintendent of public safety. He shall be furnished with all the material necessary for the performance of his duties by the department. He shall receive the annual compensation of \$960, payable in semimonthly installments, upon warrants drawn according to law. His office shall be at such a place as designated by the department.

SEC. 5. It shall be the duty of the inspector to visit as often as possible the butchering shops and business places of all persons holding a license to sell meat, milk, and their products in the city of Allentown, or where animals are slaughtered or meat or meat-food products are kept, for the purpose of ascertaining whether such places are in a sanitary condition, and take samples for chemical analysis, and if found insanitary, or such person shall refuse to allow said inspector to examine said premises, then the inspector shall immediately certify said fact to the department, and after due notice to such licensee, and after a hearing before the department, the penalties as prescribed in section 17 shall be invoked or said license may be revoked.

SEC. 6. On and after the passage of this ordinance, all dealers and vendors and all persons who sell or offer for sale meat, milk, and their products in the city of Allentown shall upon order of said inspector, after proper inspection as to the sanitary conditions, pay into the city treasury the sum of \$5 and receive therefor a receipt, presentation of which at the office of the said inspector shall entitle him to a license, provided that all the provisions and requirements as contained in the following sections are complied with.

SEC. 7. The application for license shall be received by the inspector of meats and milk before the first of May each year, and shall be renewed annually. No license shall be granted for a fractional part of a year and such license is not transferable. The inspector shall also keep a record of the names, residences, places of business, number of wagons or vehicles used by people engaged in the milk or meat business, and the number of the license. The licenses for milk and meat shall be distinct licenses and kept in separate books. All persons must be licensed and registered who are selling or offering for sale milk or meat or their products from a wagon or in a store, stand, or market place within the city, and such license, or the number thereof not less than 4 inches in height, must be displayed conspicuously on each side of the wagon or in said business place.

Meat and Meat Products—Inspection and Sale. (Ord. May 27, 1914.)

SEC. 8. No meat or meat product shall be sold or offered for sale or transportation to market in the city of Allentown which is unsound, unhealthful, unwholesome, or otherwise unfit for human consumption. The rules and regulations of the State live stock sanitary board shall be the guide in determining the condition of carcasses or any part thereof, and also of meats and meat food products, and such other rules and regulations as council may adopt in accordance with the law.

SEC. 9. One year after the passage of this ordinance, all meats and meat products must bear as the mark of inspection either the seal of city of Allentown, or the seal of any other city or the State Live Stock Sanitary Board of Pennsylvania, or the Bureau of Animal Industry of the United States, and all slaughterhouses used for the preparation of meats or its products must come up to the standard to be adopted by council of Allentown.

Milk and Milk Products—Production, Care, and Sale. (Ord. May 27, 1914.)

SEC. 10. Whoever, by himself or his servant or agent, or as the servant or agent of any person, exchanges, sells, or delivers, or has in his custody or possession with intent to sell or exchange or dispense, or offers for sale as pure milk any milk from which the cream or any part thereof has been removed, or which has been adulterated or changed in any respect by the addition of water or other substance, shall be liable to the penalties hereinafter provided.

SEC. 11. No dealer in milk or agent of such dealer, shall sell, exchange, or deliver milk from which the cream or any part thereof has been removed, unless in a conspicuous place above the center, on the outside of each vessel, can, or package from and in which such milk is sold, conveyed, or delivered, the words "skimmed milk" are permanently soldered, in metallic letters, not less than 1 inch in height: *Provided*, That in case of the delivery of skimmed milk in glass bottles or any other vessel or container the words "skimmed milk" must be either blown or pressed in such bottles, vessel, or container in letters of not less than one-half inch in height.

SEC. 12. No person shall sell, exchange, or deliver or have in his custody or possession, with intent to sell or deliver, skimmed milk containing less than 9 per cent of the milk solids.

SEC. 13. That every person who shall sell or offer for sale, or who shall transport or carry for the purpose of sale, or who shall have in his possession with intent to sell, any impure, adulterated milk or unwholesome milk, and every person who shall adulterate milk or shall sell or offer for sale milk from cows kept in insanitary premises, or which are fed on any substance in a state of putrefaction or distillery waste, or upon any substance of an unwholesome nature, or from sick or diseased cows, shall be punished by the penalties provided in section 17 of this ordinance.

SEC. 14. That the addition of water, ice, or any other substance or drug is hereby declared an adulteration.

SEC. 15. No person shall sell, exchange, or deliver or have in his, her, or their possession for the purpose of sale, any milk which contains more than 88 per cent of water and less fat than 3.25 per cent, and less solids not fat than 8.5 per cent, and the specific gravity of which at 60° F. is not between 1.029 and 1.034, and all milk of lower grade or quality than is established by this section shall be deemed adulterated and taken, and is hereby declared to be impure within the meaning of this ordinance.

SEC. 16. All persons selling milk products as butter, cheese, ice cream, etc., shall also pay out a license, and their places shall be open to inspection to the inspector during business hours to see if the same are in a clean sanitary condition. He shall take samples and see if they comply with the standard adopted by the State. If they do not comply with the same and the places are not kept in a proper sanitary condition, according to the rules and regulations of the council, they shall be subject to the same fines and penalties as provided for in section 17 of this ordinance.

SEC. 17. That any person or persons who shall violate any of the provisions of this ordinance shall be liable to a penalty of not less than \$10 nor more than \$25 for the first offense, nor more than \$50 for the second offense, and for each offense thereafter not less than \$50 nor more than \$100. All fines and penalties imposed by this ordinance shall be recoverable by summary proceedings before the mayor or any alderman or magistrate of the city, and all suits or actions at law instituted for the recovery thereof shall be in the name and for the use of the city, and upon recovery thereof all such fines and penalties shall be paid into the city treasury. In default of the payment of any fine or penalty imposed by the mayor or any alderman or magistrate of the city under the provisions of this ordinance the person or persons so offending may be committed to jail of the county of Lehigh for a period not exceeding 30 days.

Refuse and Ashes—Dumping—Licensed Collectors. (Ord. May 14, 1914.)

SECTION 1. It shall be unlawful to dump ashes or rubbish anywhere in the city limits except in such places as shall be designated by the department of public safety from time to time. Any person or persons found violating this rule, shall, upon conviction, be fined the sum of \$5 for each and every offense.

SEC. 2. All persons engaged in the work of hauling ashes or rubbish shall be listed with the department of public safety and shall carry a number painted plainly on their wagon or cart and shall be granted a permit by the department. Ash carts and wagons shall be tight and shall not be overloaded. The dropping and scattering of ashes and rubbish along the street will not be permitted. Violations of the provisions of section 1 by any of the aforesaid persons shall be punished according to the provisions of section 1 and, in addition, their permit shall be revoked for one month. No person without a permit shall be allowed to engage in the work of hauling ashes or rubbish.

SEC. 3. It shall be unlawful for any person or persons to dump garbage on any city or private dump within the city limits. Any person or persons so doing shall be punished according to the provisions of section 1.

SEC. 4. It shall be unlawful for any person or persons to dump anything but earth or ashes, free from rubbish, paper, and cans on any dump within one block of a school or other public building. Any person so doing shall be punished according to the provision of section 1.

SEC. 5. All paper must be separated from other rubbish and bundled for the convenience of the ash men, who shall burn or give to the department for disposal or baling all paper before leaving the dump. Any person or persons found dumping paper mixed with ashes or rubbish or who shall leave paper unburned on the dump shall be punished according to the provision of section 1 of this ordinance.

FARRELL, PA.**Garbage and Refuse—Care of—Receptacles. (Ord. Aug. 10, 1914.)**

SECTION 1. That all housekeepers and boarding-house keepers, hotel keepers, butchers, or storekeepers, or any other person or persons in the borough of Farrell keeping or offering garbage for collection shall provide for the storage of all kitchen and table refuse, offal, swill, and every accumulation of animal and vegetable matter that attend the preparation, decay, dealing in, or storage of fish, meats, fowl, game, or vegetables a water-tight metal receptacle provided with proper handles and a tight-fitting cover and to hold not more than 2 bushels. Said cans shall be kept in a place easily accessible to the garbage collector, but never upon any street or sidewalk, alley, or public place; and such receptacle shall be thoroughly cleaned by the owner after it has been emptied by the garbage collector; and shall provide for the storage of all general combustible waste, as paper and rags, pasteboard boxes, berry boxes, whole bottles, broken glass, and empty tin, fruit, or vegetable cans, a separate receptacle, which shall be kept in a place easily accessible to the garbage collector, but never upon any street or sidewalk, alley, or other public place.

SEC. 2. "Garbage," as used in this ordinance, shall be held to include all kitchen and table refuse, offal, all general combustible waste, as paper and rags, pasteboard boxes, berry boxes, swill, and every accumulation of animal and vegetable matter that attend the preparation, decay, dealing in or storage of meats, fish, fowl, game, or vegetables; also whole bottles, broken glass, and empty tin, fruit, or vegetable cans.

SEC. 3. If any person or persons, firm or corporation shall permit his, her, or its garbage to be so stored or kept in an exposed manner as to render the air or soil impure or unwholesome, such person or persons responsible shall, upon conviction before the burgess of the said borough, or any justice of the peace of the said borough, be sentenced to pay a fine of not less than \$1 nor more than \$25 or undergo an imprisonment in the borough lockup for a period not to exceed 48 hours.

HAVERTHILL, MASS.**Communicable Diseases—Isolation—Disinfection. (Reg. Bd. of H., Mar. 14, 1914.)**

SEC. 19a. It shall be the duty of the person in charge of any patient suffering from scarlet fever, diphtheria, measles, epidemic cerebrospinal meningitis, or typhoid fever, if said person has power and authority so to do, to adopt each and every of the following precautions to prevent the spread of such disease:

(1) To isolate the patient immediately upon the discovery of the nature of the disease, as thoroughly as is practicable, from all persons who are not suffering from the same disease and who are not necessarily in attendance upon the patient, and to maintain such isolation until the recovery or the death of the patient, except in case of patients suffering from typhoid fever.

(2) To cleanse and disinfect each and every article used by or about the patient and all excreta from the patient, and such other articles, if any, as have been specially exposed to infection, before the removal of such article or excreta from said room or rooms, if practicable, and otherwise as soon thereafter as is practicable.

(3) To disinfect the room or rooms occupied by the patient, and all articles contained therein, before said room is again occupied and within three days after the removal, recovery, or death of the patient, except when the patient has suffered from typhoid fever, in which case disinfection of the sick room shall be compulsory under this section only when ordered by the health officer.

Tuberculosis—Regulations Governing. (Reg. Bd. of H., Mar. 14, 1914.)

SEC. 19b. Every owner, agent, or occupant of any dwelling or apartment in the city of Haverhill occupied by a person having tuberculosis, or any person having charge of such dwelling or apartment, if he knows or has been notified that such diseased person or persons who had been removed therefrom had tuberculosis, shall, after such patient shall have died or removed from said dwelling or apartment, immediately and before the same is reoccupied, thoroughly cleanse and renovate the same under the supervision of the agent of the board of health. And whenever, in the opinion of the board of health, or its agent, it may be necessary, such owner, agent, occupant, or person in charge of such premises shall cause them to be rewhitened and repapered before such room, apartment, or premises are permitted to be occupied again as a dwelling. All of the above-mentioned persons shall be held responsible for a violation of this section.

SEC. 19c. Whenever a person having tuberculosis moves out of a house or an apartment, the patient, if an adult, or the active head of the family, if he knows or has been notified that such person removed therefrom had tuberculosis, shall notify the board of health of such removal within 48 hours.

SEC. 19d. No person having tuberculosis shall dispose of his sputum, saliva, or other bodily secretion or excretion so as to cause offense or damage to any person or persons occupying the same room or apartment, house, part of house, or premises, or adjoining premises: *Provided, however,* That before any prosecution is made for violation of the provisions of this section an investigation shall be made by the agent of the board of health or the visiting nurse of the said board on any complaint of any person or persons subjected to such offense or danger, and if it appears that the nuisance complained of is such as to cause offense or danger to any person occupying the same room, apartment, house or part of a house, or premises or adjoining premises, he or she shall serve notice, either orally or in writing, upon the person so complained of, reciting the alleged cause of offense or danger, and requiring him to dispose of his sputum, saliva, or other bodily secretion or excretion in such manner as to remove all reasonable cause of danger or offense.

SEC. 19e. In all private places of residence of persons sick with tuberculosis in which adequate individual sleeping accommodations are available no person known to be sick with pulmonary tuberculosis or other communicable form of said disease shall occupy for sleeping purposes a room so occupied by another person not sick with the same form of tuberculosis and whose presence is not necessary for the proper care and treatment of the patient; and no person sick with pulmonary tuberculosis or other communicable form of tuberculosis, and able to procure a bed for his or her individual use, shall occupy a bed occupied or used by another person not sick with some communicable form of tuberculosis.

KANSAS CITY, MO.**Schools—Medical Inspection of Pupils—Sanitary Regulation. (Ord. 19708, July 2, 1914.)**

SECTION 1. That all school boards and boards of education and superintendents of schools in Kansas City, Mo., managers, proprietors, and principals of all public schools and of private and denominational primary schools, shall cause to be made by a competent physician or physicians a medical examination and inspection of all pupils attending any school in Kansas City, Mo., under the supervision and direction of the Board of Hospital and Health of Kansas City, Mo., and such medical examination or inspection to be made at the commencement of each session or term of such school, and immediately thereafter, and as often thereafter as may be required by the Board of Hospital and Health of Kansas City, Mo.

SEC. 2. It shall be the duty of all school boards and boards of education and superintendents of schools in Kansas City, Mo., and managers, proprietors, and principals of all public schools and of private and denominational primary schools to cause the inspection required by this ordinance to be made.

SEC. 3. It shall be the duty of the board of hospital and health to see that the provisions of this ordinance are carried out, and that the inspections herein required are made.

SEC. 4. That all rooms or buildings occupied as a school shall be kept and maintained in a sanitary condition and well ventilated, and it shall be the duty of all school boards, boards of education, and superintendents of schools of Kansas City; Mo., managers, proprietors, and principals of all public schools and of private and denominational primary schools to have such rooms and school buildings inspected as to their sanitary and healthful condition and ventilation as often as the board of hospital and health may require.

SEC. 5. Any person, association of persons, or corporations who shall violate the provisions of this ordinance shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be fined in the sum of not less than \$25 nor more than \$200.

Antitoxin—Reporting by Druggists of the Sale of. (Res. Bd. of H. and H., Nov. 17, 1914.)

RESOLVED, by the hospital and health board, on account of the present epidemic of diphtheria, that all retail druggists of Kansas City be required to report within 24 hours to the health department, at their office in the Water Works Building, Sixth and Walnut Streets, the sale of all antitoxin, with the name of the purchaser, residence, number of units purchased, and the attending physician's name and address. This requirement has for its purpose early information of a case of diphtheria, so that the department may take prompt measures in isolating and quarantining the same.

The retail druggists of this city are respectfully urged to give this matter their earliest attention and comply with the above requirement.

LOS ANGELES, CAL.

Domestic Animals—Keeping of. (Ord. 31506, Dec. 28, 1914.)

SECTION 1. That ordinance No. 23,660 (new series) entitled "An ordinance regulating the keeping of cows and other animals within certain limits of the city of Los Angeles," approved Nov. 3, 1911, be, and the same is hereby, amended by adding thereto a new section to be numbered section 2a, and to read as follows:

SEC. 2a. It shall be unlawful for any person, firm, or corporation to keep, or cause or permit to be kept, any bull, cow, calf, sheep, or goat within 35 feet of any lunch room, lunch counter, school, church, or public building, or any door or window of any residence or dwelling house, or within 150 feet of any door or window of any hospital.

McALESTER, OKLA.

Board of Health—Organization, Powers, and Duties. (Ord. 572, Oct. 28, 1914.)

SECTION 1. That the mayor and commissioners shall constitute the city board of health, and shall, as such, have all powers and duties conferred by the laws of Oklahoma or by city ordinance, upon city boards of health. The city physician, in addition to other duties prescribed by law and by ordinance, shall be the city superintendent of public health, and shall have all the powers and perform all the duties prescribed by law for such officer. The city board of health shall enforce all ordinances, rules, and regulations in regard to public health within the city, and shall establish quarantine

under the supervision of the city physician as prescribed by ordinance, or by the rules and regulations of the State board of health.

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SEC. 5. Orders and notices herein required to be served may be served by the chief of police, or any policeman or other police officer, and the return of any such officer shall be prima facie evidence of the matters stated therein as to the manner of service,

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SEC. 9. The city superintendent of public health shall be subject to the State commissioner of public health, and shall conform to all proper rules and regulations established by him, and shall make all reports to the State board of health that may be required by law.

Communicable Diseases—Notification of Cases—Quarantine—Disinfection—Vaccination. (Ord. 572, Oct. 28, 1914.)

SEC. 2. It shall be the duty of every practicing physician to make a report in writing to the city superintendent of public health of all cases of infectious and contagious diseases within the city as soon as discovered by him or coming to his knowledge, and this provision shall apply to all cases under treatment at the time of the taking effect of this ordinance; whenever the forms furnished by the State board of health are available such form shall be used; the city superintendent of public health may whenever it may be deemed necessary, prepare blanks for the purpose, and when available they or the State board form must be used in making the report.

SEC. 3. Upon receiving the report required by section 2 hereof, it shall be the duty of the city superintendent of public health to issue an order of quarantine to the mayor on such form as may be stipulated by the rules and regulations of the State or city board of health, requiring the mayor to serve a true copy of said order of quarantine upon the persons having a contagious disease and upon the person having charge of such diseased person and the occupant of the premises upon which such diseased person may be found; thereupon such diseased person shall be isolated and confined by order of the city board of health. Any person so confined or isolated shall not be released or relieved of such quarantine without an order of the city superintendent of public health.

SEC. 4. Whenever any physician practicing within the city shall discover a case of contagious disease he shall have the power, and it is hereby made his duty, to place in effect a temporary quarantine, which shall have the force and effect of a quarantine until the proper authorities can order a quarantine, and the penalties herein provided for the violation of a quarantine shall be in force against the violation of quarantine orders made by such physician.

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SEC. 7. The city board of health may provide within or without the city limits a suitable place or places for the isolation and confinement of persons afflicted with contagious or infectious disease, and may confine and isolate such persons therein, as herein provided; and may, from time to time, as they deem necessary prohibit persons from coming within the city limits without first giving satisfactory proof that they have not been exposed to contagious or infectious disease, and shall have power to eject from the city or to isolate and confine in quarantine for a competent time, all persons entering the city in violation of such order, or whom they deem it expedient to quarantine on account of probable exposure to such disease. In case of the existence in dangerous proximity to the city of any contagious or infectious disease, the city superintendent of public health, in conjunction with the county superintendent of public health, shall provide for adequate quarantine at such distance outside the city limits as shall be deemed expedient.

SEC. 8. Whenever the city superintendent of public health shall so recommend, and the city board of health deem it necessary for the proper protection of the public health, the city board of health may issue a general order requiring all persons within the city to be vaccinated, treated with an antitoxin, or be otherwise immunized or treated for protection against contagion or infection by any method generally approved by medical science, and may provide in such order for the payment by the city of the expense of so treating indigent persons and their families.

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SEC. 10. No order for the release of quarantine shall be made by the city superintendent of public health until he receives a written report from the attending physician stating the number of persons on the quarantined premises, those who have been sick with the infectious or contagious disease, their names and ages, and when the disease first appeared in each case, and when and how it terminated. If the city superintendent of public health shall find that the regulations of the State and local boards of health relative to the period of quarantine have been fully complied with, he shall order the premises and all effects and persons thereon to be disinfected in accordance with the regulations of the State board of health, and shall require such other and further disinfection as he shall deem necessary. When all requirements have been properly complied with, the quarantine may be released; if quarantine regulations have not been fully complied with, or if proper disinfection has not been done, the city superintendent of public health shall continue the quarantine for a proper period, and until disinfection is completed and certified to by the city superintendent of public health.

No person except the attending physician shall be permitted to enter or leave any premises while the same are under quarantine, except as specially provided for by the State board of health or the city board of health and in strict accordance therewith.

SEC. 11. The sanitary policeman shall visit all quarantined premises within the jurisdiction of the city at least once every 24 hours to see that the quarantine is properly observed, and shall make daily report to the mayor or city superintendent of public health.

SEC. 12. After the termination of a contagious or infectious disease, the city superintendent of public health shall order disinfection as provided for in section 10, whether such case is subject to quarantine or not.

SEC. 13. Any person violating any provision of this ordinance, or committing any act declared to be a misdemeanor, or violating any rule, order, or quarantine regulation or order made or established by or under the authority of this ordinance, or obstructing or interfering with the city superintendent of public health, or any health officer or peace officer charged with the enforcement of any health regulation issued under authority of law, shall be guilty of a misdemeanor, and shall upon conviction be punished by a fine of not more than \$100 or by imprisonment in the city jail for any period not exceeding 90 days, or both.

Nuisances—Abatement of. (Ord. 572, Oct. 28, 1914.)

SEC. 6. Whenever the city board of health or the city superintendent of public health shall order the owner or occupant of any premises at his own expense to remove any nuisance, source of filth, or cause of sickness found thereon, within 24 hours, or within such other time as it shall be considered reasonable, and such owner or occupant refuses or neglects to comply with such order, he shall be guilty of a misdemeanor and shall be punished as hereinafter provided. Such order must be in writing and may be served personally on the owner, occupant, or authorized agent, or a copy of the order may be left at the usual place of abode of such person, or service by publication may be had as provided in section 6808, revised laws of Oklahoma, 1910.

MICHIGAN CITY, IND.

Garbage, Refuse, and Manure—Care and Disposal—Receptacles—Licensed Collectors. (Ord. Oct. 27, 1914.)

SECTION 1. The word "garbage" as herein used shall be taken to mean all kitchen refuse, decaying vegetables or meats, dead animals, or anything whatsoever that will or may decompose and become offensive or dangerous to health.

SEC. 2. The term "rubbish" as used in this ordinance shall be taken to mean dirt, chips, pieces of lumber, sticks, dead trees or branches thereof, bottles, broken glass, crockery, tin cans, woodenware, cans, boxes, straw, paper, circulars, handbills, rags, boots, shoes, hats, or any other litter or trash whatsoever.

SEC. 3. That the term "waste" as used in this ordinance shall be taken to mean cinders, ashes, plaster, brick or stone, sawdust, sand, or earth, free and clear of any rubbish as defined in section 2 of this ordinance.

SEC. 4. It shall be unlawful for any person or persons to keep in, on, or about any dwelling house, building, or premises in the city of Michigan City and within a distance of 2 miles from the corporate limits thereof, any decaying vegetables or animal substance, garbage, offal, or refuse matter or any substance that may be injurious to the public health or offensive to the residents or inhabitants of the vicinity unless the same is kept in receptacles as nearly air-tight as may be as hereinafter described, or to throw or sweep into the streets, avenues, alleys, parks, or public grounds of the said city any dirt, paper, nails, pieces of glass or board, fruit parings or skins, refuse, waste, or rubbish of any kind, or to throw or place such matter upon any sidewalk or street crossing or on any driveway, or upon the floor, stairway, or hallway of any public buildings, theater, railway depot, or railway platform in said city.

SEC. 5. Every householder or occupant of any dwelling house or other building used for the housing of persons, and the owner, keeper, or manager of every hotel, restaurant, or other place where garbage accumulates in the city of Michigan City shall provide or be provided by the garbage contractors with one or more suitable metal garbage can or cans, not to exceed 10 gallons in capacity, which shall be water-tight, shall have a close-fitting lid and two handles thereon, and which shall be placed on the premises owned or occupied by said person or persons at a place that can be easily reached by the garbage collector. The same shall not be used for the reception of garbage by more than one family, household, restaurant, or hotel, and all garbage created by or upon the premises occupied by said persons shall be deposited in said garbage cans, which shall be kept tightly covered at all times and said garbage shall be removed in manner and form under the rules and regulations hereinafter provided for: *Provided*, That all dead animals shall be immediately removed and buried by the owner of such animals, and if the owner thereof can not be ascertained within two hours after discovering the same, then, in that event, by the owner or tenant of the premises upon which they may be found.

SEC. 6. It shall be the duty of all property owners or tenants occupying any premises to provide boxes or barrels for the reception of any rubbish and waste, the same to be hauled to the dumping ground designated from time to time by the board of public works by said property owners or tenants at their own expense or by the garbage contractor at the price per quantity stipulated in this contract.

SEC. 7. No person, occupant, or owner of any property whatsoever, shall place any rubbish, waste, ashes or cinders or anything but garbage in the cans provided for in section 5 of this ordinance, nor shall such person mix any rubbish, waste, ashes, or cinders with any garbage that is to be collected and removed.

SEC. 8. It shall be unlawful for any person or persons or officer or officers or agent of any copartnership or corporation to throw or deposit, or cause to be thrown or deposited, any rubbish, waste or garbage on any vacant lot, public thoroughfare, street or

alley, or public property, or any place whatsoever, except the place provided by the said board of public works.

Sec. 9. Immediately after the passage and legal publication of this ordinance the board of public works shall advertise for bids for the collection of garbage, waste, and rubbish in the municipality during a period of not less than two years nor more than five years, each bidder to designate the price to be charged under a contract for two three, four, or five years, which time shall be specified in the bids. Said advertisements shall be published in two newspapers of general circulation in the municipality once a week for two weeks. The said bids shall be based on the price for removal per quantity of 10 gallons of garbage in cans as a standard. The board of public works are hereby empowered to contract with the person, firm, or corporation making the lowest and best bid per quantity as herein specified for removal of garbage in cans for the period determined upon. Before entering into a contract with the lowest bidder for the collection and removal of garbage the said board shall require the said bidder to furnish a bond in the sum of \$500, with good and sufficient surety, conditioned that said contractor shall collect and remove any garbage offered by the owner, tenant, or occupant of any premises, in good, proper and lawful manner and in compliance with the ordinance of the city of Michigan City governing the same, said bond to be approved by the mayor. At the expiration of the time during which said contract runs the said board shall proceed to advertise and let a new contract in the manner herein specified. The cans used in hauling garbage shall be of a capacity of not less than 10 gallons, shall be kept tightly covered at all times, shall be water-tight, and shall be removed by the person or persons holding permits to remove them, at least once a week and oftener during warm weather if necessary. Said cans when containing garbage, shall not be emptied into other containers, but all garbage shall be removed in cans in which it is originally deposited, and at the time of such removal an empty can, which has been thoroughly washed out and disinfected, shall be left in the place of the can so removed.

Sec. 10. No person or persons shall any time haul or remove garbage in barrels, boxes, open cans, or in any container in which it has not been originally deposited. No person or persons shall haul or remove garbage from any grocery, restaurant, hotel, or fruit store unless such person or persons shall have first provided themselves with the necessary cans as required herein. No person or persons shall at any time haul or remove garbage from any private residence or apartment except the person, firm, or corporation to whom has been awarded the contract hereunder for the collection and removal of garbage: *Provided*, That the owner, tenant, or occupant of any premises shall have the right to dispose of his garbage on the premises where it originates by burning the same, without offense to the neighborhood or danger to the public health.

Sec. 11. The person, firm, or corporation awarded the contract to collect and remove garbage shall provide themselves with a sufficient number of metal garbage cans to supply all who apply for garbage collection. Said cans shall not exceed 10 gallons in capacity, which cans shall be made perfectly water-tight and kept so to prevent the contents or any odor escaping therefrom. All garbage cans herein provided for to be placed on premises for the reception of garbage shall by the contractor be washed out and disinfected at least once per trip to the satisfaction of the board of health. The vehicles herein provided for shall be loaded and driven so that none of the contents shall fall on the ground or run out or spill therefrom. All of such vehicles shall have attached thereto, on both sides, a sign with the words "licensed garbage collector" painted thereon, together with the number of said vehicle in bold letters and figures. The number herein provided for on said vehicles shall be furnished by the board of public works.

Sec. 12. The person, firm, or corporation having the contract to collect garbage shall call at least once a week throughout the year and oftener in warm weather, if necessary, at all places where garbage accumulates, and upon all persons, firms, or corporations

having garbage as aforesaid, and remove the can or cans containing such garbage and shall at the same time leave another empty can on the premises to take the place of the can so removed: *Provided further*, That said contractor may, at their discretion, discontinue the service for such persons, firms, or corporations as may be more than one month in arrears in their payments for such work.

SEC. 13. All garbage thus collected shall be conveyed by the person, firm, or corporation so collecting it at his or its own cost and expense to the city garbage depository.

SEC. 14. The collection and removal of garbage as aforesaid shall be conducted under the supervision, direction, and control of the board of public works and board of health and in strict conformance with the provisions of this ordinance.

SEC. 15. The price to be charged for the collection of garbage in the city of Michigan City by the contractors shall not exceed the rate per standard can of 10 gallons or part thereof as specified in their contract with the board of public works. Ashes, cinders, and other clean waste, unmixed with rubbish as defined in section 3 of this ordinance, will be removed by the contractor herein provided, at a price based on quantity, as per barrel or cubic yard as standards, and such waste shall be deposited within the city limits at a place or places to be designated by the board of public works, and in a like manner such contractor will be required to remove rubbish at the price per barrel or per cubic yard stipulated in his contract.

SEC. 16. It shall be the duty of the person, firm, or corporation having the contract as herein specified for the collection and removal of garbage to maintain an office either at the place of residence of said person, firm, or corporation, or at some other place within the corporate limits with at least one telephone therein, which said office shall be kept open and in charge of some person from 8 a. m. to 4 p. m. of each day, except Sundays and legal holidays, for the purpose of receiving calls for the collection and removal of garbage and the receiving of such information as may be conveyed to said contractor.

SEC. 17. Should the person, firm, or corporation having the contract for the collection and removal of the garbage at any time violate any of the provisions of this ordinance or fail to comply with any of its provisions or with the provisions of the contract entered into as herein specified the board of public works, after due notice in writing served upon said contractor fixing a time for a hearing, may, after such hearing, for good and sufficient cause revoke and annul said contract and thereafter advertise for bids and enter a new contract in accordance with the provisions of this ordinance and proceed to collect any damages upon or from said bond and the sureties thereon: *Provided, however*, That said contractor may appeal from decision within 10 days to the circuit or superior court under the laws pertaining to civil appeals from justice courts.

SEC. 18. No person, firm, company, or corporation shall carry, cart, haul, or convey any manure, rubbish, waste or other refuse matter specified under sections 2 and 3 of this ordinance through the streets, alleys, or public places of Michigan City, except in some tight wagon box or bed, so made, placed, and loaded that none of its contents shall be spilled or strewn over, on, or along such street, alley, or public place.

SEC. 19. The board of health shall have authority to require the owners, managers, or renters of restaurants, hotels, fish markets, and all other places where garbage accumulates in quantities to furnish sufficient number of receptacles to take care of such accumulations, and may require that such receptacles be removed in any of the ways contemplated by this ordinance as often as necessary. Failure to obey any order or regulation of the board of health in connection with this ordinance shall be construed as a violation of this ordinance.

SEC. 20. All persons licensed under this ordinance shall pay to the treasurer for the use of the city the sum of \$25 for every such license issued, which said license shall continue in force for a period of one year from the date thereof, and all such licenses shall be amendable to all the provisions of this ordinance.

Sec. 21. It shall be the duty of all property owners or tenants occupying premises upon which manure of any kind accumulates to provide closed boxes, bins, or other receptacles therefor, and said receptacles shall be emptied promptly and completely when full and the contents thereof disposed of in a manner satisfactory to the board of health.

Sec. 22. Every person, firm, or corporation violating any of the provisions of this ordinance shall, on conviction thereof, forfeit and pay into the city of Michigan City not less than \$1 or more than \$25, together with costs of prosecution.

MONTCLAIR, N. J.

Wood Alcohol—Sale of. (Reg. Bd. of H., Dec. 8, 1914.)

Article 2, section 1, of the sanitary code was amended by adding thereto the following clause:

"The sale or exposure in a public place of wood alcohol, either with or without the admixture of other liquids, is hereby declared to constitute a nuisance unless the container in which it is sold or exposed is conspicuously labeled 'Poison.'"

Home Laundries—Registration Required. (Reg. Bd. of H., Dec. 8, 1914.)

Article 2, section 1, of the sanitary code was amended by adding thereto the following clause:

"Every person who does laundry work in his (her) home as a gainful occupation shall register his name and address at the office of the board of health, and the doing of such laundry work under conditions that are not approved by the board is hereby declared to constitute a nuisance."

Foodstuffs—Persons Engaged in Handling—Certificate of Health Required. (Reg. Bd. of H., Dec. 8, 1914.)

Article 7, section 10a, of the sanitary code was amended by adding thereto the following clause:

"No person shall hereafter engage in the manufacture for sale of bread, pastry, candy, ice cream, or any other article of food in the town of Montclair or handle any food that is to be served to customers in a restaurant, hotel, or school until he has filed with the board of health a certificate signed by a regularly licensed physician, who is approved by the board, that all persons who come in contact with the food that he so manufactures or handles, while it is being manufactured, stored, or handled by him, have been examined by the said physician within 30 days and show no evidence of any communicable disease. Such examination shall include any tests that the board may, by resolution, prescribe. Like certificates must thereafter be filed every three months on the first days of January, April, July, and October of each year based upon examinations that have been made of all such persons during the previous month, and additional certificates must be filed for all new employees as soon as they begin their duties. All certificates must be on forms furnished by the board and must give the name of every person examined. On request the board of health will designate a physician who will make such examinations and furnish such certificates without expense to the applicant."

Milk and Cream—Production, Care, and Sale. (Reg. Bd. of H., Dec. 8, 1914.)

Article 8, section 1, of the sanitary code, was amended by inserting the following clauses:

"Any person desiring to engage, either as principal or agent, in the production, sale, or distribution of milk or cream within the town of Montclair may make application therefor to the board of health upon blanks to be furnished by the board, setting forth the locality from which such person or persons procure the milk or cream, also a full and

complete list of the names and addresses of those from whom he purchases milk or cream, and also the place at or from which he desires to sell milk or cream, and whether he desires to sell raw or pasteurized milk or cream or both. Said application shall also state whether the applicant desires to sell as principal or agent, and if as agent give the name of his principal. It shall be signed by the applicant, and if granted by the said board a license shall be issued to him signed by the president and secretary of the board in the following form:

Board of Health, Montclair, N. J.

Milk License No.

— of —

is hereby licensed to engage in the business of selling and distributing in the town of Montclair (raw or pasteurized) milk and cream from (store or wagons) for a period of one year from the date hereof: *Provided*, That if such person, or any of his employees, servants, or agents, shall violate any ordinance of the said board in conducting said business, or any of the provisions of an act entitled "An act to regulate the production, distribution, and sale of milk or cream," approved March 30, 1914, or other statutory regulations of such sales, this license may, in the discretion of the board, be revoked by the board.

Dated at Montclair, N. J., this — day of —, 19 .

"The annual license fee shall be \$1 for each place at or from which milk is sold and for each wagon or vehicle used in the distribution thereof.

"All persons engaged in the business of selling milk or cream in the town of Montclair at the date when this ordinance takes effect who desire to continue the same must file their applications for a license not later than the Monday before the second Tuesday of January of each year. Licenses when granted shall be for a period of one year from the time of granting the same: *Provided*, That any licenses so granted may be vacated by the board in case the licensee or any of his employees, servants, or agents shall violate any of the provisions of the ordinance regulating the production, sale, and distribution of milk and cream, or any of the provisions of the act of the Legislature of the State of New Jersey, entitled 'An act to regulate the production, distribution, and sale of milk and cream,' approved March 30, 1914, or other statutory regulations of such sales.

"Persons desiring hereafter to commence the business of selling milk or cream in Montclair may make their application at any meeting of the board, but in every such case new applications must be made on the Monday before the second Tuesday of January of each year, as above provided.

"Any person who is licensed to sell milk or cream in the town of Montclair shall immediately withdraw from the town any supply upon notification from the board that the producer of such supply has failed or refused to comply with any of the requirements that are or hereafter may be required of milk producers."

Article 8, section 3, by adding thereto the following clause:

"Such examination shall consist of any efficient and reasonable method that may be used by the said veterinarian to determine whether or not the cows are diseased."

Article 8, section 4d, by adding thereto the following clauses:

"All cow stables shall be well ventilated at all times."

Article 8, section 4, by adding thereto a new subsection (g) as follows:

"(g) No raw milk or cream shall be sold in the town of Montclair unless it is produced and handled at a farm or dairy that scores at least 80 on the official score card of the United States Bureau of Animal Industry, and no pasteurized milk or cream shall be sold unless it is produced and handled at a farm or dairy that scores at least 70 on said score card."

Article 8, section 5a, by adding thereto the following clauses:

"Every person who is licensed by the board to sell milk or cream in the town of Montclair shall file, or cause to be filed, with the board of health, within 72 hours after the completion of a tuberculin test of any cow in a herd from which his supply is obtained, a chart showing full details of such tuberculin test, and such chart, to be accepted by the board, must show that temperature readings were made at least every two hours

from the tenth to the twentieth hour after the cow was injected with tuberculin, and whenever at the twentieth hour a rising temperature is being recorded additional temperatures must be taken and recorded until a definite reaction is established or the temperature of the cow drops to normal. The chart must also state the name of the manufacturer of the tuberculin used, the amount used, and the hour of injection. If the cow has been previously tested within a period of four months, or if the herd on the previous test showed a large percentage of tuberculous animals or of animals with a suspicious temperature, the amount of tuberculin used and the hours of reading temperatures shall conform to the best practice in such cases.

"Every cow that has been admitted to the State of New Jersey within three months and added to a herd from which milk is produced for sale in Montclair must be retested not less than 60 days and not more than 90 days after such admission to the State, and no cow shall be added to a herd unless such cow has been tested to the satisfaction of the board within three months.

"In addition to the tuberculin tests already required by this section, the board may, when in its opinion the number of tuberculous cows found in a herd or the extent of the lesions found in said cows warrants such action, require by resolution that a herd shall be retested, and no raw milk or cream from such a herd shall be sold in the town of Montclair until such a retest is made to the satisfaction of the board: *Provided*, That a five-day notice to make such a retest must be served by the board upon the person who is licensed to sell such milk or cream.

"The board may also require that any cow that shows an irregular temperature at the time of a tuberculin test or that, in the opinion of the board, has not been properly tested, shall be removed from the herd, and no person shall sell in the town of Montclair any raw milk or cream from any such cow until a retest has been made to the satisfaction of the board.

"No diseased cow or any cow that is in a condition to impair the healthfulness of the milk shall be allowed to remain in any herd from which milk is produced for sale in the town of Montclair.

"Every person who is licensed by the board to sell raw milk or raw cream in the town of Montclair shall notify the board, or cause it to be notified, at once of the removal for any reason of any cow from any herd from which his supply is obtained. Such notification shall give the ear-tag number and the reason for the removal from the herd of any such cow, together with the name and address of the person who has just secured possession of the cow, in case such cow did not die or was not slaughtered on the premises. No Montclair Board of Health ear tag shall be removed for any reason from any cow while such cow remains in the possession of a dairyman who produces milk or cream that is sold in Montclair, and no cow that has been removed from a herd shall be returned to the herd without the knowledge of the board. When a cow is returned to a herd after calving the board shall be notified of the date of parturition.

"All tuberculin tests required by this section may be made by any regularly qualified veterinarian, unless the board can show cause why tests made by such veterinarian should not be accepted.

"All tuberculin test charts that are filed with the board must have appended thereto a veterinarian's certificate as to the general health of all nonreacting cows.

"The board of health may, when in its opinion the public health requires such action, require by resolution that any milk or cream supply shall be pasteurized, under the supervision of the board, and no person shall sell any such supply after he has been notified by the board to pasteurize it unless such supply is pasteurized under the supervision of the board: *Provided*, That such supply may be sold without pasteurization after the board, by resolution, decides that the necessity for such pasteurization no longer exists.

"No person shall sell any pasteurized milk or cream within the town of Montclair unless a certificate signed by a regularly qualified veterinarian has been filed with the

board within six months for every herd from which such supply is obtained. Such certificate must state that the said veterinarian has personally examined every cow in the herd and it must also state the number of healthy cows found and the number of diseased cows found, with the nature and extent of the disease in each case and the disposition that has been made of such diseased cows.

"No person who is licensed by the board to sell milk or cream in the town of Montclair shall add any dairy to his source of supply without the written permission of the board. No such person shall at any time pasteurize his supply, or permit any part of it to be pasteurized, without the written permission of the board, nor shall any such dealer at any time sell as raw milk or cream without the written permission of the board, any supply that he has been authorized or directed by the board to pasteurize."

Article 8, section 6d, by adding thereto the following clause:

"All rooms in which milk or cream is pasteurized or bottled and all rooms in which milk utensils are washed or sterilized shall be provided with a smooth, well-drained, nonabsorbent floor. Such rooms shall at all times be clean and light and shall be effectively screened between the first days of April and November of each year."

Article 8, section 6e, by adding thereto the following clauses:

"All persons, including milkers, who come in contact with milk or cream before it is sealed in the final container must be free from all communicable diseases as shown by a medical examination made every three months, and no person shall sell any milk or cream in the town of Montclair until a certificate signed by a regularly licensed physician, who is approved by the board, that such persons have been examined by the said physician within 30 days and show no evidence of any communicable disease has been filed with the board of health. Such examinations shall include any tests that the board may, by resolution, prescribe. Like certificates shall be filed with the board of health on the 1st day of January, April, July, and October of each year based upon examinations that have been made of all such persons during the previous month: *Provided*, That such certificates will not be required for those persons who handle milk and cream that are to be pasteurized. Additional certificates must be filed for new employees as soon as they begin their duties. All certificates must be on forms furnished by the board and must give the name of every person examined."

Article 8, section 7b, by substituting therefor the following clauses:

"No raw milk shall be sold, offered for sale, or delivered in the town of Montclair unless at least 80 per cent of the samples, as shown by analyses made by or for the board, contain less than 100,000 bacteria per cubic centimeter: *Provided*, That no action will be taken to exclude any supply unless at least two samples taken on different days are found to contain more than 100,000 bacteria per cubic centimeter.

"No milk or cream that contains any appreciable amount of sediment or foreign matter shall be sold, offered for sale, or delivered in the town of Montclair, regardless of whether or not the bacteria count exceeds the limit set by this section. 'Appreciable amount of sediment' shall be construed to mean anything more than a few minute particles in a quart of milk."

Article 8, section 7c, by adding thereto the following clauses:

"No milk or cream shall be sold in the town of Montclair if it is handled or stored at a milk station, dairy, or distributing station at which a milk or cream supply not approved by the board, and not contained in a final container which is plainly labeled with the source of the supply, is handled or stored.

"No milk or cream shall be sold in the town of Montclair unless the container in which it is delivered has plainly marked thereon the name of either the producer or the vender of the milk or cream, and in case a license to sell milk or cream is granted to a dealer who handles separately more than one supply, such container shall in addition have marked thereon the source of the supply. No false or misleading statement or mark shall appear upon any container or be attached thereto."

Midwives—Required to Give Notice of Cases Attended. (Reg. Bd. of H., Dec. 8, 1914.)

Article 9, section 3, of the sanitary code was amended by adding thereto the following clause:

"Every person acting as a midwife in the town of Montclair shall notify the board by telephone or telegraph, at the expense of the board, immediately after he or she is called to attend a confinement, or as soon thereafter as the office of the board is open; and such notice shall give the name and exact address of the person who is to be attended by the said midwife."

Venereal Diseases—Persons Affected with, to Take Proper Treatment. (Reg. Bd. of H., Dec. 8, 1914.)

Article 10, section 5, of the sanitary code was amended by adding thereto the following clause:

"Every person residing in or working in the town of Montclair who is found to be affected with a venereal disease shall immediately take proper treatment for the cure of such disease or be isolated."

Barber Shops—Employees—Certificate of Health Required. (Reg. Bd. of H. Dec. 8, 1914.)

Article 12, section 1, of the sanitary code was amended by prefixing thereto the following clause:

"No person shall hereafter operate a barber shop until he has filed with the board of health a certificate signed by a regularly licensed physician, who is approved by the board, that all persons who wait upon customers in his establishment have been examined by the said physician within 30 days and show no evidence of any communicable disease. Such examination shall include any tests that the board may, by resolution, prescribe. Like certificates must thereafter be filed every three months on the 1st day of January, April, July, and October of each year for examinations that have been made of all such persons during the previous month, and additional certificates must be filed for all new employees as soon as they begin their duties. All certificates must be on forms furnished by the board and must give the name of every person examined."

Penalty. (Reg. Bd. of H., Dec. 8, 1914.)

Any person who violates any of the regulations above set forth shall, upon conviction thereof, forfeit and pay a penalty of \$25 for each offense.

NEW ORLEANS, LA.

Plague—Prevention of the Introduction and Spread of—Coops or Inclosures for Fowls and Animals. (Reg. 22, Bd. of H., Sept. 25, 1914.)

SECTION 1. Within the following limits of the city of New Orleans, to wit: Beginning at the river and Peters Avenue; along Peters Avenue (lower side) to Chestnut Street; along Chestnut Street (river side) to Napoleon Avenue; along Napoleon Avenue (lower side) to South Claiborne Avenue; along South Claiborne Avenue (river side) to the New Basin; along the New Basin (upper side) to Broad Street; along Broad Street (river side) to Columbus Street; along Columbus Street (upper side) to North Galvez Street; along North Galvez Street (river side) to St. Bernard Avenue; along St. Bernard Avenue (upper side) to North Claiborne Avenue; along North Claiborne Avenue (river side) to Lafayette Avenue; along Lafayette Avenue (upper side) to St. Claude

Avenue; along St. Claude Avenue (river side) to Poland Street; along Poland Street (upper side) to the river; along the river to Peters Avenue, point of beginning; and in the fifteenth ward (Algiers), beginning at Opelousas Avenue and the river; along Opelousas Avenue (north side) to Atlantic Avenue; along Atlantic Avenue (west side) to the river; and along the river to Opelousas Avenue, point of beginning, it shall be unlawful for any person, firm, or corporation to have, keep, maintain, or feed, for sale or for private use, in any lot, open area, yard, premises, or building, any live hares, rabbits, guinea pigs, apes, monkeys, squirrels, white mice, chickens, turkeys, geese, ducks, doves, pigeons, or guinea fowl, unless the same are kept in a movable or portable coop constructed with a metallic covered bottom and metal slides to a height of at least 4 inches, the whole surmounted by a metal cage of wire having not more than one-half inch to each mesh, and said coop to be elevated at least 2 feet from the floor on supports so constructed as to leave clear open space between the bottom of the coop and the floor or ground; said coop must be so constructed as to effectively exclude rats and to prevent escape of food from said coop, and the bottom or one side may be detachable for the purpose of cleaning such coop, and such coop must at all times be maintained in a cleanly condition.

SEC. 2. Within the following limits of the city of New Orleans, outside the limits mentioned in section 1, to wit: Beginning at the river and Peters Avenue; along the river to Protection levee; along Protection levee (lower side) to South Claiborne Avenue; along South Claiborne Avenue (river side) to Leonidas Street; along Leonidas Street (upper side) to New Basin; along New Basin (upper side) to City Park Avenue; along City Park Avenue (upper side) to Esplanade Avenue; along Esplanade Avenue (lower side) to Maurepas Street; along Maurepas Street (river side) to Gentilly Road; along Gentilly Road (lower side) to Marigny Avenue; along Marigny Avenue (lower side) to Elysian Fields Avenue; along Elysian Fields Avenue (upper side) to North Johnson Street; along North Johnson Street (river side) to Lafayette Avenue; along Lafayette Avenue (lower side) to Celestine Street; along Celestine Street (river side) to Poland Street; along Poland Street (upper side) to North Claiborne Avenue; along North Claiborne Avenue (river side) to Jourdan Avenue; along Jourdan Avenue (upper side) to St. Claude Avenue; along St. Claude Avenue (river side) to Delery Street; along Delery Street (upper side) to the river; along river to Poland Street; and in the fifteenth ward (Algiers), beginning at Atlantic Avenue and the river; along the river to the upper boundary of the United States Naval Station and the river; along this boundary to Newton Street; along Newton Street (river side) to Le Boeuf Street; along Le Boeuf Street (upper side) to Lamarque Street; along Lamarque Street (river side) to Nunez Street; along Nunez Street (upper side) to the parish line; along the parish line to the river; along the river to Opelousas Avenue, it shall be unlawful for any person, firm, or corporation to have, keep, maintain, or feed, for sale or for private use, in any lot, open area, yard, premises, or building, any live hares, rabbits, guinea pigs, apes, monkeys, squirrels, white mice, chickens, turkeys, geese, ducks, doves, pigeons, or guinea fowl, unless same are kept in a coop constructed in the manner provided for in section 1 of this ordinance, or in an inclosure surrounded by an area wall at least 6 inches thick, to be built of cement brick or stone laid in cement mortar and extending at least 24 inches into the ground and rising to a height at least 6 inches above the surface of said yard: *Provided*, That openings may be left in said surrounding walls for the purpose of drainage only: *And provided further*, That such openings shall be securely screened with a metallic grating having openings between the gratings of not more than one-half inch. The side walls above the foundation shall be constructed of concrete or brick laid in cement or of wire cloth not less than 20 gauge or more than one-half-inch mesh; and the ceilings of said area shall be constructed of material impervious to rats.

SEC. 3. Every day's violation of any provision of this ordinance shall constitute a separate and distinct offense.

SEC. 4. Whoever shall violate any provision of this ordinance shall, on conviction, for each offense, be punished by a fine of not less than \$10 nor more than \$25, or in default of payment, by imprisonment in the parish jail for not less than 10 days nor more than 30 days, or both, at the discretion of the court having jurisdiction of same.

Plague—Prevention of the Introduction and Spread of—Rat Guards on Vessels.
(Reg. Bd. of H., Sept. 10, 1914, Amending Reg. July 25, 1914.¹)

Section 1 of the regulation¹ of the board of health, adopted July 25, 1914, was amended to read as follows:

"SECTION 1. From and after the promulgation of this ordinance it shall be unlawful for any vessel, steamboat, or other water craft, except harbor boats, to lie alongside of any wharf or dock in the city of New Orleans, and such vessels, steamboats, or other water craft shall be fended off from said wharf or dock in such manner that no part of such vessel, steamboat, or other water craft shall be nearer than 8 feet from the nearest point of said wharf or dock by a floating fender or spars of sufficient strength to maintain said distance of 8 feet, and each such spar, and each such chain, hawser, rope, or line of any kind, extending from any such vessel, steamboat, or water craft, to said dock or wharf, shall be equipped with and have properly and securely attached thereto a rat shield or guard of such design, and in such manner, as shall be approved by the health officer of the city of New Orleans, except such harbor boats which shall be fumigated once every 60 days."

Plague—Prevention of the Introduction and Spread of—Garbage Districts. (Reg. Bd. of H., Sept. 10, 1914, Amending Reg. July 27, 1914.²)

Section 2 of the regulation of the board of health adopted July 27, 1914, was amended as follows: In lines 3 and 4 of the regulation, as published on page 2097 of the Public Health Reports of August 7, 1914, "North Anthony Street" was changed to "South Anthony Street." After the words "the point of beginning" at the end of the same paragraph, the following was added:

"In the fifteenth ward (Algiers) the first garbage district shall comprise the territory within the following limits: Beginning at the river front and Atlantic Street; along both sides of Atlantic Street to Diana Street; along Diana Street, both sides, to Verret Street; along Verret Street, both sides, to Socrates Street; along Socrates Street, both sides, to Teche Street; along Teche Street, both sides, to Bringier Street; along Bringier Street, both sides, to the river; and along the river to Atlantic Street, the point of beginning."

Plague—Prevention of the Introduction and Spread of—Rat Proofing of Buildings Used for Residential Purposes. (Reg. Bd. of H., Sept. 10, 1914, Amending Reg. July 27, 1914.³)

Section 3 of the regulation of the board of health adopted July 27, 1914, was amended by inserting at the end of the paragraph headed⁴ "Class B," the following:

"*Provided*, That any building of class 'B,' used exclusively for residential purposes, may be made rat proof by constructing at the margin of the ground area of said building a wall of concrete or brick or stone laid in cement; such wall to extend into and below the surface of the ground at least 2 feet and to meet the floor of the building above closely and without any intervening space, such walls shall be at least 6 inches thick and extend entirely around said building: *Provided*, That said walls may be built

¹ Public Health Reports, Aug. 7, 1914, p. 2092.

² *Ibid.*, p. 2096.

³ *Ibid.*, p. 2093.

⁴ *Ibid.*, p. 2094, second paragraph.

with openings therein for ventilation only: *And provided further, That such openings for ventilation shall be securely screened with metallic gratings having openings between said gratings of not more than one-half inch, and the whole so constructed and closed as to prevent the entrance of rats beneath such buildings.*"

NEW YORK, N. Y.

Opium and Drugs Having Similar Effects—Sale of. (Reg. Bd. of H., Nov. 24, 1914.)

Resolved, That section 182 of the Sanitary Code be, and the same is hereby, amended so as to read as follows:

SEC. 182. No opium, morphine, chloral, or cannabis indica, or any other substance giving a physiological reaction similar to that of opium; or any salts, alkaloids, or derivatives, of any of the said drugs or substances; or any preparation, compound, or mixture, containing any of the said drugs or substances or their salts, alkaloids, or derivatives; shall be sold at retail or given away in the city of New York except upon the written prescription of a duly licensed physician, veterinarian or dentist.

The foregoing provisions shall not, however, apply to preparations, compounds, or mixtures, containing any of the aforesaid drugs or substances or their salts, alkaloids, or derivatives, prepared for external use only, in the form of liniments, ointments, oleates, or plasters.

NORWOOD, OHIO.

Milk and Cream—Pasteurization of. (Reg. Bd. of H., Nov. 14, 1914.)

1. It shall be unlawful for any person, firm, or corporation to sell, offer for sale, or have in his possession for the purpose of selling or giving away to any person or persons in the city of Norwood, county of Hamilton, State of Ohio, any milk or cream which has not been pasteurized as hereinafter required.

2. Milk and cream shall be deemed pasteurized within the meaning of this regulation if the same shall have been heated to a temperature of not less than 145° F., and held at that temperature for not less than 30 minutes. The health officer of the board of health or his assistants shall be empowered to inspect the process of pasteurization, also the premises, apparatus, and conditions under which same is done. The pasteurization of milk or cream otherwise than according to the methods and process approved by the city health officer shall not be deemed a compliance with the provisions of this regulation.

3. The above described pasteurization shall be required in all cases except those wherein such milk or its by-products are obtained from dairies which are under the direct control of a recognized milk commission of the Cincinnati Academy of Medicine, and this exception shall apply only to products known as certified and inspected.

4. All resolutions or parts of resolutions in conflict herewith are hereby repealed.

5. This regulation to take effect and be in force from and after the 1st day of June, 1915.

6. Upon its appearing to the satisfaction of the board of health that any person is violating the above regulation, his permit to vend milk or its products shall be revoked.