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RAT PROOFING.

ITS PRACTICAL APPLICATION IN THE CONSTRUCTION OR REPAIR OF DWELLINGS OR OTHER BUILDINGS.

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Those contemplating the erection of a new or the repair of an old building, whether of frame, brick, rock, concrete, or other construction, should be informed as to the sanitary and economic benefits to be derived from rat-proofing measures of a permanent character, and should require the scrupulous application of such measures as a part of the builder's contract. The expense to be incurred is slight when compared with the cost of the building, and the measures applied will insure not only practical freedom from rats but in most cases freedom from various insects as well.

It is a popular fallacy that rats may be eliminated by poison and traps, whereas such measures used alone serve only to reduce their numbers, provide a greater abundance of food for survivors, and possibly stimulate multiplication. Neither trapping nor poisoning nor the combination of the two will alone rid premises of rats, for they breed four or five times a year, and although trapped or poisoned the birth rate keeps pace with the death rate.

For the successful elimination of the rat a third measure is absolutely essential, namely, the separation of the rat from his food supply. This will require in every instance certain structural alterations in buildings harboring them. After such changes have been effected, poison and traps become important adjuncts.

Commonly we have to deal with three varieties of rats: (1), the *Mus norvegicus*, known as the brown, gray, wharf or Norway rat; (2), the *Mus rattus*, the old English black rat; and (3), the *Mus alexandrinus*, the Egyptian or roof rat.

The brown rat (*M. norvegicus*) is larger than either the black or roof rat and more ferocious. He is a more prolific breeder and the young are more numerous. He is a burrower and usually makes

his home in, or in close proximity to the ground, being most commonly found inhabiting ground areas of buildings, beneath the floors.¹ He is rarely trapped in upper stories. Under natural conditions, when unchecked by ratproofing measures, he destroys or drives to upper floors both black and roof rats. Only mice persist and occupy the same premises, their smaller size permitting escape into small holes. While known as the wharf rat, he is rarely trapped on ships visiting the Pacific coast.

Black and roof rats differ chiefly in color. They are of about the same size but smaller than the Norway rat. They show preference for upper floors and are able to live between ceilings, in walls, and on roofs. They are remarkable climbers, their agility permitting them to pass from roof to roof by telephone and electric wires or other means, and their great trap shyness and cunning render them more difficult of control than their larger relative.

In the presence of the unchecked Norway rat, comparatively few black or roof rats may be found, but when the larger rat is absent or has been destroyed they increase rapidly, and may then be found inhabiting basements and ground floors. They are generally acceded to be the most common ship-borne rat; they are by far the most common form trapped on ships visiting the Pacific coast from foreign ports.

These differences in the natural habitat being appreciated, it will be seen that any plan for the elimination of the rat must contemplate the rat proofing of the building from basement to roof.

For practical purposes, a rat-proof building may be defined as follows: A building constructed of material impervious to rats, in which all unnecessary or accidental openings have been permanently closed, and all natural openings provided with doors, windows, gratings, or screens closely approximating such openings, and securely closed when the building is not in use.

The rat can be built out and destroyed by the application of the following measures:

The erection of rat-proof buildings only.

The closure of all natural or accidental openings in existing buildings of rat-proof construction.

The remodeling of all nonrat-proof buildings, using materials impervious to rats.

The removal of material covering yards, sidewalks, and passageways which will permit rat refuge.

The protection or removal of rat food.

The destruction of rats by poison and traps.

¹ The ground area is the space on which a building stands. The area wall is the wall inclosing such space.

THE RAT PROOFING OF THE NEW BUILDING.**FOUNDATION WALLS.**

The building, if of frame construction, should be placed upon a foundation wall of material impervious to rats, such as brick or concrete. This wall should be not less than 6 inches in thickness; should be laid without break around the entire building; should extend not less than 18 inches beneath the surface of the surrounding soil and upward flush with the under surface of the floor above.¹ Floor joists should be embedded in this wall or the spaces between the joists filled in and perfectly closed, up to the floor level.

If the wall is opened to admit plumbing, the openings remaining around such plumbing should be at once closed with cement to the full depth of the wall. If the wall is opened to permit ventilation, such openings should be carefully screened with cast-iron gratings or wire cloth not less than 20 gauge nor greater than $\frac{1}{2}$ -inch mesh. If opened to admit basement doors, the doors must closely fit such openings when closed.

GROUND AREAS.

The ground area inclosed by foundation walls requires especial attention. If no food products are to be stored, prepared, or sold on the premises, the ground area should be covered with a layer of concrete not less than 3 inches in thickness, above which a floor of tongue-and-groove lumber should be placed, disregarding the dead space remaining between.

If the building is to be used as a fish market, bakery shop, sausage factory, candy factory, restaurant kitchen, or for the preparation of other foodstuffs, the ground area should be filled in with clean earth or sand to within 3 inches of the top of the foundation wall, over which should then be placed a layer of concrete not less than 3 inches in thickness, finished with a layer of cement not less than one-half inch in thickness. This surface, representing the floor of the building, should, for sanitary reasons, remain uncovered.

If the building is to be used as a bakery shop, meat market, butter shop, restaurant, delicatessen shop, or other place where foodstuffs are stored or kept for sale, the ground area preferably should be treated in a manner similar to that required where foodstuffs are prepared, a wooden floor, if desired, being closely laid over the concrete surface, care being used to see that no dead space sufficient to admit rats remains between the two. In lieu of this the ground area should be covered with a layer of concrete not less than 3 inches in thickness, and the floor above constructed of two layers of

¹ It is important that the area wall extend not less than 18 inches beneath the surface soil; otherwise, rats will burrow under the walls and harbor beneath the building.

1-inch tongue-and-groove lumber driven tight, between which should be placed a layer of wire cloth not less than 20 gauge nor greater than one-half inch mesh. This wire cloth should extend upward 8 inches on the side walls and be covered with the baseboard.¹

BASEMENTS.

Buildings provided with basements should have the side walls of such constructed of materials impervious to rats. The ground area—the basement floor—should be covered with concrete not less than 3 inches in thickness, finished with a wearing surface of cement not less than one-half inch in thickness.

Basement windows and basement ventilators should be carefully screened with wire cloth not less than 20 gauge nor greater than one-half inch mesh. Basement doors should fit snugly, and if practical should be provided with a liquid check or similar appliance which will automatically close them.

BASEMENT CEILINGS.

Wherever practicable and not prohibited by fire ordinance, basement ceilings should remain open and unsealed in order that rat refuge may be prevented between the basement ceiling and the floor above. If a finished ceiling is required such ceilings should be made and kept rat tight. Should the premises above such sealed basements be used for the storage, preparation, or sale of foodstuffs the floor above the basement ceiling should be constructed of two layers of 1-inch tongue-and-groove lumber driven tight, between which should be placed a layer of galvanized-iron wire cloth not less than 20 gauge nor greater than one-half inch mesh. This wire cloth should extend upward on the side walls not less than 8 inches and be covered with the baseboard.

Where the expense will not permit the installation of rat-proof foundation walls as described, rat proofing of frame structures (if not contrary to building laws) may be accomplished in a less satisfactory and less permanent way by elevation. In this case the building must be elevated on free underpinning, not less than 18 inches above the surface of the surrounding soil. It is important that the ground area beneath the elevated structure remain clean at all times and clear of lumber, boxes, and débris; otherwise a convenient and perfect harboring place for rats will be provided.

If the building is to be constructed of brick, stone, or concrete a foundation wall as outlined will of necessity be required to support the building. The same careful attention must be given to natural

¹ Experience teaches that ground areas should be concreted; otherwise rats escaping through accidental openings which may be subsequently made in the floor above will burrow and harbor in the ground beneath the building.

or unnecessary openings which may be made in the wall. Should chimney flues be carried by the wall from the basement to the roof and remain unused the openings should be closed with wire mesh or stopped with a close-fitting cover.

Side walls above the basement containing openings require little attention unless the building is in close proximity to adjacent structures or such openings convey electric or other wires, in which event the openings should be screened or kept closed.

THE ROOF.

Careful and successful rat proofing will require that all roof openings be given detailed attention. Doors and roof hatches should fit snugly and remain closed when not in use. Ventilators, skylights, and unused chimney flues should be screened with galvanized iron wire cloth not less than 20-gauge nor greater than one-half-inch mesh.

Upon the completion of the building a careful inspection should be made and any openings found sufficient in size to admit a rat should be at once closed. Such an inspection is also of particular importance following alterations or repairs and should under no circumstances be omitted if the building is to be maintained rat proof.

THE CLOSURE OF NATURAL OR ACCIDENTAL OPENINGS IN BUILDINGS OF RAT-PROOF CONSTRUCTION.

By rat-proof construction as used here is meant buildings covered with fireproof roofs and constructed with side walls and foundations of materials impervious to rats. Most city buildings of modern construction fall within this classification. Few are, however, actually rat proof. This is due partially to the omission of screens to basement windows and to ventilators, skylights, and other roof openings, but principally to the neglect of plumbers, electricians, and others to properly close openings around electric wires and pipes introduced for the conveyance of water, gas, or steam.

The closure of all such openings in buildings of this character is essential to perfect rat proofing; their discovery will require a painstaking inspection of the building from basement to roof.

This inspection should begin at the sidewalk. Sidewalk elevator doors and basement stairway doors should fit snugly; the latter should be provided with an automatic closing device. Basement windows, ventilators, and gratings should be screened with heavy wire cloth. Defects in the sidewalk should be repaired, and defective or absent lens lights in the sidewalks replaced.

Entering the basement, the floor should be noted, and if defective, repaired with concrete; otherwise such defective floor will permit burrowing and rat harbor beneath.

The side walls should next be inspected and all openings made for plumbing or electric or telephone wires carefully noted. Pipes for the water supply and house sewerage system rarely fit closely the openings in the wall made to permit their passage. Such jagged and irregular openings left by the careless plumber permit the easy entrance of rats and should be sealed with cement to the full depth of the wall.

Old, broken, and abandoned pipes previously used for water or sewage are occasionally found entering basement walls. They offer a convenient highway for rats between the basement and the street or sewer, and should be permanently stopped with cement.

Open conduits for the conveyance of electric cables may be frequently noted entering basement walls. Openings around and within such conduits should be closed with fine cement.

The lower ends of chimney flues entering the basement, if unused, should be screened. They frequently convey electric wires from the roof to the basement. Black and roof rats easily climb up and down these wires and in this way reach the roof or basement.

CELLINGS.

All defects or openings in basement ceilings should be perfectly closed. Such are likely to be found around pipes for gas, water, steam heat, or electric wires. If rats have found refuge between the ceiling and the floor above, this harborage can be most conveniently destroyed by the removal of the entire ceiling. If this is prohibited by fire ordinance every effort should be used to make and keep this ceiling and the floor above rat tight.

UPPER FLOORS.

On inspecting upper floors the same careful attention should be given to openings in partition walls made for the passage of pipes and wires. In addition attention should be directed toward inclosed dead space of sufficient size to permit rat refuge. Thorough rat proofing demands not only that the entrance of the rat to the building be prevented, but also that all contained rat harbors affording refuge be eliminated. Defects or breaks in walls should be repaired. Unfinished walls should be completed. Boxed toilet bases should be removed and solid foundations installed. Boxed plumbing should be opened up. Shelving and counters should contain no inclosed dead space. Food bins should be provided with close-fitting covers and be made rat tight. Dead space beneath show windows should be especially noted and opened up or be made rat proof by accurate construction. Accumulated rubbish should be removed, and boxed, crated, sacked or loose merchandise frequently inspected and moved to prevent even temporary rat harborage.

ROOFS.

The elimination of black and roof rats will depend upon the care used in closing roof openings. Roof hatches and doors in elevator houses should fit snugly and remain tightly closed when not in use. If constructed of wood they should be covered with heavy galvanized iron.

This is especially true when such buildings are occupied by stores or markets which store, prepare or keep food for sale, such as restaurants, bakeries, fish and meat markets, fruit and vegetable stores, delicatessen shops, candy factories, etc.

Skylight ventilators and louver¹ ventilators in elevator shafts should be screened with galvanized-iron wire cloth not less than No. 20 gauge nor greater than one-half inch mesh. Unused chimney flues should receive the same treatment, particular attention being given such openings when they admit electric or telephone wires.

THE REMODELING OF NONRATPROOF BUILDINGS.

This classification includes all frame structures, with or without basements and generally without foundation walls and floors impervious to rats. The majority of all buildings fall within this class, and since they permit the easy access of rats, supply food and afford refuge, they represent the principal obstacle to be overcome in the rat-proofing of cities or towns.

All such buildings should be remodeled and constructed with brick or concrete area walls, but, since the area wall to be provided in such cases is for rat-proofing purposes alone, the foundation wall of the structure need not be disturbed, the area wall being erected just within or without and against the old foundation. Preferably, this wall should be erected just within the old foundation. It should be constructed of brick, stone, or concrete, not less than 6 inches in thickness, should extend not less than 18 inches beneath the surface of the surrounding soil and upward until flush with the under surface of the floor above. Should the building rest upon a brick or concrete foundation, an additional wall will not be required, but care should be used to see that the foundation wall extends entirely around the building. Wherever lacking in this respect, or otherwise defective, it should be repaired. If floor joists rest upon the top of this wall, the wall should be continued upward between such joists until flush with the under surface of the floor above. All openings around pipes or wires should be sealed with cement.

The ground areas or basement floors of such structures and upper floors and roofs should be treated in the manner outlined for new buildings, particular care being used to see that the additional rat-

¹ A louver ventilator is an opening provided with slats having space between.

proofing requirements are employed when such buildings contain foodstuffs.

In rat proofing dwellings it should be known that the greatest number of rats can usually be caught under the front steps. This should be remembered when remodeling measures are applied.

THE REMOVAL OF MATERIAL COVERING YARDS, SIDEWALKS, AND PASSAGEWAYS.

Wooden floors, whether covering yards, sidewalks, or passageways, when lying in close proximity to the ground, offer easy access to rats and form a convenient harboring place. Such wooden floors should be removed and the ground area left bare or covered with gravel, cinders, or cement.

THE PROTECTION OR REMOVAL OF RAT FOOD.

By rat food is meant waste food or food refuse, such as is thrown carelessly on vacant lots, or around garbage cans, or into imperfect garbage cans, or surplus food thrown to chickens or dropped in transportation or handling.

The imperfect garbage can represents the most important source of rat food outside the building, and its contents provide amply for rat sustenance. Aside from other sanitary objections the elimination of the rat can not be accomplished until the imperfect garbage can has been replaced. The installation of a perfect garbage can is a civic necessity—a debt due the community by every householder, and this debt should be promptly paid.

Chicken yards offer a convenient source of rat food and should be rat proofed or abandoned. Rat proofing may be accomplished by constructing a coop or inclosure with an area wall as described for frame structures, the ground area being covered with 3 inches of concrete and the side walls above the foundation constructed of wire cloth not less than 20 gauge nor greater than $\frac{1}{2}$ -inch mesh. This should extend upward at least 6 feet. The door provided should be rat proof and remain closed when not in use. Chickens may range in the open yard, but should be fed only within the rat-proof coop.

THE DESTRUCTION OF RATS BY POISON AND TRAPS.

Poison and traps reduce the number of rats, but do not eliminate them. Both are of especial value in ridding large rat-proofed structures of contained rats, which, finding harbor and sustenance therein, might otherwise perpetuate themselves. Poison is of immense value in destroying rats on roofs and in localities presenting difficult or expensive rat-proofing problems, such as freight and storage depots, freight yards, garbage dumps, and the water front.

POISONS.

Most rat poisons depend upon phosphorus or arsenic for the poisonous element. Both act in a satisfactory manner and either, of good quality, may be purchased ready prepared in the open market. They should be spread upon bread cut into squares of about three-fourths inch, both sides being covered.

It is claimed that poisons containing phosphorus may occasion fires and that arsenical poisons, suffering but little deterioration on exposure, remain indefinitely dangerous to children or animals other than rats. Poisons should therefore be placed with great care. It is also important that the receptacle containing the stock supply be kept out of reach of children.

TRAPS.

Snap traps, because of their small size and adaptability, will be found most satisfactory for general use. They should be obtained with strong hardwood bases, all springs and wires being securely fastened to this base. The efficiency of such traps is increased when provided with a double-acting trigger release, with hooks for attaching bait. They should be placed where they will interrupt the runways of rats—under floors, above ceilings, within walls, and on girders, cross beams, ledges, etc. They should be securely anchored with a small piece of twine. Smoking is not essential.

Cage traps are of especial value in sewers, but may be employed in any position affording sufficient room. They may be covered with loose sacking or other material or left bare. Such traps should be about 20 inches long, with underbraces wired and the release pedal ledged. Mice can pass between the wires of cage rat traps, so that these traps when set may serve to supply mice with food. Cage-trapped rats should be chloroformed.

BAIT.

The various foodstuffs used for this purpose are here mentioned in the order of their relative value. For snap traps: Bacon, cheese, shelled nuts, scrap meat. For black rats: Dried raw meat. For cage traps: Bread (best dipped in grease), cheese, scrap meat, vegetables (cabbage, carrots).



Fig. 1.—UNSCREENED BASEMENT VENTILATOR.

Rats enter basements from the street through such openings. They should be covered with wire-mesh screen.



Fig. 2.—PROPERLY SCREENED BASEMENT VENTILATORS UNDER SHOW WINDOWS.



Fig. 3.—DEFECTIVE BASEMENT DOORWAY AT THE BOTTOM OF BASEMENT STAIRS.

Rats readily pass beneath such doorways to and from the street.



Fig. 4.—DEFECTIVE CONCRETE FLOOR IN BASEMENT, CONCRETE LAYER TOO THIN; HAS BECOME BROKEN AND NOW PERMITS BURROWING AND RAT HARBOR BENEATH.

All basement floors should be constructed of concrete not less than 3 inches thick and finished with a layer of cement one-half inch thick.



Fig. 5.—DEFECTIVE BASEMENT WALL. OPENING MADE FOR THE INSTALLATION OF HOUSE SEWAGE SYSTEM.

Opening left around sewer pipe and not subsequently closed. A convenient entrance for rats. Should be closed with cement.

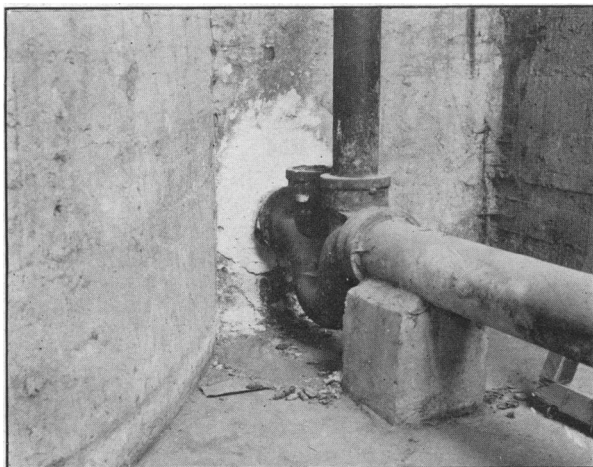


Fig. 6.—SHOWING PROPER REPAIR OF A DEFECTIVE WALL SURROUNDING SEWER PIPE ENTERING BASEMENT.

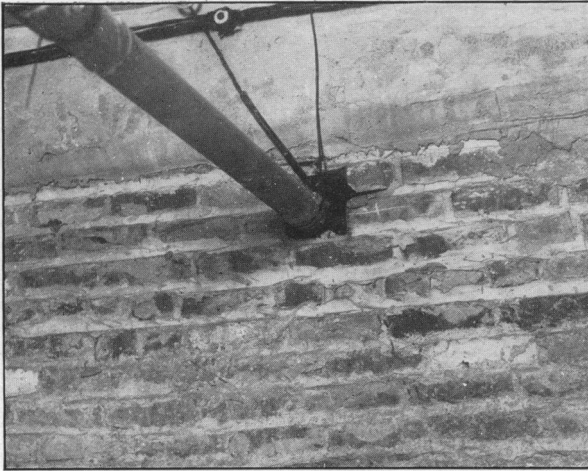


Fig. 7.—DEFECTIVE AND BROKEN WALL.

Entrance made for water pipes. Should be repaired with cement the full depth of the wall.



Fig. 8.—OLD ABANDONED SEWER ENTERING BASEMENT. A COMMON HIGHWAY FOR THE ENTRANCE OF RATS INTO BASEMENTS.

80 rats were trapped in the above sewer by placing a snap trap in the mouth of the opening.

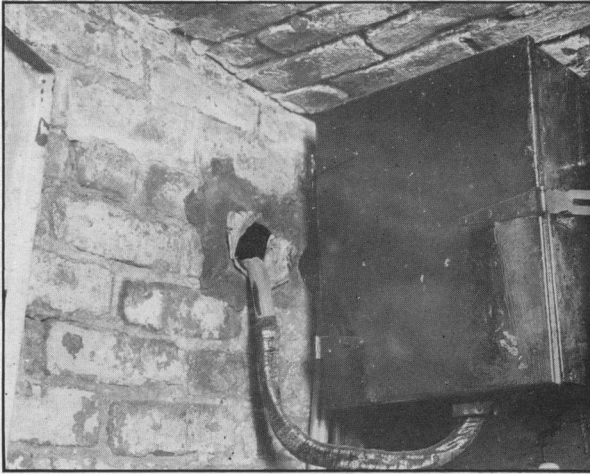


Fig. 9.—OPEN CONDUIT CARRYING ELECTRIC CABLE AND ENTERING BUILDING THROUGH BASEMENT WALL.

Such openings should be closed with fine cement the full depth of the wall.

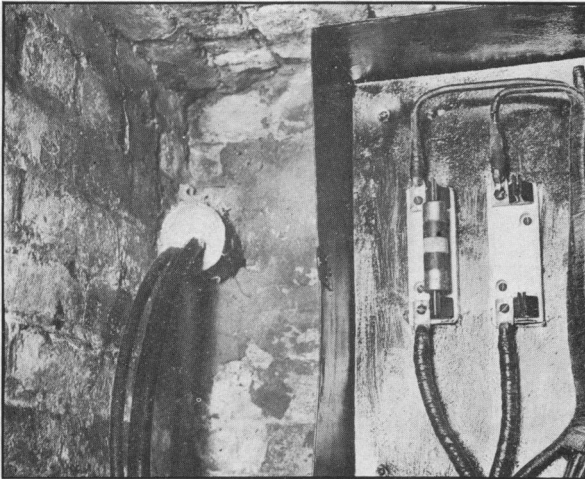


Fig. 10.—PROPERLY SEALED CONDUIT CARRYING ELECTRIC WIRES AND ENTERING THROUGH BASEMENT WALL. OPENINGS AROUND AND WITHIN CONDUIT SEALED WITH FINE CEMENT THE FULL DEPTH OF THE WALL.

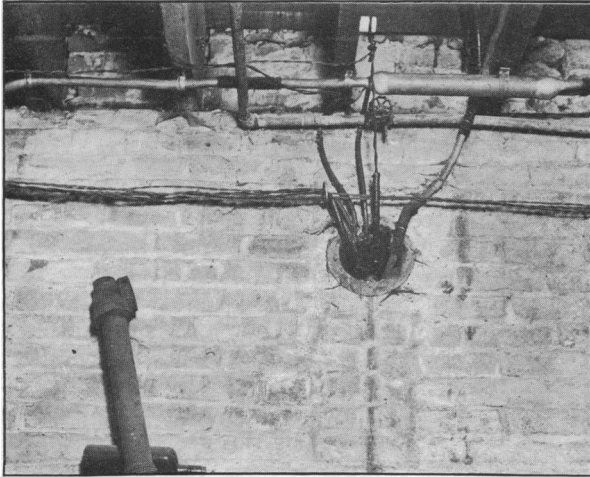


Fig. 11.—LOWER END OF CHIMNEY FLUE USED TO CONVEY ELECTRIC WIRES FROM THE ROOF TO THE BASEMENT.

Roof and Black rats readily climb up or down these wires and in this way reach the roof or the basement.

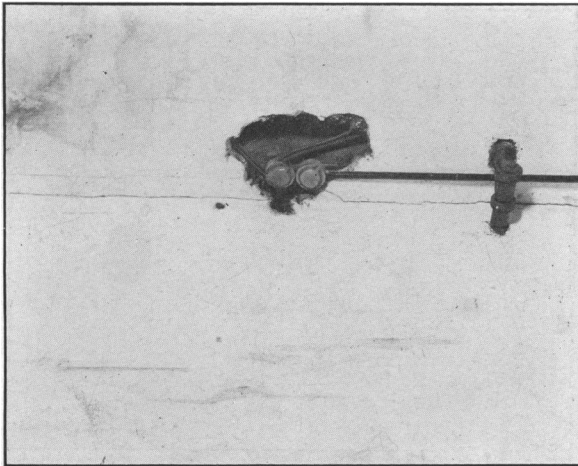


Fig. 12.—DEFECTIVE CEILING AROUND ELECTRIC WIRING.

Such openings permit rats to enter and harbor between the ceiling and the floor above. All openings in ceilings made for the installation of electric wires should be repaired promptly and perfectly.

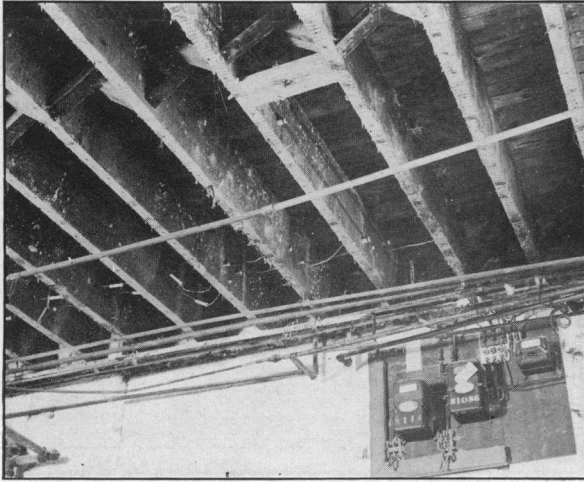


Fig. 13.—BASEMENT CEILING BEING REMOVED TO DESTROY RAT HARBOR EXISTING BETWEEN THE BASEMENT CEILING AND THE FLOOR ABOVE.

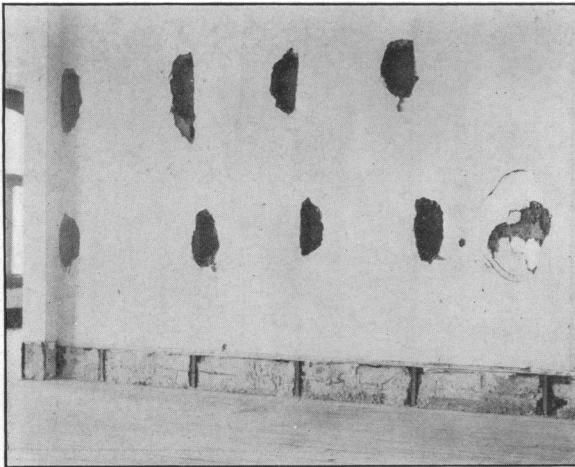


Fig. 14.—DEFECTIVE WALL IN LOFT OF BUILDING.

Damaged in removing fixtures when vacating premises and not subsequently repaired. Permits rats to enter and harbor between the walls.

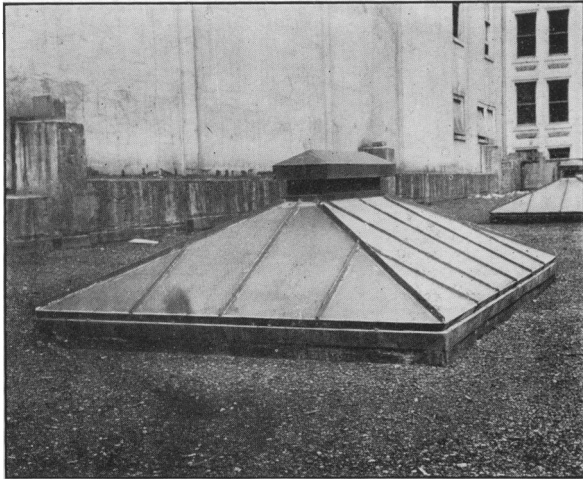


Fig. 15.—UNSCREENED SKYLIGHT VENTILATOR.

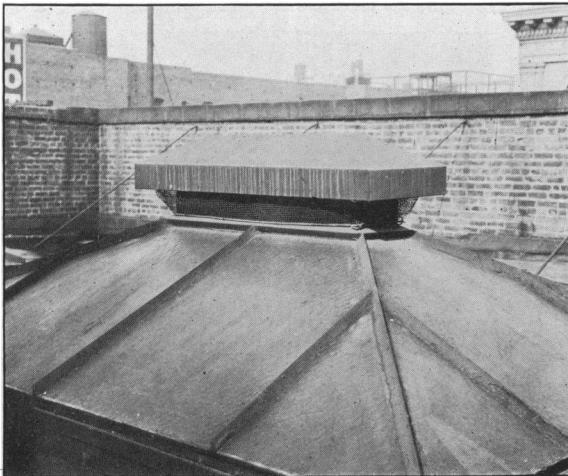


Fig. 16.—PROPERLY SCREENED SKYLIGHT VENTILATOR.

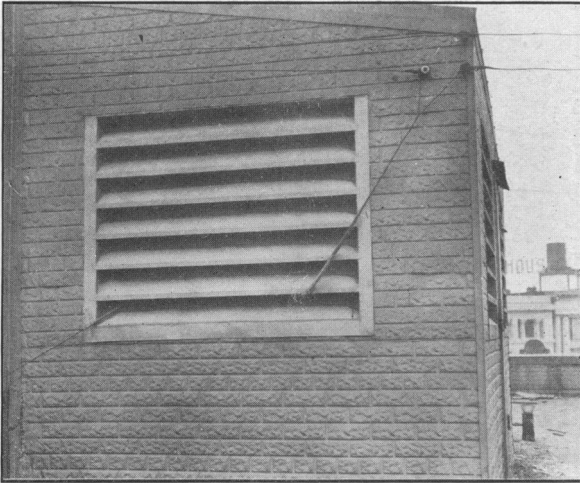


Fig. 17.—UNSCREENED LOUVER VENTILATOR IN ROOF OF ELEVATOR HOUSE.

Electric wires entering through such ventilators provide a runway and permit an easy means for the entrance of rats. All such ventilators should be screened.

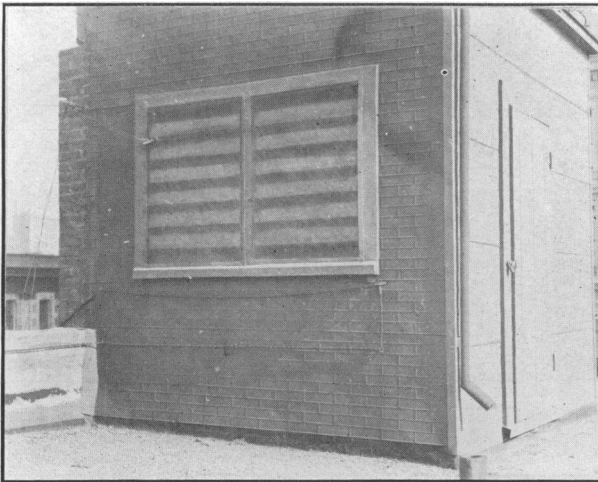


Fig. 18.—PROPERLY SCREENED LOUVER VENTILATOR IN ELEVATOR SHAFT HOUSING ON ROOF.

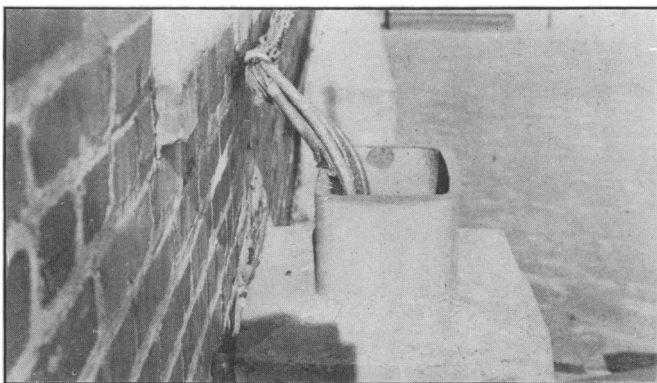


Fig. 19.—ROOF EXIT OF UNUSED, UNSCREENED, CHIMNEY FLUE, TRANSMITTING ELECTRIC CABLE FROM THE ROOF TO THE BASEMENT.

Roof and Black rats pass up or down such flues to reach the basement or roof. Such openings should be screened with heavy wire mesh.



Fig. 20.—THE ROOF EXIT OF AN UNUSED CHIMNEY FLUE PROPERLY SCREENED WITH HEAVY WIRE MESH.

PREVALENCE OF DISEASE.

IN CERTAIN STATES AND CITIES.

SMALLPOX.

Indiana—Evansville.

Acting Asst. Surg. Neary, of the Public Health Service, reports that during the week ended April 5, 1913, there were notified at Evansville 33 cases of smallpox with a total to date of 572 cases.

Maine—Rockland, Rockville, Thomaston, and Rockport.

Acting Asst. Surg. Adams at Rockland reported March 29 the occurrence of 4 new cases of smallpox at Rockland, 3 cases at Rockville, 3 cases at Thomaston, and 1 case at Rockport, all of a mild type.

Maryland—Frederick and Montgomery Counties.

The State department of health reported April 9 that two new foci of smallpox were notified in Maryland, one case having occurred at Brunswick, Frederick County, and one at Norbeck, Montgomery County.

New York—Niagara Falls.

Acting Asst. Surg. Bingham of the Public Health Service reported April 5 that from November 1, 1912, to date there had been notified at Niagara Falls 41 cases of smallpox.

Miscellaneous State Reports.

| Places. | Cases. | Deaths. | Places. | Cases. | Deaths. |
|-----------------------|--------|---------|-------------------------|--------|---------|
| Colorado (Mar. 1-31): | | | Florida (Mar. 17-23): | | |
| Counties— | | | Counties— | | |
| Boulder..... | 1 | ..... | Alachua..... | 1 | ..... |
| Denver..... | 4 | ..... | Escambia..... | 19 | ..... |
| Fremont..... | 2 | ..... | Manatee..... | 1 | ..... |
| Huerfano..... | 6 | ..... | Osceola..... | 1 | ..... |
| Kit Carson..... | 2 | ..... | Polk..... | 2 | ..... |
| Larimer..... | 2 | ..... | Sumter..... | 1 | ..... |
| Las Animas..... | 1 | ..... | Total..... | 25 | ..... |
| Ouray..... | 4 | ..... |  |  |  |
| Pueblo..... | 1 | ..... | New Jersey (Mar. 1-31): | | |
| Rio Blanco..... | 1 | ..... | Counties— | | |
| Summit..... | 1 | ..... | Monmouth..... | 10 | ..... |
| Weld..... | 2 | ..... | Morris..... | 1 | ..... |
| Total..... | 27 | ..... | Union..... | 6 | ..... |
| | | | Total..... | 17 | ..... |

SMALLPOX—Continued.

Miscellaneous State Reports—Continued.

| Places. | Cases. | Deaths. | Places. | Cases. | Deaths. |
|---------------------------------------|------------|-----------|------------------------------------|------------|----------|
| Texas (Jan. 1-31):¹ | | | Virginia (Jan. 1-31)—Contd. | | |
| Counties— | | | Counties—Continued. | | |
| Hunt..... | | 10 | Washington..... | 3 | |
| Henderson..... | | 1 | Wythe..... | 8 | |
| Van Zandt..... | | 1 | Total..... | 231 | 1 |
| Total..... | | 12 | Virginia (Feb. 1-28): | | |
| Utah (Feb. 1-28): | | | Counties— | | |
| Counties— | | | Albemarle..... | 1 | |
| Beaver..... | 1 | | Alleghany..... | 1 | |
| Boxelder..... | 53 | | Bedford..... | 4 | |
| Cache..... | 17 | | Botetourt..... | 1 | |
| Carbon..... | 15 | 1 | Brunswick..... | 6 | |
| Davis..... | 43 | | Dinwiddie..... | 1 | |
| Emery..... | 5 | | Giles..... | 2 | |
| Iron..... | 24 | | Grayson..... | 1 | |
| Juab..... | 9 | | Halifax..... | 24 | |
| Millard..... | 16 | | Henry..... | 15 | |
| Morgan..... | 5 | | Mecklenburg..... | 34 | |
| Salt Lake..... | 154 | | Norfolk..... | 2 | |
| Sanpete..... | 25 | 1 | Orange..... | 1 | |
| Sevier..... | 2 | | Pittsylvania..... | 30 | |
| Summit..... | 5 | | Prince Edward..... | 15 | |
| Tooele..... | 43 | | Roanoke..... | 11 | |
| Utah..... | 21 | | Total..... | 149 | |
| Wasatch..... | 3 | | Washington (Jan. 1-31): | | |
| Weber..... | 28 | | Counties— | | |
| Total..... | 469 | 2 | Asotin..... | 1 | |
| Virginia (Jan. 1-31): | | | Benton..... | 8 | |
| Counties— | | | Clark..... | 17 | |
| Albemarle..... | 1 | | Franklin..... | 13 | |
| Alexandria..... | 1 | | Kitsap..... | 8 | |
| Bedford..... | 1 | | Kittitas..... | 3 | |
| Burnside..... | 12 | | Klickitat..... | 1 | |
| Franklin..... | 1 | | Lewis..... | 7 | |
| Giles..... | 1 | | Pierce..... | 19 | |
| Halifax..... | 66 | 1 | Skagit..... | 4 | |
| Henry..... | 34 | | Skamania..... | 2 | |
| Lee..... | 3 | | Snohomish..... | 1 | |
| Mecklenburg..... | 1 | | Spokane..... | 30 | |
| Pittsylvania..... | 85 | | Whitman..... | 25 | |
| Prince Edward..... | 1 | | Walla Walla..... | 2 | |
| Rappahannock..... | 8 | | Yakima..... | 98 | |
| Rockbridge..... | 1 | | Total..... | 239 | |
| Warren..... | 4 | | | | |

City Reports for Week Ended Mar. 22, 1913.

| | | | |
|------------------------|----|--------------------------|----|
| Ann Arbor, Mich..... | 1 | Muscatine, Iowa..... | 2 |
| Buffalo, N. Y..... | 1 | Nashville, Tenn..... | 2 |
| Chattanooga, Tenn..... | 1 | New Bedford, Mass..... | 5 |
| Cincinnati, Ohio..... | 3 | Niagara Falls, N. Y..... | 1 |
| Columbus, Ohio..... | 7 | Oakland, Cal..... | 2 |
| Duluth, Minn..... | 2 | Peoria, Ill..... | 1 |
| Elmira, N. Y..... | 7 | Providence, R. I..... | 1 |
| Evansville, Ind..... | 51 | St. Joseph, Mo..... | 3 |
| Kalamazoo, Mich..... | 3 | San Francisco, Cal..... | 1 |
| Knoxville, Tenn..... | 14 | Spokane, Wash..... | 7 |
| Lexington, Ky..... | 6 | Superior, Wis..... | 1 |
| Los Angeles, Cal..... | 3 | Toledo, Ohio..... | 12 |
| Marinette, Wis..... | 2 | Washington, D. C..... | 13 |
| Milwaukee, Wis..... | 7 | Zanesville, Ohio..... | 2 |
| Montgomery, Ala..... | 1 | | |

¹ Supplemental report.

TYPHOID FEVER.

State Reports.

| Places. | Number of new cases reported during month. | Places. | Number of new cases reported during month. |
|-------------------------|--|-----------------------------|--|
| Texas (February, 1913): | | Washington (January, 1913): | |
| Cameron County— | | Chehalis County..... | 2 |
| Brownsville..... | 3 | Okanogan County..... | 2 |
| Denton County— | | Walla Walla County..... | 2 |
| Denton..... | 1 | Yakima County..... | 1 |
| Harris County..... | 3 | Bellingham..... | 1 |
| Houston Heights..... | 1 | Seattle..... | 4 |
| Johnson County— | | Spokane..... | 4 |
| Cleburne..... | 1 | Total..... | 15 |
| Nueces County— | | | |
| Kingsville..... | 2 | | |
| Total..... | 11 | | |

CEREBROSPINAL MENINGITIS.

State Reports.

| Places. | Number of new cases reported during month. | Places. | Number of new cases reported during month. |
|-------------------------|--|-----------------------------------|--|
| Texas (February, 1913): | | Texas (February, 1913)—Continued. | |
| Dallas County— | | Travis County— | |
| Dallas..... | 4 | Austin..... | 12 |
| Dawson County— | | Washington (January, 1913): | |
| Lamesa..... | 1 | Bellingham..... | 1 |
| Somervell County..... | 1 | | |

California—Imperial, Los Angeles, and San Bernardino Counties.

The State Board of Health of California reported March 25 that 1 case of cerebrospinal meningitis had been notified in El Centro County, 7 cases in Los Angeles County, and 4 cases in Ontario County.

California—Los Angeles.

Senior Surg. Brooks of the Public Health Service reported the occurrence of a case of cerebrospinal meningitis at Los Angeles during the week ended April 5 and a total since January 1 of 48 cases with 23 deaths.

Cases and Deaths Reported by Cities for Week Ended Mar. 22, 1913.

| Places. | Cases. | Deaths. | Places. | Cases. | Deaths. |
|-----------------------|--------|---------|-------------------------|--------|---------|
| Baltimore, Md..... | | 2 | New Bedford, Mass..... | 1 | 1 |
| Boston, Mass..... | 2 | 1 | New Orleans, La..... | 9 | 6 |
| Chicago, Ill..... | 1 | 1 | New York, N. Y..... | 7 | 4 |
| Cincinnati, Ohio..... | 5 | 4 | Oakland, Cal..... | | 1 |
| Cleveland, Ohio..... | 3 | 1 | Pittsburgh, Pa..... | 1 | 1 |
| Columbus, Ohio..... | | 1 | Saginaw, Mich..... | | 1 |
| Danville, Ill..... | | 1 | St. Joseph, Mo..... | 2 | |
| Haverhill, Mass..... | 1 | | San Francisco, Cal..... | 3 | 1 |
| Lexington, Ky..... | 1 | | Toledo, Ohio..... | | 1 |
| Los Angeles, Cal..... | 8 | 3 | Wheeling, W. Va..... | 1 | 1 |

POLIOMYELITIS (INFANTILE PARALYSIS).

Washington—Spokane.

One case of poliomyelitis was reported in Spokane during the month of January, 1913.

Cases and Deaths Reported by Cities for Week Ended March 22, 1913.

During the week ended March 22, 1913, poliomyelitis (infantile paralysis) was reported by cities as follows: Baltimore, Md., 1 death; Chicago, Ill., 1 death; Fall River, Mass., 1 death; Lowell, Mass., 1 case; New York, N. Y., 3 cases.

ERYSIPELAS.

Cases and Deaths Reported by Cities for Week Ended Mar. 22, 1913.

| Places. | Cases. | Deaths. | Places. | Cases. | Deaths. |
|-----------------------|--------|---------|-------------------------|--------|---------|
| Baltimore, Md..... | | 3 | Lynn, Mass..... | | 1 |
| Berkeley, Cal..... | 1 | | McKeesport, Pa..... | 1 | |
| Boston, Mass..... | | 6 | Milwaukee, Wis..... | 4 | |
| Bridgeport, Conn..... | 1 | | Moline, Ill..... | 1 | |
| Buffalo, N. Y..... | | 1 | New Castle, Pa..... | 1 | |
| Chicago, Ill..... | 24 | 4 | New York, N. Y..... | | 12 |
| Cincinnati, Ohio..... | 3 | | Oakland, Cal..... | | 1 |
| Cleveland, Ohio..... | 15 | 2 | Peoria, Ill..... | | 2 |
| Dayton, Ohio..... | 2 | | Pittsburgh, Pa..... | 10 | 1 |
| Erie, Pa..... | 1 | | Providence, R. I..... | | 1 |
| Harrisburg, Pa..... | 3 | | Reading, Pa..... | 1 | |
| Hartford, Conn..... | 3 | | Rutland, Vt..... | 1 | 1 |
| Homestead, Pa..... | 1 | | St. Joseph, Mo..... | 1 | |
| Johnstown, Pa..... | 1 | | San Francisco, Cal..... | 3 | 2 |
| Kalamazoo, Mich..... | 1 | | Schenectady, N. Y..... | 1 | 1 |
| Lancaster, Pa..... | 1 | | York, Pa..... | 1 | |
| Los Angeles, Cal..... | 1 | 1 | | | |

PLAGUE.

Rats Collected and Examined.

| Places. | Week ended— | Found dead. | Total collected. | Examined. | Found infected. |
|--------------------|----------------|-------------|------------------|-----------|-----------------|
| California: | | | | | |
| Cities— | | | | | |
| Oakland..... | Mar. 22, 1913. | 4 | 578 | 446 | |
| Berkeley..... | do..... | 1 | 165 | 123 | |
| San Francisco..... | do..... | 13 | 1,930 | 1,439 | |
| Washington: | | | | | |
| City— | | | | | |
| Seattle..... | do..... | | 905 | 854 | |

California—Squirrels Collected and Examined.

During the week ended March 22, 1913, there were examined 95 ground squirrels from San Joaquin County. No plague-infected squirrel was found.

PNEUMONIA.

Cases and Deaths Reported by Cities for Week Ended Mar. 22, 1913.

| Places. | Cases. | Deaths. | Places. | Cases. | Deaths. |
|-------------------------|--------|---------|-----------------------------|--------|---------|
| Alameda, Cal..... | 5 | ..... | Manchester, N. H..... | 4 | 4 |
| Braddock, Pa..... | 7 | ..... | New Castle, Pa..... | 3 | ..... |
| Chicago, Ill..... | 66 | 155 | Newport, Ky..... | 1 | 1 |
| Cleveland, Ohio..... | 40 | 23 | New York, N. Y..... | ..... | 174 |
| Duluth, Minn..... | 5 | 5 | Pittsburgh, Pa..... | 22 | 28 |
| Dunkirk, N. Y..... | 4 | ..... | Reading, Pa..... | 1 | 5 |
| Erie, Pa..... | 3 | ..... | San Francisco, Cal..... | 11 | ..... |
| Grand Rapids, Mich..... | 4 | 1 | Saratoga Springs, N. Y..... | 2 | 3 |
| Harrisburg, Pa..... | 1 | 3 | Schenectady, N. Y..... | 1 | ..... |
| Kalamazoo, Mich..... | 1 | 1 | South Bethlehem, Pa..... | 5 | 1 |
| Lancaster, Pa..... | 2 | ..... | York, Pa..... | 1 | ..... |
| Los Angeles, Cal..... | 2 | 9 | Wilkes-Barre, Pa..... | 1 | 2 |
| McKeesport, Pa..... | 2 | ..... |  |  |  |

RABIES.

During the week ended March 22, 1913, a death from rabies was reported at Chicago, Ill.

Indiana.

With regard to the death from rabies noted in the Public Health Reports of March 28 as having occurred in Marion County, Ind., during the month of February, in the person of a 4-year-old boy, Dr. J. N. Hurty, State health commissioner of Indiana, has reported further that this is the second death from rabies that has recently occurred in the State.

In Indiana the State legislature has set aside a portion of the dog tax for the use of the State board of health in preventing the occurrence of rabies. According to the State law health officers have the power to require the muzzling of dogs or to establish a quarantine for dogs for any length of time that may in their judgment seem proper. To enforce these measures, the sheriffs and other peace officers may shoot on sight all unmuzzled dogs or dogs which may be abroad when quarantine is ordered. The law also provides that persons who have been bitten by dogs and are not able to obtain proper treatment may be given the "Pasteur treatment" at Indianapolis free of charge.

Dr. Hurty further states that up to the end of March, 1913, 171 persons had been treated, of whom 2 had died, and that in the 2 fatal cases the treatment had not been begun until more than 10 days after the patient had been bitten. Both the patients had been badly bitten in the face. In the case of one, the 4-year-old boy who died in February, treatment was not begun until 12 days after he had been bitten; in the other fatal case, which terminated in September, 1912, 15 days had elapsed.

TETANUS.

During the week ended March 22, 1913, tetanus was reported by cities as follows: Baltimore, Md., 1 death; Los Angeles, Cal., 1 case with 1 death; New Orleans, La., 2 deaths; Wilmington, N. C., 1 death.

TYPHUS FEVER.

Idaho.

Dr. Ralph Falk, secretary of the Idaho State board of health, reported by letter April 4 that he had a case of typhus fever under his care in the person of a Spaniard who had arrived from South America by way of England a few days before.

SCARLET FEVER, MEASLES, DIPHThERIA, AND TUBERCULOSIS.

State Reports.

| | Scarlet fever. | Measles. | Diphtheria. |
|---------------------------------|----------------|----------|-------------|
| Texas (February, 1913)..... | 91 | ..... | 29 |
| Washington (January, 1913)..... | 78 | 346 | 73 |

California—Los Angeles.

Senior Surg. Brooks, of the Public Health Service, reported that during the week ended April 5 there were notified at Los Angeles 384 cases of measles, with a total since January 1, of 1,468 cases.

Evansville, Ind.—Diphtheria and Scarlet Fever.

Acting Asst. Surg. Neary reports that during the week ended April 5, 1913, there were notified at Evansville 16 cases of diphtheria and 10 cases of scarlet fever.

Pittsburgh—Measles.

Surg. Stoner, of the Public Health Service, reports the occurrence of 244 cases of measles, with 6 deaths, at Pittsburgh during the week ended April 5, 1913, and a total from November 1, 1912, the date of the beginning of the outbreak, to April 5, 1913, of 7,991 cases, with 121 deaths.

Cases and Deaths Reported by Cities for Week Ended Mar. 22, 1913.

| Cities. | Population, United States census 1910. | Total deaths from all causes. | Diphtheria. | | Measles. | | Scarlet fever. | | Tuberculosis. | |
|---|--|-------------------------------|-------------|---------|----------|---------|----------------|---------|---------------|---------|
| | | | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. |
| Over 500,000 inhabitants: | | | | | | | | | | |
| Baltimore, Md..... | 558,485 | 229 | 28 | ..... | 440 | 5 | 22 | 1 | 25 | 26 |
| Boston, Mass..... | 670,585 | 260 | 56 | 5 | 246 | 2 | 43 | 1 | 71 | 20 |
| Chicago, Ill..... | 2,185,283 | 770 | 195 | 20 | 783 | 15 | 432 | 27 | 145 | 96 |
| Cleveland, Ohio..... | 560,663 | ..... | 33 | 2 | 256 | 6 | 23 | 4 | 33 | 15 |
| New York, N. Y..... | 4,766,883 | 1,685 | 313 | 36 | 976 | 24 | 440 | 20 | 669 | 198 |
| Pittsburgh, Pa..... | 533,905 | 180 | 23 | 7 | 359 | 5 | 30 | ..... | 26 | 23 |
| From 300,000 to 500,000 inhabitants: | | | | | | | | | | |
| Buffalo, N. Y..... | 423,715 | 112 | 11 | ..... | 105 | 2 | ..... | 2 | 26 | 12 |
| Cincinnati, Ohio..... | 364,463 | 142 | 5 | ..... | 61 | 1 | 11 | 2 | 37 | 15 |
| Los Angeles, Cal..... | 319,198 | 124 | 6 | ..... | 160 | 2 | 8 | ..... | 42 | 22 |
| Milwaukee, Wis..... | 373,857 | ..... | 20 | 2 | 46 | 1 | 32 | 2 | 26 | 11 |
| Newark, N. J..... | 347,469 | 135 | 33 | 3 | 34 | 1 | 21 | 1 | 40 | 13 |
| New Orleans, La..... | 339,075 | 149 | 24 | 4 | 319 | 2 | 9 | ..... | 25 | 15 |
| San Francisco, Cal..... | 416,912 | 142 | 9 | ..... | 7 | ..... | 5 | ..... | 24 | 13 |
| Washington, D. C..... | 331,069 | 131 | 3 | ..... | 438 | 1 | 18 | ..... | 23 | ..... |
| From 200,000 to 300,000 inhabitants: | | | | | | | | | | |
| Jersey City, N. J..... | 267,779 | 98 | 18 | 3 | 137 | ..... | 28 | 4 | 27 | 10 |
| Providence, R. I..... | 224,326 | 74 | 9 | 5 | 2 | ..... | 9 | ..... | 11 | 8 |
| Seattle, Wash..... | 237,194 | 51 | 6 | ..... | 157 | 3 | 6 | 1 | 5 | 5 |

Cases and Deaths Reported by Cities for Week Ended Mar. 22, 1913—Contd.

| Cities. | Population, United States cen- sus 1910. | Total deaths from all causes. | Diph- theria. | | Measles. | | Scarlet fever. | | Tuber- culosis. | |
|--------------------------------------|---|---|------------------|---------|----------|---------|-------------------|---------|--------------------|---------|
| | | | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. |
| From 100,000 to 200,000 inhabitants: | | | | | | | | | | |
| Bridgeport, Conn. | 102,054 | 51 | 6 | 3 | 3 | | 1 | 4 | 3 | |
| Cambridge, Mass. | 104,839 | 30 | 7 | | 61 | 1 | 5 | 5 | 8 | |
| Columbus, Ohio | 181,548 | 65 | 4 | 1 | 6 | | 9 | 2 | 5 | |
| Dayton, Ohio | 116,577 | 41 | 8 | 2 | 4 | | 4 | 3 | 6 | |
| Fall River, Mass. | 119,295 | 47 | 3 | | 48 | 2 | 23 | 8 | 2 | |
| Grand Rapids, Mich. | 112,571 | 39 | 2 | 2 | 42 | 1 | 3 | 1 | 2 | |
| Lowell, Mass. | 106,294 | 34 | 6 | | 35 | | 4 | 2 | 3 | |
| Nashville, Tenn. | 110,364 | 50 | | | 70 | 1 | | 9 | 6 | |
| Oakland, Cal. | 150,174 | 45 | 3 | | | | 1 | 8 | 6 | |
| Richmond, Va. | 127,628 | 56 | | | 235 | | 3 | 4 | 3 | |
| Spokane, Wash. | 104,402 | | 2 | | 3 | | 4 | | 3 | |
| Toledo, Ohio | 168,497 | 53 | 10 | 1 | 65 | | 1 | 6 | 5 | |
| Worcester, Mass. | 145,986 | 58 | 4 | 2 | 9 | | 10 | 7 | 4 | |
| From 50,000 to 100,000 inhabitants: | | | | | | | | | | |
| Altoona, Pa. | 52,127 | | 4 | | | | 4 | 1 | 2 | |
| Bayonne, N. J. | 55,545 | 16 | 4 | 1 | 9 | | 9 | 3 | | |
| Brockton, Mass. | 56,878 | 16 | 1 | | 1 | | | 4 | 2 | |
| Camden, N. J. | 94,538 | | 8 | | 108 | | 9 | 9 | | |
| Duluth, Minn. | 78,466 | 23 | 3 | | 12 | | 2 | 1 | 1 | |
| Elizabeth, N. J. | 73,409 | 20 | 5 | | 11 | | 3 | 6 | 1 | |
| Erie, Pa. | 66,525 | 24 | 4 | | 49 | | 2 | 4 | | |
| Evansville, Ind. | 69,647 | 18 | 2 | | 1 | | 19 | 1 | 3 | |
| Harrisburg, Pa. | 64,186 | 18 | 4 | | 4 | | | | | |
| Hartford, Conn. | 98,915 | 43 | 9 | | 29 | | 7 | 1 | 4 | |
| Hoboken, N. J. | 70,324 | | 1 | | 4 | 1 | 2 | 7 | 1 | |
| Johnstown, Pa. | 55,482 | 16 | 13 | 2 | 41 | 1 | 1 | | | |
| Lynn, Mass. | 89,336 | 32 | 2 | 1 | 54 | | 1 | 3 | 1 | |
| Manchester, N. H. | 70,063 | 29 | 4 | | 20 | 1 | 1 | 1 | 1 | |
| New Bedford, Mass. | 96,652 | 37 | 1 | 1 | 50 | | 11 | 8 | 4 | |
| Passaic, N. J. | 54,773 | 21 | 3 | | 5 | | 2 | 2 | 2 | |
| Pawtucket, R. I. | 51,622 | | | | | | | 2 | 2 | |
| Peoria, Ill. | 66,950 | 26 | 2 | | 3 | | 1 | | 2 | |
| Reading, Pa. | 96,071 | 25 | 2 | | 194 | 2 | 5 | 2 | | |
| Saginaw, Mich. | 50,510 | 19 | 4 | | 21 | | 11 | 1 | 1 | |
| St. Joseph, Mo. | 77,403 | 24 | 1 | | | | 14 | 3 | 2 | |
| Schenectady, N. Y. | 72,826 | 14 | | | 21 | | 9 | 1 | | |
| South Bend, Ind. | 53,684 | 9 | 4 | | 2 | | 6 | | 1 | |
| Springfield, Mass. | 88,926 | 41 | 3 | 3 | 39 | | 10 | 3 | | |
| Trenton, N. J. | 96,815 | 47 | 3 | | 20 | 1 | 7 | 1 | 6 | |
| Wilkes-Barre, Pa. | 67,105 | 18 | 3 | | 3 | | 1 | 3 | 4 | |
| Yonkers, N. Y. | 79,803 | | 6 | | 51 | | 3 | 7 | 1 | |
| From 25,000 to 50,000 inhabitants: | | | | | | | | | | |
| Atlantic City, N. J. | 46,150 | 9 | 1 | | 5 | | 1 | | | |
| Aurora, Ill. | 29,807 | 7 | | | | | 2 | | 2 | |
| Berkeley, Cal. | 40,434 | 17 | | | 2 | | 1 | | 2 | |
| Chattanooga, Tenn. | 44,604 | | | | | | | 2 | | |
| Chelsea, Mass. | 32,452 | 19 | 3 | | 11 | | 4 | | 1 | |
| Chicopee, Mass. | 25,401 | 9 | 1 | | | | 4 | 1 | 1 | |
| Danville, Ill. | 27,871 | 12 | 1 | | 11 | | | | 1 | |
| East Orange, N. J. | 34,371 | | 3 | | 20 | | 9 | | | |
| Elmira, N. Y. | 37,176 | 13 | 1 | | 38 | | | | 1 | |
| Everett, Mass. | 33,484 | 4 | | | 7 | | 3 | | | |
| Fitchburg, Mass. | 37,826 | 18 | 2 | 1 | 188 | | 2 | | 1 | |
| Haverhill, Mass. | 44,115 | 15 | 1 | | 96 | | | 2 | | |
| Kalamazoo, Mich. | 39,437 | 9 | 3 | | 2 | | | 3 | | |
| Knoxville, Tenn. | 38,346 | 10 | | | 35 | 1 | | | 1 | |
| La Crosse, Wis. | 30,417 | 6 | | | | | | 2 | 1 | |
| Lancaster, Pa. | 47,227 | | 3 | | 18 | | 3 | | | |
| Lexington, Ky. | 35,099 | 23 | 1 | | 15 | | 1 | 2 | 3 | |
| Little Rock, Ark. | 45,941 | | | | 4 | | | 1 | | |
| Lynchburg, Va. | 29,494 | 17 | | | 64 | | | | | |
| McKeesport, Pa. | 42,694 | 6 | 4 | 1 | 2 | | 6 | 1 | | |
| Montgomery, Ala. | 38,136 | 12 | 1 | | 1 | | | 1 | | |
| Newcastle, Pa. | 36,280 | | 1 | | 59 | | 5 | 1 | | |
| Newport, Ky. | 30,309 | 7 | 2 | | | | 1 | 3 | 3 | |
| Newton, Mass. | 39,806 | 11 | 1 | | 20 | | 4 | | 1 | |
| Niagara Falls, N. Y. | 30,445 | 8 | 2 | 1 | 25 | | 1 | 3 | | |
| Norristown, Pa. | 27,875 | 10 | | | | | 1 | | | |
| Orange, N. J. | 29,630 | 5 | 1 | | 7 | | 2 | 1 | | |
| Pasadena, Cal. | 30,291 | | | | | | | | 1 | |
| Pittsfield, Mass. | 32,121 | | | 1 | 6 | | | 1 | 1 | |

Cases and Deaths Reported by Cities for Week Ended Mar. 22, 1913—Contd.

| Cities. | Popula- tion, United States census 1910. | Total deaths from all causes. | Diph- theria. | | Measles. | | Scarlet fever. | | Tuber- culosis. | |
|---|---|---|------------------|---------|----------|---------|-------------------|---------|--------------------|---------|
| | | | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. |
| From 25,000 to 50,000 inhabitants—Con. | | | | | | | | | | |
| Portsmouth, Va..... | 33,190 | 8 | | | 19 | | | | | 1 |
| Racine, Wis..... | 38,002 | 10 | 4 | | 6 | | 3 | | | 3 |
| Roanoke, Va..... | 34,874 | 13 | 1 | | 58 | 1 | | | 6 | 3 |
| Salem, Mass..... | 43,697 | 8 | 2 | | 2 | | | | | 1 |
| San Diego, Cal..... | 39,578 | 6 | 1 | 1 | 3 | | | | 5 | 5 |
| South Omaha, Nebr..... | 26,259 | 5 | | | | | 1 | | | |
| Superior, Wis..... | 40,384 | 13 | | | | 2 | 2 | | | |
| Taunton, Mass..... | 34,259 | 15 | | | 4 | | 4 | 2 | 3 | |
| Waltham, Mass..... | 27,834 | 5 | 4 | | 4 | | 2 | | | |
| West Hoboken, N. J..... | 35,403 | 5 | 5 | | 16 | | 4 | | | |
| Wheeling, W. Va..... | 41,641 | 15 | 1 | | 16 | | 1 | | 4 | 2 |
| Williamsport, Pa..... | 31,860 | 9 | 1 | | 21 | | 1 | | | |
| Wilmington, N. C..... | 25,748 | 15 | | | 4 | | | | 3 | 2 |
| York, Pa..... | 44,750 | | 5 | | 4 | | 6 | | 6 | 2 |
| Zanesville, Ohio..... | 28,026 | 13 | 2 | | | | 3 | | | |
| Less than 25,000 inhabitants: | | | | | | | | | | |
| Alameda, Cal..... | 23,833 | 9 | | | 1 | | 1 | | | 1 |
| Ann Arbor, Mich..... | 14,817 | 7 | 1 | | 12 | | 1 | | | |
| Beaver Falls, Pa..... | 12,191 | | | | 2 | | | | | |
| Biddeford, Me..... | 17,079 | 8 | | | | | | | | 1 |
| Bradford, Pa..... | 17,759 | 2 | 7 | 2 | 7 | | | | | |
| Cambridge, Ohio..... | 17,327 | 1 | | | | | | | | |
| Clinton, Mass..... | 13,075 | 1 | | | 1 | | | | | |
| Columbus, Ga..... | 20,554 | 5 | | | | | | | | 1 |
| Concord, N. H..... | 21,479 | 8 | | | 28 | | 2 | | | |
| Cumberland, Md..... | 21,839 | 10 | 1 | | 11 | | | | 1 | 1 |
| Dunkirk, N. Y..... | | 5 | | | 6 | | | | | 1 |
| Franklin, N. H..... | 6,132 | 3 | | | 4 | | | | | |
| Galesburg, Ill..... | 22,089 | 9 | | | | | 2 | | | |
| Harrison, N. J..... | 14,499 | 5 | | | | | | | 2 | |
| Homestead, Pa..... | 18,713 | 4 | 1 | | 6 | | | | | 1 |
| Kearny, N. J..... | 18,659 | 2 | | | 5 | | | | | |
| La Fayette, Ind..... | 20,081 | 6 | | | 1 | | | | | |
| Marquette, Wis..... | | 3 | | | | | | | | 1 |
| Marlboro, Mass..... | | 2 | | | 2 | | 1 | | 1 | 1 |
| Massillon, Ohio..... | 23,830 | 2 | | | | | 1 | | | |
| Medford, Mass..... | 23,150 | 9 | 2 | | 5 | | 7 | | | 1 |
| Melrose, Mass..... | 15,715 | 5 | 1 | | | | 2 | | | |
| Moline, Ill..... | 24,190 | 14 | | | | | | | | 1 |
| Montclair, N. J..... | 21,450 | 10 | | | 5 | | 1 | | 2 | |
| Muscataine, Iowa..... | 14,073 | 8 | | | | | 3 | | | |
| Nanticoke, Pa..... | 18,857 | 6 | 2 | | 6 | | 2 | | | |
| Newburyport, Mass..... | 19,240 | 2 | | | | | | | 2 | |
| North Adams, Mass..... | 22,019 | 2 | 1 | | | | 1 | | | |
| Northampton, Mass..... | 19,931 | 11 | | | | | 3 | | 2 | |
| Plainfield, N. J..... | 23,550 | 7 | 2 | | 5 | | 2 | | 1 | |
| Rutland, Vt..... | 13,546 | 2 | | | 25 | | | | 1 | 1 |
| Saratoga Springs, N. Y..... | | 7 | 1 | | 7 | | | | | |
| South Bethlehem, Pa..... | 13,241 | 6 | | | 4 | | 1 | | 2 | 1 |
| Springfield, Ohio..... | | | 1 | | 1 | | 1 | | | |
| Steelton, Pa..... | 14,476 | 6 | | | 8 | | | | | |
| Wilksburg, Pa..... | 18,294 | 7 | 2 | | 4 | | | | 2 | |

IN INSULAR POSSESSIONS.

HAWAII.

Plague-Infected Rat Found.

A rat dead from plague was found at Honokaa, March 10, 1913, making a total of 5 plague-infected rats found at Honokaa from February 1 to date. These rats were all found in stables.

Examination of Rodents for Plague Infection.

At Honolulu rats have been examined for plague infection as follows: Week ended March 1, 1913, 306 rats; week ended March 8, 1913, 384 rats. No plague-infected rat was found.

During the same period rats and mongoose were examined at Hilo as follows: Week ended March 1, 1913, 972; week ended March 8, 1913, 1,166. No plague-infected rodent was found. At Honokaa during the week ended March 1, 1913, there were examined 1,912 rats and mongoose and during the week ended March 8, 1913, 1,887. No plague-infected rodent was found.

PORTO RICO.

Rats Collected and Examined.

Passed Asst. Surg. Creel reports that during the week ended March 22, 1913, there were examined 1,593 rats, collected from various points in Porto Rico, and that of these 417 were collected from various parts of San Juan municipality.

No case of plague in man has been notified in Porto Rico since September 12, 1912, and no plague-infected rat has been found since December 19, 1912.

FOREIGN REPORTS.

AUSTRALIA.

Sydney—Examination of Rats.

The following information was issued by the Department of Health of New South Wales: During the four weeks ended March 1, 1913, there were examined at Sydney for plague infection 1,502 rats. No plague-infected rat was found.

CHINA.

Shanghai—Plague Among Rats.

Plague is reported present among rats at Shanghai. The authorities at the French concession report for the month of January, 1913, 524 rats collected from suspected sources and examined for plague infection, of which number 37 were found infected.

CUBA.

Habana—Transmissible Diseases.

MAR. 10-20, 1913.

| Diseases. | New cases. | Deaths. | Remain- ing under treat- ment. | Diseases. | New cases. | Deaths. | Remain- ing under treat- ment. |
|--------------------|------------|---------|---|--------------------|------------|---------|---|
| Leprosy..... | | | 244 | Scarlet fever..... | 22 | | 32 |
| Malaria..... | | | 12 | Measles..... | 23 | | 20 |
| Typhoid fever..... | 9 | 1 | 38 | Varicella..... | 7 | | 11 |
| Diphtheria..... | 21 | 2 | 14 | Paratyphoid..... | 5 | 1 | 10 |

¹ Imported from Porto Rico.

ECUADOR.

Guayaquil—Plague and Yellow Fever.

Passed Asst. Surg. Parker reports: During the month of February, 1913, plague was reported in three localities, Guayaquil, Duran, and Milagro, with 60 new cases and 23 deaths. During the same period yellow fever was present in Guayaquil, Agua Piedra, Duran, Milagro, Naranjito, and Bucay, with 67 new cases and 37 deaths.

April 3 Dr. Parker further reported plague and yellow fever in Guayaquil and vicinity during the month of March, 1913, as follows: Plague, 24 cases with 11 deaths; yellow fever, 52 cases with 33 deaths.

JAVA.

Plague in January, 1913.

During the month of January, 1913, plague was reported in Java as follows:

| Districts. | Cases. | Deaths. |
|---------------|--------|---------|
| Surabaya..... | 22 | 22 |
| Malang..... | 313 | 304 |
| Kediri..... | 179 | 162 |
| Madioen..... | 47 | 42 |
| Total..... | 561 | 530 |

ZANZIBAR.

Zanzibar—Examination of Rats.

Consul Hays reports that during the two weeks ended February 21, 1913, there were examined at Zanzibar for plague infection 1,641 rats. No plague-infected rat was found.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.

Reports Received During Week Ended Apr. 11, 1913.

CHOLERA.

| Places. | Date. | Cases. | Deaths. | Remarks. |
|---------------------|---------------------|--------|---------|----------|
| Dutch East Indies: | | | | |
| Java— | | | | |
| Batavia..... | Feb. 16-22..... | 18 | 16 | |
| India: | | | | |
| Bassein..... | Feb. 9-15..... | 12 | 12 | |
| Calcutta..... | Feb. 16-22..... | 48 | 48 | |
| Cochin..... | Feb. 17-23..... | 5 | 5 | |
| Negapatam..... | Feb. 9-15..... | 3 | 3 | |
| Rangoon..... | Dec. 22-28..... | 1 | 1 | |
| Do..... | Dec. 29-Feb. 1..... | 23 | 22 | |
| Do..... | Feb. 2-22..... | 4 | 3 | |
| Turkey in Europe: | | | | |
| Constantinople..... | Mar. 12-17..... | 3 | 1 | |

YELLOW FEVER.

| Places. | Date. | Cases. | Deaths. | Remarks. |
|------------------|----------------|--------|---------|--|
| Brazil: | | | | |
| Manaos..... | Mar. 2-15..... | 7 | 7 | |
| Ecuador: | | | | |
| Agua Piedra..... | Feb. 1-28..... | 3 | 4 | |
| Bucay..... | do..... | 2 | 1 | |
| Duran..... | do..... | 3 | 3 | |
| Guayaquil..... | do..... | 34 | 18 | Mar. 1-31, in Guayaquil and vicinity: Cases, 52; deaths, 33. |
| Milagro..... | do..... | 16 | 10 | |
| Narinjito..... | do..... | 9 | 4 | |

PLAGUE.

| Places. | Date. | Cases. | Deaths. | Remarks. |
|---------------------|--------------------|--------|---------|---|
| Brazil: | | | | |
| Rio de Janeiro..... | Feb. 2-Mar. 1..... | 7 | 2 | |
| Chile: | | | | |
| Iquique..... | Feb. 9-15..... | 3 | 3 | |
| Ecuador: | | | | |
| Duran..... | Feb. 1-28..... | 6 | 4 | |
| Guayaquil..... | do..... | 49 | 18 | Mar. 1-31 in Guayaquil and vicinity: Cases, 24; deaths, 11. |
| Milagro..... | do..... | 5 | 1 | |

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

Reports Received During Week Ended Apr. 11, 1913—Continued.

PLAGUE—Continued

| Places. | Date. | Cases. | Deaths. | Remarks. |
|-----------------|---------------------|--------|---------|---------------------------------------|
| Egypt..... | | | | Total Mar. 7-13: Cases, 22; deaths 7. |
| Alexandria..... | Mar. 3-11..... | 3 | | |
| Provinces— | | | | |
| Behera..... | Mar. 10-13..... | 2 | 2 | |
| Charkeh..... | Mar. 6-10..... | 7 | | |
| Fayoum..... | Mar. 6-12..... | 1 | | |
| Menouf..... | Mar. 5-10..... | 3 | 2 | |
| Minieh..... | Feb. 6-Mar. 9..... | 6 | 1 | |
| India: | | | | |
| Calcutta..... | Feb. 16-22..... | | 10 | |
| Rangoon..... | Dec. 22-28..... | 12 | 11 | |
| Do..... | Dec. 29-Feb. 1..... | 73 | 71 | |
| Do..... | Feb. 2-22..... | 107 | 104 | |
| Mauritius..... | Jan. 10-16..... | 4 | 2 | |
| Turkey in Asia: | | | | |
| Jiddah..... | Mar. 10-13..... | 1 | 1 | |

SMALLPOX.

| | | | | | |
|------------------------|----------------------|----|----|----|---|
| China: | | | | | |
| Kulangsu..... | Feb. 23-29..... | | | 1 | International settlement of Amoy. Deaths among natives. |
| Shanghai..... | Feb. 17-Mar. 8..... | 7 | 30 | | |
| Egypt: | | | | | |
| Alexandria..... | Mar. 8-14..... | 4 | 4 | | |
| France: | | | | | |
| Nice..... | Feb. 1-28..... | 2 | | | |
| Paris..... | Mar. 9-15..... | 3 | | | |
| India: | | | | | |
| Calcutta..... | Feb. 16-22..... | | | 2 | |
| Karachi..... | Feb. 23-Mar. 1..... | 3 | 1 | 2 | |
| Madras..... | do..... | 6 | 2 | 1 | |
| Rangoon..... | Dec. 22-Feb. 1..... | 18 | 4 | 4 | |
| Do..... | Feb. 2-22..... | 25 | 8 | 8 | |
| Malta..... | Feb. 1-28..... | 1 | | | |
| Mexico: | | | | | |
| Aguascalientes..... | Mar. 17-23..... | | | 5 | |
| Chihuahua..... | do..... | | | 1 | |
| Guadalajara..... | Mar. 16-22..... | 3 | | | |
| Salina Cruz..... | Mar. 9-22..... | 1 | 1 | | |
| San Luis Potosi..... | Jan. 4-Feb. 1..... | 2 | 2 | | |
| New Foundland: | | | | | |
| St. John's..... | Mar. 9-15..... | 5 | | | |
| Portugal: | | | | | |
| Lisbon..... | Feb. 23-Mar. 22..... | 19 | | | |
| Russia: | | | | | |
| Moscow..... | Feb. 9-Mar. 8..... | 6 | 3 | | |
| Warsaw..... | Dec. 8-28..... | 4 | 3 | | |
| Spain: | | | | | |
| Almeria..... | Feb. 1-28..... | | | 2 | No longer epidemic. |
| Barcelona..... | Mar. 9-21..... | | | 55 | |
| Seville..... | Feb. 1-28..... | | | 8 | |
| Valencia..... | Mar. 2-15..... | 14 | | | |
| Straits Settlements: | | | | | |
| Singapore..... | Feb. 9-15..... | 1 | | | |
| Switzerland: | | | | | |
| Basel..... | Mar. 2-15..... | 10 | | | |
| Turkey in Asia: | | | | | |
| Beirut..... | Mar. 2-15..... | 8 | 1 | | Present. |
| Damascus..... | Mar. 8..... | | | 1 | |
| Mersina..... | Mar. 9-15..... | 2 | | 1 | |
| Smyrna..... | Nov. 24-Dec. 14..... | | | 5 | |
| Union of South Africa: | | | | | |
| Durban..... | Feb. 2-8..... | 1 | | | Imported. |
| Turkey in Europe: | | | | | |
| Constantinople..... | Feb. 22-Mar. 1..... | | | 10 | |
| Do..... | Mar. 9-15..... | | | 8 | |
| Uruguay: | | | | | |
| Montevideo..... | Dec. 1-31..... | 3 | | | Last previous case in May, 1912. |
| Do..... | Jan. 1-31..... | 1 | | | |

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

Reports Received from Dec. 27, 1912, to Apr. 4, 1913.

CHOLERA.

| Places. | Date. | Cases. | Deaths. | Remarks. |
|---------------------------|---------------------|--------|---------|----------|
| Bulgaria: | | | | |
| Eski Saghara..... | Dec. 9..... | 2 | | |
| Sofia..... | Nov. 21-Dec. 16... | 6 | 1 | |
| Shumia..... | Dec. 30..... | 18 | | |
| China: Foochow | | | | |
| Dutch East Indies: | | | | |
| Borneo— | | | | |
| Bandermasin..... | Nov. 22-30..... | 5 | 5 | |
| Pontrank..... | Oct. 6..... | 1 | | |
| Samarinda..... | Oct. 9-Nov. 2..... | 26 | 25 | |
| Singkawang..... | Oct. 8-Nov. 1..... | 2 | 2 | |
| Java— | | | | |
| Batavia..... | Nov. 9-Dec. 31... | 40 | 28 | |
| Do..... | Jan. 19-Feb. 15... | 36 | 32 | |
| Madioen..... | Sept. 15-Nov. 9... | 192 | 105 | |
| Megalang..... | Oct. 7-12..... | 9 | 6 | |
| Paseroean Residency.. | Sept. 20-26..... | 2 | 1 | |
| Samarang..... | July 19-Dec. 26... | 591 | 485 | |
| Surabaya..... | Oct. 16-Nov. 23.. | 4 | 3 | |
| Sumatra— | | | | |
| Air Tiris..... | Dec. 3-22..... | 11 | 11 | |
| Benkoelen..... | Nov. 3-30..... | 3 | 1 | |
| Koeoh..... | Dec. 3-15..... | 4 | 9 | |
| Jambi..... | Sept. 18-24..... | 1 | | |
| Roembo..... | Dec. 3-15..... | 2 | 2 | |
| Telokbetong..... | Nov. 1-Dec. 31... | 181 | 20 | |
| India: | | | | |
| Bassein..... | Jan. 25-Feb. 8..... | 19 | 17 | |
| Bombay..... | Nov. 17-Feb. 22... | 205 | 147 | |
| Calcutta..... | Nov. 9-Feb. 15... | | 417 | |
| Cochin..... | Oct. 10-Nov. 9..... | 6 | 6 | |
| Madras..... | Nov. 24-Feb. 22... | 28 | 29 | |
| Negapatam..... | Nov. 11-Feb. 1..... | 23 | 23 | |
| Rangoon..... | Nov. 1-30..... | 2 | 2 | |
| Indo-China: Saigon | | | | |
| Japan | | | | |
| Aita Ken..... | Dec. 2..... | 1 | | |
| Chiba Ken..... | Nov. 23-Mar. 8... | 50 | | |
| Fukushima Ken..... | Dec. 5..... | 1 | | |
| Hiardo Islands..... | Sept. 15-Dec. 1... | 30 | | |
| Hioga Ken..... | Nov. 27-Dec. 19... | 22 | | |
| Hiroshima Ken..... | Nov. 23..... | 1 | | |
| Ibaraki Ken..... | Dec. 6..... | 2 | | |
| Iwate Ken..... | Dec. 16..... | 1 | | |
| Kanagawa Ken..... | | | | |
| Yokohama..... | Nov. 24-Jan. 14... | 22 | | |
| Kochi Ken..... | Nov. 28-Dec. 4..... | 3 | | |
| Minami Tokaki gun..... | Sept. 15-Dec. 2... | 40 | | |
| Nagasaki Ken..... | | | | |
| Nagasaki city..... | Sept. 15-Dec. 2... | 10 | 4 | |
| Osaka Fu..... | Nov. 23-Dec. 3... | 14 | | |
| Saga Ken..... | do..... | 5 | | |
| Sasebo..... | Sept. 15-Dec. 2... | 7 | | |
| Shidzuoka Ken..... | Dec. 3-Feb. 11... | 57 | | |
| Taiwan (Formosa). | | | | |
| Tokushima Ken..... | Sept. 15-Dec. 1... | 65 | | |
| Tokyo Fu..... | Nov. 23-Feb. 4... | 108 | | |
| Tokyo..... | | | | |
| Wakamatsu Ken..... | Nov. 26..... | 1 | | |
| Russia: | | | | |
| Odessa..... | Jan. 8-21..... | 5 | 2 | |
| Siam: | | | | |
| Bangkok..... | Oct. 13-Jan. 4... | | 6 | |

Isolated cases.

Total year 1912: Cases, 2,722; deaths, 1,678, exclusive of Taiwan. Total Jan. 1-Feb. 18: Cases, 83.

Total Nov. 23-Feb. 4: Cases, 55. Sept. 25-Dec. 7: 9 cases from vessels. Total Sept. 29, 1912, to Jan. 9, 1913: Cases, 39.

Nagasaki Ken and outlying islands, Sept. 15-Dec. 2: Cases, 188; deaths, 134, including previous reports.

Total year 1912: Cases, 333; deaths, 256. Not previously reported.

Oct. 2-Dec. 7: Cases, 273, and in vicinity, 342.

Nov. 18-20: 1 case from s. s. Bosnian from Constantinople. Confined in the quarantine barracks.

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

Reports Received from Dec. 27, 1912, to Apr. 4, 1913—Continued.

CHOLERA—Continued.

| Places. | Date. | Cases. | Deaths. | Remarks. |
|-----------------------------|---------------------|--------|---------|---|
| Straits Settlements: | | | | |
| Singapore..... | Nov. 17-23..... | 2 | 2 | |
| Do..... | Jan. 27-Feb. 1..... | 1 | 1 | |
| Turkey in Asia..... | | | | |
| Adana— | | | | |
| Adana..... | Nov. 17-Dec. 2.... | 2 | 2 | |
| Aleppo— | | | | |
| Aleppo..... | Nov. 24-Dec. 2.... | 3 | 3 | |
| Alexandretta..... | do..... | 3 | 2 | |
| Angora— | | | | |
| Angora..... | Nov. 24-Dec. 11... | 29 | 23 | |
| Balikesir..... | Nov. 24-Dec. 2.... | | 1 | |
| Beirut— | | | | |
| Merdjijoun..... | Dec. 3-11..... | | 15 | |
| Tabariyeh..... | Dec. 13-22..... | | | Present. |
| Brusa..... | Nov. 17-Dec. 11... | 26 | 38 | |
| Castamoni..... | Nov. 17-Dec. 2.... | 6 | 4 | |
| Dierbekir..... | do..... | 8 | 2 | |
| Hedjaz— | | | | |
| Jedda..... | Nov. 25-Dec. 14... | 395 | 393 | Among returning pilgrims. |
| Medina..... | Dec. 3-11..... | | 6 | |
| Mekka..... | Nov. 17-23..... | 111 | 172 | Dec. 3-11: Deaths, 3,007. |
| Ismidit..... | Nov. 17-Dec. 2.... | 3 | 1 | |
| Kartal..... | Dec. 30-Feb. 12... | 9 | 3 | |
| Khodavendikar— | | | | |
| Karassi..... | Jan. 30-Feb. 12... | | 2 | |
| Mosul..... | Nov. 17-Dec. 2.... | | 2 | |
| Sinope..... | Dec. 3-11..... | 1 | 4 | |
| Smyrna..... | Nov. 17-Dec. 2.... | 3 | 1 | |
| Syria— | | | | |
| Haifa..... | Dec. 21..... | | 1 | |
| Tiberias..... | Dec. 3-25..... | 129 | 68 | |
| Tarsus..... | Nov. 24-Dec. 2.... | 2 | 1 | |
| Turkey in Europe: | | | | |
| Constantinople..... | Dec. 3-Jan. 28.... | 1,598 | 787 | Total, Nov. 5-Jan. 28: Cases, 2,515; deaths, 1,245. |
| Zanzibar..... | Nov. 8-Dec. 21.... | 131 | 130 | Total, Aug. 5-Dec. 23: Cases, 943; deaths, 912, including previous reports from Mwera, Chwaka, and Mokoton. Chwaka district, Oct. 4-Dec. 31, 332 cases, not included in previous reports. |
| At sea..... | | | | Nov. 18-20: 1 fatal case on s. s. Bosnian, en route from Constantinople to Odessa. |

YELLOW FEVER.

| | | | | |
|----------------------------|---------------------|----|----|---|
| Brazil: | | | | |
| Bahia..... | Jan. 24-Mar. 8..... | 9 | 3 | |
| Manaos..... | Jan. 5-Mar. 1..... | 10 | 10 | |
| British Gold Coast: | | | | |
| Akkra..... | Mar. 22..... | | | Present. |
| Ecuador: | | | | |
| Agua Piedra..... | Dec. 1-31..... | 7 | 4 | |
| Do..... | Jan. 1-31..... | 5 | 2 | |
| Bucay..... | Nov. 15-Dec. 31... | 3 | 2 | |
| Do..... | | | | Jan. 1-31, 1 case, 1 death. |
| Duran..... | Nov. 1-Dec. 31.... | 3 | 3 | |
| Do..... | Jan. 1-31..... | 8 | 5 | |
| Guayaquil..... | Nov. 1-Dec. 31.... | 25 | 16 | |
| Do..... | Jan. 1-31..... | 56 | 30 | Feb. 18-24, 16 cases. Mar. 15, still present. |
| Milagro..... | Nov. 1-Dec. 31.... | 2 | 2 | |
| Do..... | Jan. 1-31..... | 3 | 1 | |
| Naranjito..... | Nov. 1-Dec. 31.... | 3 | 2 | |
| Do..... | Jan. 1-31..... | 3 | | |
| Senegal: | | | | |
| Dakar..... | Dec. 7..... | | | Present. |
| Venezuela: | | | | |
| Caracas..... | Nov. 1-Dec. 31.... | 9 | 2 | In September 2 deaths and in October 1 death not previously reported. Feb. 7, 1 case. |
| Do..... | Jan. 1-31..... | 2 | | |

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

Reports Received from Dec. 27, 1912, to Apr. 4, 1913—Continued.

PLAGUE.

| Places. | Date. | Cases. | Deaths. | Remarks. |
|---------------------------|---------------------|--------|---------|--|
| Afghanistan: | | | | |
| Tchahel-Bagdareh..... | Sept. 1-30..... | | | And vicinity 100 deaths daily. Present to Oct. 29. |
| Arabia: | | | | |
| Orán— | | | | |
| Debal..... | Feb. 16..... | | | Present. |
| Brazil: | | | | |
| Bahia..... | Jan. 12-Mar. 8.... | 11 | 4 | |
| Pernambuco..... | Nov. 1-Jan. 31.... | | 11 | |
| Rio de Janeiro..... | Nov. 3-Feb. 1.... | 17 | 7 | Year 1912: Cases, 21. |
| Santos..... | Dec. 1..... | 2 | 2 | |
| British East Africa: | | | | |
| Dagoretti..... | Jan. 14-Feb. 5.... | 1 | | |
| Kiambu..... | Nov. 16-Oct. 21.... | 2 | | |
| Kisumu..... | Dec. 8-28..... | 7 | | |
| Do..... | Jan. 14-Feb. 5.... | 3 | | |
| Mombasa..... | Oct. 1-Dec. 25.... | 16 | 12 | Free Nov. 18. |
| Nairobi..... | Nov. 16-Feb. 5.... | 8 | 1 | |
| Canary Islands: | | | | |
| Teneriffe— | | | | |
| Santa Cruz..... | Feb. 21-27..... | | 5 | |
| Chile: | | | | |
| Iquique..... | Jan. 8-19..... | 7 | 4 | |
| Taital..... | Oct. 22-28..... | 3 | | |
| China: | | | | |
| Amoy..... | Jan. 17-Feb. 15.... | | | Pneumonic form present and in vicinity. |
| Kulangsu..... | Jan. 17..... | 3 | | International settlement of Amoy. |
| Hohow..... | Nov. 1-30..... | | | Do. |
| Hongkong..... | Jan. 12-Feb. 22.... | 5 | 5 | Total Jan. to Sept., 1912: Cases, 1,848; deaths, 1,728. |
| Manchuria..... | Dec. 14..... | | | Present along the railway be- tween Harbin and Chang- Chun. |
| Pakhoi..... | Dec. 1-31..... | 30 | | |
| Shanghai..... | Nov. 18-Dec. 15.... | | 2 | Dec. 18, present in vicinity of the French settlement. |
| Swatow..... | | | | Jan. 9, in vicinity. |
| Dutch East Indies: | | | | |
| Java— | | | | |
| Kediri..... | Oct. 6-Jan. 4..... | 406 | 377 | |
| Madloen..... | do..... | 98 | 96 | |
| Malang..... | | | | Total year 1912: Cases, 1,477; deaths, 1,406, among natives including Pasoeroean Resi- dency. |
| Pasoeroean Residency..... | Oct. 6-Jan. 4..... | 736 | 731 | |
| Surabaya..... | do..... | 43 | 43 | |
| Ecuador: | | | | |
| Duran..... | Nov. 1-Dec. 31.... | 4 | 1 | |
| Do..... | Jan. 1-31..... | 2 | 1 | |
| Guayaquil..... | Nov. 1-Dec. 31.... | 139 | 52 | |
| Do..... | Jan. 1-31..... | 68 | 42 | And vicinity, Jan. 1-Feb. 24: Cases, 123; deaths, 61; Mar. 15, still present. |
| Milagro..... | Dec. 1-31..... | 8 | 1 | |
| Do..... | Jan. 1-31..... | 4 | | |
| Egypt..... | | | | Total Jan. 1-Dec. 31: Cases, 884; deaths, 441. Jan. 1-Mar. 6: Cases, 88; deaths, 45. |
| Alexandria..... | Mar. 2..... | 1 | 1 | Mar. 4, 1 fatal case. |
| Cairo..... | Dec. 30..... | 1 | 1 | |
| Port Said..... | Dec. 29..... | 1 | 1 | |
| Do..... | Jan. 1-Mar. 5..... | 4 | 2 | |
| Provinces— | | | | |
| Assiout..... | Jan. 22-Feb. 23.... | 13 | 10 | |
| Behera..... | Nov. 29-Dec. 12.... | 2 | 1 | |
| Benisouef..... | Jan. 22-Feb. 2.... | 4 | 2 | |
| Charkieh..... | Nov. 29-Dec. 12.... | 3 | 2 | |
| Do..... | Jan. 2-Feb. 23.... | 8 | 7 | |
| Fayoum..... | Jan. 19-Feb. 11.... | 8 | 5 | |
| Galloubeh..... | Jan. 1-7..... | 1 | 1 | |
| Garbieh..... | Jan. 1-Feb. 26.... | 4 | 1 | |
| Do..... | Nov. 23-Dec. 17.... | 3 | | |
| Girgeh..... | Jan. 1-Feb. 3..... | 4 | 1 | |
| Do..... | Dec. 21-25..... | 1 | 1 | |
| Gizeh..... | Jan. 1-Feb. 3..... | 5 | 3 | |

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

Reports Received from Dec. 27, 1912, to Apr. 4, 1913—Continued.

PLAGUE—Continued.

| Places. | Date. | Cases. | Deaths. | Remarks. |
|-----------------------------|-----------------------|--------|---------|--|
| Egypt—Continued. | | | | |
| Provinces—Continued. | | | | |
| Menouf..... | Jan. 1-Mar. 4..... | 14 | 3 | |
| Do..... | Oct. 1-Dec. 31..... | 13 | 7 | |
| Minieh..... | Nov. 23-Dec. 29..... | 7 | 4 | |
| Do..... | Jan. 23-Feb. 5..... | 2 | 1 | |
| Hawaii: | | | | |
| Kukuihaele..... | Jan. 11-31..... | 2 | 2 | |
| India: | | | | |
| Bombay..... | Nov. 17-Feb. 22..... | 172 | 136 | Mar. 13: Still present. |
| Calcutta..... | Nov. 9-Feb. 15..... | ..... | 105 | |
| Madras..... | Dec. 29-Jan. 4..... | 1 | 1 | |
| Karachi..... | Nov. 19-23..... | 2 | 2 | |
| Rangoon..... | Oct. 1-Nov. 30..... | 68 | 68 | |
| Provinces..... | | | | |
| Delhi..... | Oct. 27-Dec. 28..... | 31 | 14 | |
| Bombay..... | do..... | 6,785 | 5,121 | |
| Madras..... | do..... | 1,833 | 1,337 | |
| Bengal..... | do..... | 60 | 59 | |
| Bihar and Orissa..... | do..... | 1,269 | 1,025 | |
| United Provinces..... | do..... | 7,844 | 6,001 | |
| Punjab..... | do..... | 952 | 709 | |
| Burma..... | do..... | 85 | 85 | |
| Central Provinces..... | do..... | 404 | 301 | |
| Mysore..... | do..... | 1,506 | 1,114 | |
| Hyderabad..... | do..... | 1,498 | 1,212 | |
| Central India..... | Oct. 27-Dec. 28..... | 70 | 60 | |
| Rajputana..... | do..... | 2,862 | 2,824 | |
| Kashmir..... | do..... | 3 | 1 | |
| Provinces..... | | | | |
| Delhi..... | Dec. 29-Feb. 1..... | 28 | 21 | |
| Bombay..... | do..... | 2,589 | 1,917 | |
| Madras..... | do..... | 1,144 | 829 | |
| Bengal..... | do..... | 29 | 29 | |
| Bihar and Orissa..... | do..... | 4,341 | 3,470 | |
| United Provinces..... | do..... | 10,041 | 8,524 | |
| Punjab..... | do..... | 872 | 719 | |
| Burma..... | do..... | 388 | 342 | |
| Central Provinces..... | do..... | 183 | 142 | |
| Mysore..... | do..... | 931 | 681 | |
| Hyderabad..... | do..... | 662 | 576 | |
| Central India..... | do..... | 16 | 10 | |
| Rajputana..... | do..... | 475 | 443 | |
| Kashmir..... | do..... | 7 | 1 | |
| North West Provinces..... | do..... | 1 | 1 | |
| Indo-China: Saigon..... | Aug. 20-Dec. 16..... | 58 | 36 | |
| Japan: | | | | |
| Taiwan (Formosa)..... | ..... | ..... | ..... | Total, year 1912: Cases, 223; deaths 185. |
| Kagi..... | Apr. 2..... | ..... | ..... | Present. |
| Mauritius..... | Oct. 11-Jan. 9..... | 231 | 151 | |
| Morocco: Rabat..... | Nov. 1..... | 3 | ..... | Among the military. |
| New Caledonia: | | | | |
| Numea..... | Sept. 17-Oct. 17..... | 8 | 5 | |
| Do..... | Oct. 29-Dec. 2..... | ..... | ..... | 7 cases with 2 deaths among Europeans, and 22 fatal cases among natives. |
| Peru: | | | | |
| Departments— | | | | |
| Ancachs..... | July 1-31..... | 4 | ..... |  |
| Do..... | Aug. 1-31..... | 4 | 3 | Mollendo, Nov. 17-Jan. 12: Cases, 15; deaths, 4. Jan. 21, 2 cases, with 1 death. |
| Arequipa..... | July 1-31..... | 7 | 2 | |
| Do..... | Aug. 1-31..... | 5 | 3 | |
| Callao..... | July 1-31..... | 1 | 1 | Present in September; Dec 2-Jan. 12: Cases, 7. |
| Ferrinhafe..... | Dec. 23-Jan. 12..... | 1 | ..... |  |
| Ica..... | do..... | 1 | ..... |  |
| Lambayeque..... | Dec. 2-22..... | 7 | ..... | Present in September. |
| Jayanca..... | do..... | ..... | ..... | Present. |
| Libertad..... | July 1-31..... | 8 | 2 | |
| Do..... | Aug. 1-31..... | 12 | 7 | |
| Cosma..... | Dec. 2-22..... | ..... | ..... | Do. |
| Paijan..... | do..... | ..... | ..... | Do. |
| Salaverry..... | Dec. 23-Jan. 12..... | 1 | ..... |  |
| San Pedro..... | Dec. 2-Jan. 12..... | 27 | ..... |  |

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

Reports Received from Dec. 27, 1912, to Apr. 4, 1913—Continued.

PLAGUE—Continued.

| Places. | Date. | Cases. | Deaths. | Remarks. |
|-----------------------------|----------------------|--------|---------|--|
| Peru—Continued. | | | | |
| Departments—Continued. | | | | |
| Trujillo..... | Dec. 2-Jan. 12..... | 44 | ..... |  |
| Lima..... | July 1-31..... | 3 | 2 | |
| Do..... | Aug. 1-31..... | 4 | 2 | Dec. 2-22: Cases, 2. |
| Piura..... | | | | |
| Catacaos..... | Dec. 2-Jan. 12..... | ..... | ..... | Present. |
| Falta..... | do..... | ..... | ..... | Do. |
| Piura..... | Dec. 23-Jan. 12..... | ..... | ..... | Do. |
| Sulanna..... | Dec. 2-22..... | ..... | ..... | Do. |
| Philippine Islands: | | | | |
| Manila..... | Nov. 10-Feb. 15..... | 16 | 12 | |
| Provinces..... | | | | Third quarter, 1912: Cases, 8; deaths, 7. |
| Russia: | | | | |
| Don, territory..... | Nov. 1-Jan. 12..... | ..... | ..... | In 6 localities. 38 cases, with 22 deaths. |
| Hutor Popova (estate)..... | Nov. 1-15..... | 20 | 12 | Esaul district. |
| Moscow..... | Dec. 29-Jan. 11..... | 3 | 1 | |
| Transbaikal district— | | | | |
| Verneudinsk..... | Oct. 18-28..... | 3 | 3 | Near Nerchinsk. |
| Trans-Caspian Ty. Merv..... | Dec. 9-21..... | 29 | 29 | Pneumonic. |

SMALLPOX.

| | | | | |
|-----------------------------------|----------------------|-------|-------|--|
| Arabia: Aden..... | Jan. 14-Mar. 23..... | 3 | ..... |  |
| Abyssinia: Adis Ababa..... | Nov. 24-Dec. 21..... | ..... | ..... | Present. |
| Algeria: | | | | |
| Departments— | | | | |
| Algiers..... | Oct. 1-31..... | 11 | ..... |  |
| Constantine..... | do..... | 11 | ..... |  |
| Oran..... | Oct. 1-Dec. 31..... | 170 | 10 | |
| Do..... | Jan. 1-31..... | 11 | 3 | |
| Argentina: Buenos Aires..... | Nov. 1-Dec. 31..... | ..... | 7 | |
| Austria-Hungary: | | | | |
| Galicia..... | Nov. 10-Dec. 7..... | 3 | ..... |  |
| Fiume..... | Jan. 14-Feb. 10..... | 2 | ..... |  |
| Moravia..... | Jan. 17-25..... | 2 | ..... |  |
| Trieste..... | Dec. 8-Mar. 1..... | 29 | ..... |  |
| Brazil: | | | | |
| Para..... | Dec. 8-Feb. 1..... | 2 | ..... |  |
| Pernambuco..... | Nov. 1-Jan. 31..... | ..... | 168 | |
| Rio de Janeiro..... | Nov. 3-Feb. 1..... | 27 | 10 | |
| British Columbia: Vancouver..... | Feb. 2-Mar. 1..... | 2 | ..... |  |
| British East Africa: Mombasa..... | Dec. 1-31..... | 17 | 10 | |
| Canada: | | | | |
| Provinces— | | | | |
| British Columbia— | | | | |
| Fernie..... | Feb. 23-Mar. 1..... | 12 | ..... |  |
| Ontario— | | | | |
| Cornwall..... | Mar. 16-22..... | 2 | ..... |  |
| Hamilton..... | Jan. 1-Feb. 28..... | 48 | ..... |  |
| Niagara Falls..... | Feb. 1-28..... | 9 | ..... |  |
| Ottawa..... | Jan. 4-Mar. 22..... | 31 | ..... |  |
| Toronto..... | Dec. 1-Feb. 15..... | 8 | ..... |  |
| Windsor..... | Feb. 9-Mar. 22..... | 6 | ..... |  |
| Quebec— | | | | |
| Montreal..... | Dec. 15-Mar. 22..... | 133 | 1 | |
| Quebec..... | Dec. 15-Mar. 15..... | 32 | ..... |  |
| St. Johns..... | Jan. 12-Mar. 8..... | 22 | ..... |  |
| Chile: | | | | |
| Punta Arenas..... | Oct. 31-Nov. 30..... | 3 | ..... | Oct. 31, 1 case in vicinity. |
| Do..... | Jan. 1-31..... | 1 | ..... |  |
| China: | | | | |
| Amoy..... | Jan. 4-16..... | ..... | ..... | Present. Kulangsu, Jan. 12-25, 1 case. |
| An Kho..... | Jan. 4..... | ..... | ..... | Epidemic; 2 days' journey from Amoy. |
| Chungking..... | Nov. 3-Jan. 4..... | ..... | ..... | Present. |
| Dalny..... | Jan. 12-18..... | 1 | 1 | |
| Hankow..... | Dec. 29-Jan. 4..... | 1 | ..... |  |
| Harbin..... | Dec. 1-31..... | 6 | ..... |  |
| Hoihow..... | Jan. 3..... | ..... | ..... | Do. |
| Hongkong..... | Nov. 24-Feb. 22..... | 40 | 30 | |
| Nanking..... | Dec. 7-Feb. 8..... | ..... | ..... | Do. |
| Shanghai..... | Nov. 18-Feb. 9..... | 23 | 118 | Deaths among natives. |
| Tientsin..... | Nov. 17-Feb. 22..... | ..... | 4 | |

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

Reports Received from Dec. 27, 1912, to Apr. 4, 1913—Continued.

SMALLPOX—Continued.

| Places. | Date. | Cases. | Deaths. | Remarks. |
|-------------------------------|-----------------------|--------|---------|--|
| Costa Rica: Limon..... | Feb. 1..... | 2 | 2 | |
| Dutch East Indies: | | | | |
| Java— | | | | |
| Batavia..... | Nov. 9-Jan. 4..... | 26 | 7 | Jan. 5-11, 10 cases, with 5 deaths in the district, mainly in Samarang. |
| Samarang..... | Oct. 4-24..... | 57 | 23 | |
| Do..... | Jan. 5-Feb. 1..... | 753 | 161 | |
| Egypt: | | | | |
| Alexandria..... | Dec. 9-Mar. 4..... | 16 | 3 | |
| Cairo..... | Nov. 12-Feb. 11..... | 13 | 4 | |
| Fort Said..... | Dec. 3-31..... | 1 | 1 | |
| France: | | | | |
| Marseille..... | Nov. 1-Feb. 28..... | ..... | 18 | |
| Nantes..... | Jan. 5-Mar. 8..... | 7 | ..... |  |
| Paris..... | Dec. 1-Mar. 9..... | 37 | 1 | |
| Germany..... | | | | Total: Nov. 24-30, 5 cases not included in report, p. 2231, vol. xxvii; Dec. 1-Mar. 15, 28 cases. |
| Breslau..... | Jan. 19-25..... | 1 | ..... |  |
| Hamburg..... | Jan. 10-25..... | 2 | ..... |  |
| Gibraltar..... | Dec. 9-Mar. 16..... | 3 | 1 | |
| Great Britain: | | | | |
| Hull..... | Mar. 8-14..... | 1 | ..... |  |
| Liverpool..... | Jan. 1-Mar. 15..... | 3 | ..... |  |
| Newcastle on Tyne..... | Feb. 9-15..... | 15 | ..... |  |
| Sheffield..... | Feb. 26-Mar. 2..... | 1 | ..... |  |
| Greece: | | | | |
| Athens..... | Feb. 10-22..... | 1 | 2 | |
| Patras..... | Mar. 3-9..... | ..... | 9 | Epidemic. |
| Piræus..... | Jan. 1-31..... | 16 | ..... |  |
| Honduras: Trujillo..... | Feb. 2-8..... | 1 | ..... |  |
| India: | | | | |
| Bombay..... | Nov. 17-Feb. 22..... | 61 | 19 | |
| Calcutta..... | Dec. 1-Feb. 15..... | ..... | 19 | |
| Karachi..... | Dec. 1-Feb. 22..... | 16 | 5 | |
| Madras..... | Dec. 1-15..... | 26 | 5 | |
| Rangoon..... | Oct. 1-Nov. 30..... | 11 | 3 | |
| Indo-China: Saigon..... | Aug. 20-Dec. 23..... | 3 | 3 | |
| Italy: | | | | |
| Palermo..... | Dec. 15-Feb. 15..... | 7 | ..... |  |
| Turin..... | Feb. 3-Mar. 2..... | 5 | ..... |  |
| Japan..... | | | | Total, year 1912: Cases, 14; deaths, 1. |
| Nagasaki..... | Nov. 1-30..... | 1 | ..... |  |
| Taiwan (Formosa)..... | ..... | ..... | ..... | Year 1912: Cases, 4. |
| Yokohama..... | Jan. 1-13..... | 2 | ..... | From s. s. Pera from London via ports. |
| Mexico..... | | | | Feb. 16: Cases, 1,500 to 2,000, with 10 per cent of deaths, mainly along the western coast. Jan. 30-Feb. 16: Present in Aguiarre, Cajame, Corral, Esperanza, Navojca, Puga, and Tarin. |
| Agascalientes..... | Dec. 9-Mar. 16..... | ..... | 19 | |
| Chihuahua..... |do..... | ..... | 18 | |
| Durango..... | Dec. 1-Feb. 28..... | ..... | 117 | |
| Guadalajara..... | Jan. 5-Mar. 15..... | 7 | ..... |  |
| Juarez..... | Mar. 1..... | 1 | ..... |  |
| Mazatlan..... | Jan. 1-7..... | 2 | ..... |  |
| Mexico..... | Nov. 17-Feb. 15..... | 75 | 22 | |
| Salina Cruz..... | Nov. 17-Mar. 1..... | 7 | 2 | |
| San Luis Potosi..... | Sept. 15-Dec. 21..... | 4 | ..... |  |
| Sonora— | | | | |
| Agua Zarca..... | Jan. 30..... | 2 | ..... |  |
| Nogales..... |do..... | 1 | ..... |  |
| Veracruz..... | Jan. 26-Mar. 8..... | 11 | 1 | 1 case imported from Pasco del Macho. |
| Netherlands: Rotterdam..... | Dec. 22-28..... | ..... | 1 | |
| Newfoundland: St. John's..... | Feb. 23-Mar. 1..... | 1 | ..... |  |
| Peru: | | | | |
| Callao..... | Sept. 1-14..... | ..... | ..... | Present. |
| Lima..... |do..... | ..... | ..... | Do. |
| Mollendo..... | Nov. 24-Dec. 7..... | 5 | 1 | |
| Salaverry..... | Dec. 4-11..... | 1 | ..... |  |

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

Reports Received from Dec. 27, 1912, to Apr. 4, 1913—Continued.

SMALLPOX—Continued.

| Places. | Date. | Cases. | Deaths. | Remarks. |
|---------------------------------------|----------------------|--------|---------|--|
| Philippine Islands: Manila..... | Dec. 21..... | ..... | ..... | 1 case removed from s. a. Manban to the San Lazaro Hospital. Third quarter, 1912: Cases, 9; deaths, 0. |
| Portugal: Lisbon..... | Dec. 1-Feb. 22..... | 44 | ..... | Total, Oct. 1-31: Cases, 6. |
| Roumania..... | ..... | ..... | ..... |  |
| Russia: | | | | |
| Batoum..... | Dec. 1-31..... | 1 | ..... |  |
| Libau..... | Dec. 16-Jan. 4..... | 2 | ..... |  |
| Moscow..... | Dec. 8-Feb. 8..... | 8 | 2 | |
| Odessa..... | Nov. 17-Jan. 18..... | 8 | 3 | |
| St. Petersburg..... | Nov. 24-Feb. 15..... | 109 | 13 | |
| Warsaw..... | Sept. 22-Dec. 7..... | 25 | 4 | |
| Riga..... | Dec. 1-31..... | 1 | ..... |  |
| Siberia— | | | | |
| Omsk..... | Jan. 1-27..... | 7 | ..... |  |
| Vladivostok..... | Dec. 15-28..... | 4 | 1 | |
| Do..... | Jan. 1-13..... | 4 | ..... |  |
| Servia: Belgrade..... | Dec. 22-28..... | 2 | ..... |  |
| Siam: Bangkok..... | Nov. 10-Jan. 4..... | ..... | 5 | |
| Spain: | | | | |
| Almeria..... | Dec. 1-Jan. 31..... | ..... | 54 | |
| Barcelona..... | Dec. 1-Mar. 8..... | ..... | 134 | |
| Cadiz..... | Nov. 1-Dec. 31..... | ..... | 7 | |
| Madrid..... | do..... | ..... | 34 | |
| Do..... | Jan. 1-Feb. 23..... | ..... | 42 | |
| Malaga..... | Dec. 1-31..... | ..... | 1 | |
| Seville..... | Dec. 31-Jan. 31..... | ..... | 43 | |
| Valencia..... | Nov. 14-Mar. 1..... | 73 | 2 | |
| Straits Settlements: Singapore..... | Nov. 24-Feb. 8..... | 7 | 4 | |
| Sweden: Stockholm..... | Oct. 8-21..... | 3 | ..... |  |
| Switzerland: | | | | |
| Cantons— | | | | |
| Aargau..... | Dec. 15-Jan. 18..... | 2 | ..... |  |
| Basel..... | Nov. 14-Mar. 1..... | 27 | ..... |  |
| Grisons..... | Dec. 1-Feb. 1..... | 15 | ..... |  |
| Turkey in Asia: Beirut..... | Dec. 8-Mar. 1..... | 69 | 11 | |
| Turkey in Europe: Constantinople..... | Dec. 1-Mar. 8..... | ..... | 130 | |
| Uruguay: Montevideo..... | Feb. 18..... | ..... | ..... | Present. |
| West Indies: | | | | |
| Barbados..... | Mar. 8..... | 1 | ..... | From Granada. |
| Grenada..... | do..... | 3 | ..... | In vicinity of St. Georges. |
| Zanzibar..... | Nov. 8-Feb. 7..... | 22 | 3 | |

SANITARY LEGISLATION.

STATE LAWS AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

KENTUCKY.

Tuberculosis—Board of Commissioners—Creation and Duties of. (Laws of 1912, Chap. 111, Approved Mar. 18.)

SECTION 1. That there is hereby created a commission to be known as the Kentucky Board of Tuberculosis Commissioners. Said commission shall consist of seven persons, men and women, and the governor of this Commonwealth, who shall be ex-officio member thereof. Said commissioners shall be appointed by the governor of the Commonwealth, and two of said commissioners shall be regular registered physicians. The first commissioners appointed under this act shall hold their office for the following terms, viz: Two for a period of one year, two for a period of two years, and three for a period of three years, and, in making such appointments, the governor shall designate the term of each appointee. All subsequent appointments shall be made by the governor for a term of four years and until their successors are appointed and qualified. Any vacancies occurring in said commission shall be filled for the unexpired term by the governor. Said commissioners, or any of them, may be removed by the governor at any time for cause.

SEC. 2. For the purposes of this act, the board of commissioners and their successors in office shall be a body corporate with all the powers necessary to carry into effect the purposes of this act. Said commissioners, as soon as possible after their appointment and qualification, shall adopt a seal and organize by electing a president and a secretary and treasurer to serve for one year and until their successors are elected and qualified, but the same person may be elected to serve both as secretary and treasurer and need not be a member of the commission, and said secretary and treasurer shall execute a bond to the people of the State of Kentucky for the faithful performance of his or their trusts and for the proper handling and accounting for all of the properties, assets and moneys of the commission that may come into his or their hands at any time in such amount and in such form and with such sureties as the commission shall approve. Said secretary and treasurer may at any time be removed and a successor be appointed by said commission in its discretion. A majority of said commission shall constitute a quorum. Said commission shall, as soon as practicable after its appointment and qualification, select a permanent place for its meetings, and shall in such place have a permanent office, which office shall be kept open for the transaction of its business at all times in the same manner as other public offices are required to be kept open in this Commonwealth, and it shall be the duty of the commission by and through its secretary to preserve all books, papers, reports and writings concerning the acts and doings of said commission in said office and same shall be public records and open to the inspection of the public as other public records are required to be preserved and exhibited in this Commonwealth. Said commission, in addition to the officers heretofore mentioned, may, in their discretion, appoint such other officers and employees as they may deem necessary to carry out the purposes of said commis-

sion, and shall fix the compensation of all employees at such amounts as they may deem necessary, but in no event to exceed the annual appropriation hereafter made for the purposes of said commission.

The secretary in the absence of the commission shall have general charge of the office of said commission and be responsible to the commission for its proper conduct, and the commission may arrange in the absence or disability of the secretary for any other employee that it may deem proper to take charge and conduct such office.

The members of said commission shall receive no compensation for their services, but they shall be reimbursed out of the annual appropriation for the use of said commission for their actual expenses necessarily incurred in the performance of their duties upon vouchers duly approved by the commission, signed by the secretary and countersigned by the president thereof.

Said commission shall have full power to establish such by-laws as it may deem necessary and expedient from time to time for its own conduct, and also defining and fixing the duties of all officers and employees or assistants of said commission.

SEC. 3. The powers and duties of the commission shall be coextensive with the State. The objects of said commission shall be as follows:

1. The study of tuberculosis in all its forms and relations. To secure and disseminate information with reference to tuberculosis, to promote and carry on a campaign of education with reference thereto, and in general to pursue any other activities with reference to informing the public as to the nature of tuberculosis, its dangers, and the means whereby its spread may be prevented.

2. Investigation of the prevalence of tuberculosis in the State of Kentucky and the collecting and publishing of useful information.

3. Securing of proper legislation for the relief and prevention of tuberculosis.

4. Cooperation with the public authorities, State and local boards of health, the National Association for the Study and Prevention of Tuberculosis, medical societies, and other organizations in approved measures adopted for the prevention of the disease.

5. To encourage the establishment throughout the State of Kentucky of local associations for the purpose of undertaking in their particular localities the work proposed to be carried on by this commission.

6. Encouragement of adequate provision for consumptives by the establishment of sanatoria, hospitals, and dispensaries.

And they shall have full power and authority to carry out and execute all of the foregoing purposes, and, in addition thereto, it shall be the duty of the commission to recommend to the proper authorities suitable persons for appointment by it as members of the boards of trustees of any sanatoria that may be established under the provisions of this act, and it shall further be their duty to visit, at such periods as in their discretion may be sufficient, any sanatoria that may be established under the provisions of this act, and to recommend to the boards of trustees of such sanatoria any changes in management or in the employees that they may deem necessary and proper, and it shall be their duty, if in the opinion of such commission any board of trustees or members of such board or employees under such board of any sanatoria, State or county, in this Commonwealth are incompetent or neglectful of duty, to prefer charges against such board or such member of such board or such employee under such board. All charges against a board of trustees or a member thereof shall be made to the officer authorized to make such appointment, and, if he deem such charges adequate and sustained, it shall be his duty to remove such board or such member thereof, and all charges against employees shall be made to the board by whom employed, and, if in the opinion of said board such charges are adequate and sustained, such board shall at once remove such employee or employees.

Said commission is further empowered to visit all private incorporated sanatoria and all other sanatoria coming within the provisions of this act, and to ascertain and

keep a record of the condition and efficiency of such sanatorium. It shall be the duty of the commission to visit all sanatoria, both public and private, incorporated, at least once during each calendar year and to report and file with their records a statement of the condition and efficiency of each sanatorium.

SEC. 4. The sum of \$15,000 annually is hereby appropriated for the payment of the expenses in carrying out the purposes of said commission, said appropriation of \$15,000 to be available on the passage of this act, and the auditor of public accounts is hereby directed to draw his warrant upon the treasurer of the State in favor of the treasurer of said commission for said appropriation of \$15,000 annually upon the 1st day of July in each year upon the order of said commission evidenced by a voucher duly approved and signed by the secretary of said commission and countersigned by the president thereof. All vouchers shall be issued in duplicate, a copy of which shall be filed quarterly with the auditor of public accounts.

SEC. 5. All printing which shall be required by the commission aforesaid shall be done by the public printer upon the same terms and in the same manner as other public printing is required to be done.

SEC. 6. That sanatoria for the treatment of tuberculosis may be erected and maintained in and by districts in this Commonwealth in the following manner: A district for the erection and maintenance of a tuberculosis sanatorium may consist of one county or of more than one county, said counties being contiguous to each other. The fiscal court of any county may by resolution declare that such county shall be a district for the erection and maintenance of a sanatorium for the treatment of tuberculosis, and said fiscal court upon such resolution being passed shall out of the funds of the county appropriate a sufficient amount for the erection of such sanatorium, or, if there are not sufficient funds on hand for such appropriation at the time said resolution is adopted, at the next succeeding county levy said court may make such levy as will be sufficient to produce the necessary amount, and shall further make a levy for the maintenance of such sanatorium, and shall annually thereafter make a levy of sufficient amount of tax to pay the annual expenses of maintenance of said institution. The fiscal courts of two or more contiguous counties may by resolution duly passed by each court unite said counties into a district for the purpose of establishing therein a sanatorium for the treatment of tuberculosis said [and] at the time of passing said resolution, each court shall provide an appropriation for the proportion of the cost of erection of such sanatorium to be paid by such county, or, if the funds are not on hand for that purpose, shall at the next regular meeting of the fiscal court at which a county levy is made levy a tax for that purpose, and also levy a tax for the payment of the proportionate part of the annual maintenance of said sanatorium to be paid by such county and shall thereafter make an annual levy of tax sufficient in amount to pay the proportion of the costs of said county for the succeeding year.

Where two or more counties unite to form such district, the first cost of the sanatorium and the cost of all betterments and additions thereto shall be paid by the counties comprising the district in proportion to the taxable property of each county as shown by their respective county assessments. The annual expense of maintaining such institution and the care and treatment of the patients therein shall be borne by each county reasonably and equitably in such amounts as shall be ascertained under rules and regulations to be passed and approved by the Kentucky Board of Tuberculosis Commissioners aforesaid, which rules and regulations shall be such that the expense shall be borne reasonably and equitably by each of the counties in their proper proportion.

SEC. 7. If the fiscal court of any county or counties shall fail or refuse to establish a tuberculosis sanatorium district, as herein authorized, the citizens of any county or of two or more contiguous counties may have such county or such contiguous counties established as a tuberculosis sanatorium district in accordance with the

provisions of this act, in the following manner: Twenty or more legal voters of such county may file their petition with the county judge of such county that the proposition of establishing such county as a district for the erection of a sanatorium for the treatment of tuberculosis be submitted to the voters of said county at the next general election which shall be held in said county, provided that such general election does not occur within less than 30 days after the filing of said petition. Each voter signing said petition shall state his full name and address. Upon the filing of said petition with the county judge he shall enter an order directing the publication in full of such petition in the newspaper having the largest circulation in said county at least once a week for four consecutive weeks next preceding such general election, and shall further enter an order directing the clerk of the county court to have placed upon the ballot at such election and [the] question, "Are you in favor of establishing a tuberculosis sanatorium district?" with underneath the words "Yes," followed by a square, and "No," followed by a square, for the placing of the stencil of the voter. If the majority of those voting on the proposition to establish such sanatorium district vote "Yes," then said district shall be established. If the contrary, then it shall not. The vote on such question shall be canvassed and returned by the board of election commissioners for such general election, and such election may be contested, as provided by law for other contested elections, by a petition filed in the circuit court of such county by one or more qualified voters of said county who voted "Yes" or "No," as the contest may be had, and to which the members of the fiscal court of the county shall be made defendants, together with such other qualified voters as may have voted contrary to the contestants and desire to be made parties to the contest.

Where the citizens of two or more contiguous counties desire to have such counties established into a district for the erection of such sanatorium, not less than 20 qualified legal voters of each county shall file a petition in the county of their residence asking that such district be established and naming the several counties to be united in the district. Such petitions shall be filed in each county of the proposed district and the method of proceeding in each shall be the same as hereinabove provided for one county, except that the same proceeding shall be taken in each county for the general election to be held at the same time in each county. If any one county in the proposed district shall fail to vote "Yes" on the proposition, then said district can not be established unless by a contest of the election in such county it should be finally determined that such county had voted "Yes." At the time of filing the petition or petitions, as the case may be, the petitioners shall deposit with the county judge a sufficient sum of money to pay the cost of advertising hereinabove required.

SEC. 8. The result of any county or district election shall be certified to the fiscal court of such county or to the fiscal court of each of the counties composing said district to be established, and said fiscal court or courts shall, if the result of said election be certified to it or them as in favor of the establishment of such district, forthwith proceed to declare such county or counties a district for the establishment of a sanatorium for the treatment of tuberculosis, and shall proceed to put same into effect in the same manner as fiscal court or courts are authorized to do upon their own initiative as hereinabove provided, and the cost and expenses of erection and maintenance shall follow in all manners the same as hereinabove provided.

SEC. 9. Upon the creation of a tuberculosis district the fiscal court of the county or the fiscal courts of the several counties, where there are several counties in such district, shall at once notify the Kentucky Board of Tuberculosis Commissioners of the establishment of such district, and thereupon it shall be the duty of the Kentucky Board of Tuberculosis Commissioners to recommend to the county judge or, if more than one county, to the county judge of each county the appointment of suitable persons for such district board of trustees. The district board of trustees where the district shall consist of but one county shall consist of 7 persons, men and women,

at least 1 of whom shall be a registered physician, and for the purpose of such appointment the board of trustees shall recommend not less than 14 names of persons, men and women, duly qualified citizens of such county, for appointment.

Where the district consists of several counties the district board of trustees shall consist of not less than two nor more than four persons from each county: *Provided, however,* That no board shall consist of less than seven persons. Where any county in such district shall have a population in excess of 20,000, such county shall be allowed a trustee for each 10,000 in excess of 20,000 of population, subject, however, to the limitation hereinbefore set down. Said trustees shall consist of men and women and at least one shall be a registered practicing physician. The commission in recommending names to the county judge or county judges for such appointment shall recommend twice as many names for each county as the county shall be entitled to have trustees appointed, out of which names the county judge of each county shall make his selection for that county.

SEC. 10. The Kentucky Board of Tuberculosis Commissioners upon the establishment of such district shall select a site for said sanatorium in such part of the district as in their judgment shall be best adapted to the wants of the institution and most economical to the district, having regard in the selection to water supply, drainage, facility of access, with a quality of soil suitable for farming purposes, and price asked for the land, and all plans and specifications for the erection of such building shall be submitted to the commission for its approval, and, if approved by it, such district shall be authorized to proceed at once with the erection of same. If not approved by the commission, then the commission shall make such recommendations as to it may seem best, and if such recommendations are accepted by the fiscal court or courts of the district, then they shall proceed with the erection of a sanatorium in accordance with the recommendations of the commission.

SEC. 11. The government of such district sanatorium shall be vested in the board of trustees heretofore provided for, and the terms of office of said persons first appointed by the county judge or county judges, as provided for, shall be as follows: One-third of said number for a term of two years, one-third for a term of three years, and one-third for a term of four years, and where the board shall consist of seven or such number as can not be divided by three, the number in excess of one-third of the next even number into which said board can be divided shall be appointed for a term of four years. Thus, where there are seven trustees, two for two years, two for three years, and three for four years. Thereafter, as their terms expire, their successors shall be recommended and appointed in the same manner, but for a term of four years each. Such trustee shall hold office until his or her successor is appointed and qualified. Any vacancy occurring in said board shall be filled for the unexpired term by the county judge of such county by appointment on recommendation of the Kentucky Board of Tuberculosis Commissioners of two names from the county in which such vacancy occurs.

SEC. 12. For the purpose of this act, such district board of trustees and their successors in office shall be a body corporate, under the name and style of District Board of Tuberculosis Sanatorium Trustees for ——— County (or counties) as the case may be, and they shall have all the powers necessary to carry into effect the purpose of this act. Said trustees, as soon as possible after their appointment and qualification, shall adopt a seal, organize by electing a president and a secretary and treasurer to serve for two years and until their successors are elected and qualified, but the same person may be elected to serve both as secretary and treasurer and need not be a member of the board of trustees, and said secretary and treasurer shall give bond to the people of the State of Kentucky for the faithful performance of his or their duties and for the proper handling of all of the properties, assets, and moneys of the institution that may come into his or their hands at any time in such sum and in such form and with such sureties as said district board of trustees shall approve. Said secre-

tary and treasurer may at any time be removed and a successor appointed by said district board of trustees in its discretion. A majority of said district board of trustees shall constitute a quorum.

SEC. 13. The fiscal court or courts of the county or counties composing such district shall from time to time as the tax levied for the purposes of said sanatorium are collected, appropriate same to the use of such sanatorium and shall direct the county treasurer to pay the amount of such appropriation to the secretary of said sanatorium and to take the receipt of said secretary, countersigned by the president of said sanatorium, as his voucher therefor.

SEC. 14. Said board of trustees, as heretofore created, shall have the general control of the property and affairs of the sanatorium, and shall take such action as shall be necessary to carry out the purposes of this act.

SEC. 15. The members of the board of trustees shall receive no compensation for their services, but they shall be reimbursed for their actual expenses necessarily incurred in the performance of their duties, upon vouchers duly approved by the board of trustees, signed by the secretary and countersigned by the president thereof.

SEC. 16. There shall be a thorough visitation of said sanatorium by two of the trustees thereof monthly, and by the whole board annually. On each of these occasions a written report of the state of the institution shall be submitted to them by the superintendent of the sanatorium. On the first Friday in June of each year there shall be held the regular annual meeting of the board of trustees, at which the superintendent of the sanatorium and the secretary and treasurer thereof shall each submit a report of the affairs of the sanatorium in such form as may be prescribed by the Kentucky Board of Tuberculosis Commissioners, and the secretary and treasurer shall also submit a statement of his accounts and the reports of the superintendent and secretary and treasurer, and the latter's statements of accounts shall be transmitted in duplicate by the board, with their annual report, to the Kentucky Board of Tuberculosis Commissioners, and by said commission with its recommendation thereon to the governor for approval, and the financial part and such other parts of said report as are indicated by the commission for publication by the State auditor.

SEC. 17. The district board of trustees shall appoint a medical superintendent of the sanatorium for tuberculosis not a member of said board, who shall be a legally qualified physician. He shall be a graduate in medicine and surgery from some medical college recognized as in good standing by the State board of health, and of acknowledged skill in his profession, and must have had special training and experience in a hospital or sanatorium for tuberculosis, and such medical superintendent shall, in all matters pertaining to the sanatorium, be under the general supervision of the board of trustees, who may remove him at any time for cause upon written charges preferred and after he has been given an opportunity to be heard in his own behalf, and appoint his successor.

SEC. 18. The district board of trustees shall have power to establish such by-laws as it may deem necessary and expedient from time to time for defining the duties of officers, assistants, or employees, for fixing the conditions of admission to the institution, support and discharge of patients, and for conducting in a proper manner the professional and business affairs of the sanatorium, and also to ordain and enforce a suitable system of rules and regulations for the internal government, discipline, and management of the sanatorium.

SEC. 19. No person shall be received into said sanatorium as a patient unless said person shall have been a resident of Kentucky and of said district for at least 12 months next preceding such person's application for admission into said sanatorium, and no person entitled to be admitted as above shall be received as a free patient in said sanatorium, unless said person shall file with his or her application for admission into said sanatorium a certificate of the county judge of the county of which such person is a resident, stating that from evidence submitted to said county judge he is

of the opinion that such applicant is unable to pay for maintenance in said sanatorium. The board of trustees of said sanatorium shall have power to provide by rule the character of examination to which any applicant for admission into said sanatorium shall submit before being received into said sanatorium for the purpose of ascertaining whether or not such applicant is suffering from tuberculosis. No greater number of persons shall be admitted to said institution than can be properly taken care of and treated. As nearly as may be done, each county of the district shall have the right to have admitted its proper and proportionate number of free patients, who are unable to pay their maintenance in said sanatorium. The expenses of conveying indigent patients to the sanatorium shall be paid by the county of which said patient is a resident.

SEC. 20. Where patients who have been, or may be, maintained in said sanatorium, have or shall acquire estate which can be subjected to debt, the county attorney of such county of said patient's residence is authorized and directed in every such case, to sue them in the name of said sanatorium, and recover the amount of such patient's maintenance, or so much thereof as such estate will suffice to pay for the time such patients shall have been kept and maintained therein, and not otherwise paid for, and by proper proceedings subject their estates, respectively, for the payment thereof; and when the husband, wife, or parent of any such patient, who has been or may be supported in said sanatorium, shall have estate sufficient for the support of such patient, in addition to the support of any other persons, who may be dependent on such husband or parent, in like manner to sue and recover from such husband the amount of his wife's maintenance, from such wife the amount of her husband's maintenance, from such parent the amount of his or her child's maintenance, at the rate aforesaid for the time that they shall have been respectively maintained by said sanatorium, and the statute of limitations providing the time in which actions for such recovery may be instituted shall not run against recovery herein provided for until from and after time at which said estate is acquired. Such suit shall create a *lis pendens* lien, and if judgment is obtained, such judgment shall constitute a lien upon so much of the patient's estate as is described in the petition, and said county attorney shall be allowed a fee of 15 per cent of the amount collected for his services.

SEC. 21. If at any time the accommodations of the sanatorium will permit the treatment and cure of patients in excess of the indigent patients sent by the various counties, as hereinbefore provided, persons suffering from tuberculosis who are able to pay for their care and maintenance, or who have persons or kindred bound by law to maintain them, may be admitted to the sanatorium, and the charges for the support and care of such patients shall be paid to the corporation through the medical superintendent for such patients, persons, or kindred, at a rate to be determined by the board of trustees of said sanatorium. Before such persons shall be admitted to the said sanatorium, for the purpose of determining whether or not they are afflicted with tuberculosis, they shall submit to such an examination as the board of trustees may by rule determine.

SEC. 22. The medical superintendent shall be the chief executive officer of the sanatorium. He shall have the general superintendence of the buildings, grounds, furniture, fixtures, stock, and the direction and control of all persons therein, subject to the by-laws and regulations prescribed by the district board of trustees. He or his representative shall daily ascertain the condition of each and all the patients, and prescribe or direct their treatment. He shall cause full and fair records of all his official acts and the entire business and operation of the sanatorium to be kept regularly from day to day, in the manner and to the extent prescribed by the by-laws; and he shall see that all the accounts and records are fully made up to the last day, and present the same to the board of trustees at their annual meeting. It shall be the duty of the medical superintendent to admit any member of the board of trustees, or any member

of the board of the State commissioners at any time into every part of the sanatorium, and to exhibit to him or them on demand, all the books, papers, accounts, and writings belonging to the sanatorium, or pertaining to its business management, discipline, or government. He shall make at the time of reception of patients a record of the date of same, name, age, residence, occupation, and such other statistics in regard to every patient admitted to the sanatorium as the by-laws may require. The medical superintendent shall have power to appoint, with the advice and consent of the board of trustees, whenever in their discretion it seems necessary, an assistant physician or physicians, each of whom shall be a legally qualified physician, a graduate in medicine and surgery from some medical college recognized as in good standing by the State board of health and of acknowledged skill in the medical profession. The medical superintendent shall also have power to remove such assistant physician or physicians, with the consent of the board of trustees. The medical superintendent shall have the power and authority to employ any servant or employees at the sanatorium, all of whom shall be under his direct supervision, and any of whom may be removed by him at will. All moneys collected by the medical superintendent shall be immediately paid over by him to the treasurer of the sanatorium, and his receipt be taken therefor. No fees or moneys of any kind shall be collected by the medical superintendent or any employee of said sanatorium from any patient for services rendered such person in said sanatorium.

SEC. 23. No member of the board of trustees of said sanatorium, and no employee thereof, shall be interested directly or indirectly in any contract, or receive any benefit directly or indirectly, from any contract made with said sanatorium.

SEC. 24. The secretary or treasurer, as provided in the by-laws, shall have the custody of all moneys, bonds, notes, mortgages, and other securities and obligations belonging to said sanatorium, and moneys shall be disbursed only for the uses and purposes of the sanatorium and in the manner prescribed by the by-laws or itemized vouchers allowed by the board of trustees, and signed by the secretary and countersigned by the president. He shall keep full and accurate accounts of all receipts and payments in the manner directed in the by-laws and such other accounts as the board of trustees shall prescribe. He shall render statements of accounts of the several books, and of the funds and other property in his custody whenever required so to do by the board of trustees. He shall have all accounts and records fully made up to the last day preceding the annual meeting and present the same to the board of trustees at their annual meeting.

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

DES MOINES, IOWA.

Privies and Cesspools—Construction, Maintenance, and Cleaning of. (Ordinance No. 2050, Adopted Nov. 13, 1912.)

SECTION 1. No person shall construct, permit or maintain upon his premises a cesspool or privy vault where both the city sewer and water systems are accessible and contiguous thereto after September 1, 1913.

SEC. 2. Where a cesspool or privy vault is permitted by law, in no case shall it be allowed within 50 feet of any well or other source of water used for drinking or culinary purposes.

SEC. 3. No privy vault constructed shall be more than 5 feet in depth, 3 feet in width, and 4 feet in length. Privy vaults shall be paved on the bottom and walled up with brick or stone laid in cement, so as to be made water-tight. Application shall be made to the health department for permit to erect privy vault or establish cesspool, and upon approval of location and plans for same, as required by this ordinance, permit shall be issued.

SEC. 4. The contents of any privy vault or cesspool shall not be permitted to accumulate within 1 foot of the surface of the ground at the top of the vault.

SEC. 5. No cesspool in which night soil is deposited or privy vault shall be erected within 20 feet of any building used or occupied for residence purposes, neither shall such vault or cesspool be dug within 10 feet of any street, or within 5 feet of any alley, and such privy vaults or cesspools shall have 9-inch walls constructed of hard-burned brick, stone, or concrete laid in cement mortar, with sides and bottom cemented so as to be water-tight, and no such cesspool shall be more than 5 feet in diameter and 7 feet in depth.

SEC. 6. All privy vaults and cesspools shall be kept clean at all times. The door of the privy building shall not be allowed to remain open at any time unless there is a self-closing fly door in addition to that required under the above rules. No wash water, garbage, kitchen slops, or liquid wastes of any kind shall be emptied into any privy vault, and no night soil from any person suffering from typhoid fever or other serious bowel trouble shall be deposited in any privy vault or cesspool without being previously disinfected in such manner as may be approved by the attending physician or the health department. These rules and regulations apply only to property where sewer and water systems are not available.

SEC. 7. Where sewer and water systems are available, water-closets must be installed, privy buildings removed, and the excavations thoroughly cleaned and filled with clean earth or ashes on or before September 1, 1913.

SEC. 8. Whenever any owner, agent, or occupant of any property is notified by an agent of the health department that any cesspool or privy vault is in need of cleaning or repair, he shall proceed to comply with said notice within the time fixed in said notice. Notice shall be in writing, and give location of property and all other particulars necessary for the proper execution of the work and the abatement of the conditions existing.

If the owner, agent, or occupant neglects or refuses to comply with the notice of the department, the department may cause the vault or cesspool to be removed, altered, or repaired, as it may deem expedient, at the expense of said owner, agent, or occupant,

but nothing herein contained shall preclude prosecution for violation of any provisions of this ordinance.

SEC. 9. Whenever the use of any privy vault or cesspool is discontinued, such privy vault or cesspool shall be cleaned and filled up with clean earth or other suitable material to be designated by the health department.

SEC. 10. Any person violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined not less than \$5 nor more than \$100, and in default of payment shall be committed to the city jail not less than 1 day nor more than 30 days, and each day's failure to comply with this ordinance shall constitute a separate offense.

SEC. 11. All ordinances or parts of ordinances in conflict herewith are hereby repealed.

Stables and Disposal of Manure. (Ordinance No. 2051, Nov. 13, 1912.)

SECTION 1. It shall be the duty of the owner or occupant or tenant or keeper of any boarding, sales, livery, or other stables, where any horse, mule, cow, or other animal is kept, to remove or cause to be removed all manure from said stables or premises at least twice weekly from March 15 to December 1, or oftener as deemed necessary, and once a week from the 1st of December to the 15th day of March, and said owner, or occupant, or tenant, or keeper shall be required to store in fly-proof receptacles, not accessible to flies, all such manure pending its removal.

SEC. 2. From June 1 to October 1, manure shall not be used as a fertilizer on gardens, lots, or other open areas, unless and until thoroughly mixed with soil and so covered with soil that flies will not be attracted thereto.

SEC. 3. No manure shall be dumped and left on the street, sidewalk, alley, or open area, or lot in any inhabited section nor be used to grade, in whole or in part, any sidewalk, street, alley, open area, or lot in said section. And any site used as a public dump for manure shall not be within 100 feet of any building used in whole or in part for dwelling purposes.

SEC. 4. Manure shall be conveyed through the streets in the city of Des Moines in such vehicles only as are properly protected against flies by suitable covering.

SEC. 5. All manure stacked or piled for fertilizing purposes on any truck farm or garden in thickly settled neighborhoods shall be so stacked or piled at a distance of not less than 50 feet from any buildings used, in whole or in part, for dwelling purposes, and shall be stored in a closed bin or screened receptacle, so as to prevent access of flies thereto.

SEC. 6. Whenever the duty is put upon the owner of any premises or stable or lot or open area or public place in this ordinance in the owner's absence it shall be the duty of the agent of said owner to comply with the provisions of this ordinance; and for the purposes thereof any person receiving or collecting rent or attending to said property in any manner shall be deemed to be the agent of the owner.

SEC. 7. It shall be the duty of every person owning, controlling, operating, or having in charge, any stable, barn, or other place where horses, mules, cows, or other live stock is kept, to have and maintain at all times upon the premises a fly-tight receptacle of sufficient dimensions and for the purpose of containing the droppings of manure from said stock, and the same shall have a top or lid so arranged as to be fly-tight and to exclude therefrom all flies and therein to promptly deposit all droppings from said stock and to keep the lid thereon (except when necessarily open for the purpose of depositing therein or removing therefrom) closed in such manner as to prevent the ingress of flies thereto. And every person having or keeping such manure in the city shall cause the same to be removed from the premises at least once a week or oftener if required by the health department.

SEC. 8. All receptacles for manure from any animal mentioned in this ordinance, and the receptacles for filth, offal, débris, or refuse of any kind, now or hereafter located in any street, alley, or public place shall be removed therefrom on or before March 1, 1913, by the owner, agent, or occupant of the premises adjoining the place where said receptacle is located.

SEC. 9. No barn or stable of any kind used for the shelter of any animal contemplated by section 1 of this ordinance shall be used or maintained within 25 feet of any building used wholly or in part by any person for sleeping quarters, or where food is prepared, served, or sold.

SEC. 10. That any person who shall violate any of the provisions of this ordinance shall be subject to a fine of not less than \$1 nor more than \$25 or imprisonment in the city jail for a term of not less than 1 day nor more than 30 days or both.

SEC. 11. All ordinances or parts of ordinances in conflict herewith are hereby repealed.

Dead Animals—Disposal of. (Ordinance No. 2052, Nov. 13, 1912.)

SECTION 1. It shall be unlawful for any person to place any dead animal in any street, alley, or other public place in the city, or to allow any dead animal, which he owned or of which he had control, to remain in any street, alley, or other public place or on the premises of any person within the city for more than five hours; and should any animal die in any street, alley, or other public place or on the premises of any person within the city, then the person who owned or had possession and control of said animal prior to death, shall remove or cause to be removed the carcass within five hours from the time said animal dies, and have the same desiccated or cremated.

SEC. 2. It shall be the duty of the owner, possessor, and all persons having knowledge of any dead animal in the city to report the same to the health department, giving the name of the person who owned or had possession or control of said animal prior to its death and the place where the same may be found, and it shall be the duty of said health department to forthwith notify the person who owned or had possession and control of said animal to cause the same to be removed and desiccated or cremated as provided by this ordinance.

SEC. 3. The words, "dead animals," as used in this ordinance shall be held to include all dead animals, skinned or unskinned, undressed, unslaughtered hogs, cattle, and other animals which have died from disease, accident, or cause other than slaughter for use as food, in accordance with the sanitary laws regulating such act. It shall be unlawful for any person or persons to skin animals dying with tuberculosis, anthrax, blackleg, or other malignant diseases.

SEC. 4. Any person, firm, or corporation engaged in the collecting or removal of dead animals shall not charge for such collection or removal to exceed the following rate:

| | |
|---|---------|
| Horses and cattle, each carcass..... | \$2. 00 |
| Horses and cattle, skinned or burned, each carcass..... | 4. 50 |
| Hogs and calves, each carcass..... | . 50 |
| Dogs, fowls, and cats, each carcass..... | . 15 |

SEC. 5. Any person violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined not less than \$5 nor more than \$100, and in default of payment shall be committed to the city jail not to exceed 30 days, and each day's failure to comply with this ordinance shall constitute a separate offense.

SEC. 6. All ordinances or parts of ordinances in conflict herewith are hereby repealed.

Garbage—Disposal of. (Ordinance No. 2053, Nov. 13, 1912.)

SECTION 1. It shall be unlawful for any person, firm, association, or corporation to deposit garbage or offal or other filthy or offensive substances upon their own premises or the premises of any other person or in any street, alley, or public place unless deposited in a water-tight receptacle upon the premises of the owner; which receptacle shall be provided with close-fitting covers which shall not be removed except when absolutely necessary. Said receptacles shall be kept or placed in the rear of the house, and shall be of a capacity of not to exceed 2 bushels. Every owner or tenant of a dwelling house shall keep the premises clean, and shall each day collect and place all garbage and offal that has accumulated upon the premises into receptacles, provided for that purpose, and in no case shall garbage or offal be permitted to remain upon any premises more than one week.

SEC. 2. Any person, firm, or corporation collecting garbage or offal shall not charge to exceed the following rates:

| | |
|--|--------|
| Garbage or offal per month per family, including the use of receptacle in which to deposit same..... | \$1.00 |
| Garbage and offal per month per family, where family furnishes their own receptacle..... | .90 |

SEC. 3. Garbage shall include ordinary kitchen refuse of all kinds, except dirt, ashes, and liquid wastes.

SEC. 4. Any person, firm, or corporation engaging in the transportation of garbage, offal, ashes, manure, or any other filthy or offensive substances for hire, or feeding purposes, shall first procure a written permit from the health department so to do. Failure to comply with any of the provisions of this ordinance or any written regulations or orders of the health department shall be deemed sufficient cause for the revocation of said permits. All applicants for permits for the transportation of the aforesaid material shall provide wagons with bodies sufficiently tight to prevent the contents escaping therefrom, and when unloaded each of the said wagons shall be thoroughly disinfected to the satisfaction of the health department. Said wagons shall be loaded and conveyed so that none of the material shall fall to the ground, run out, or spill therefrom. Upon both sides of the wagon box shall be placed metal signs with lettering at least 4 inches in height, and such signs shall bear the words, "Garbage permit" and the number of the said permit. All permits for the transportation of the aforesaid material shall expire April 1 of each year.

SEC. 5. Any person, firm, or corporation violating any of the provisions of this ordinance shall upon conviction thereof be fined not less than \$10 or more than \$100, and in default of payment shall be committed not less than 1 day nor more than 30 days in the city jail.

SEC. 6. All ordinances or parts of ordinances in conflict herewith are hereby repealed.

SEC. 7. This ordinance shall be in full force and effect from and after its passage and publication as required by law.

Foodstuffs—Production, Care, and Sale. (Ordinance No. 2054, Nov. 13, 1912.)

SECTION 1. It shall be the duty of the health officer or his assistants to visit at frequent intervals each public and private market, stall, shop, store, warehouse, cannery, factory, restaurant, and storehouse in the city of Des Moines and to inspect each and all wagons, carts, and vehicles of venders or street hawkers in or about which meat, dairy products, vegetables, fruit, bread, or other provisions are kept, made, held, or carried for sale, or other disposition of foods intended for human consumption, and to examine and carefully inspect all such foodstuffs and provisions.

SEC. 2. Every person keeping, maintaining, or being in charge of any public or private market, stall, shop, store, bakery, ice cream or candy factory, storehouse,

warehouse, cold storage, cart, wagon, or other vehicle in, on, or about which any meat, fish, oysters, birds, fowl, vegetables, fruit, milk, bread, candies, cakes, or other provisions are kept, held, or stored, or offered for sale or other disposition, as food intended for human consumption, shall keep such public or private market or stall, shop, store, wagon, bakery, candy factory, ice-cream factory, storehouse, warehouse, cold storage, cart, or other vehicle in a clean, pure, and wholesome condition, and if any person shall allow or permit the same to become or remain unclean, impure, or unwholesome he shall be guilty of a violation of this ordinance.

SEC. 3. It shall be unlawful to keep meat, game, fish, vegetables, dried fruit, dairy products, cooked meats, figs, dates, dried olives, sauerkraut, mincemeat, lard, butter, butterine, candy, crackers, cookies, cakes, bread, berries of any kind, bananas removed from the main stalk, shelled nuts, or any foodstuffs which may be contaminated either within any store, building, structure, or inclosure whatsoever, or outside thereof, unless the aforementioned articles or the receptacles containing the same are at least 2 feet above the floor, sidewalk, or surface of the ground.

In addition to the foregoing regulation, all of the aforesaid articles, if located within any store, building, structure, or inclosure of any kind shall be properly protected from flies.

When any of the aforesaid articles are displayed in the open air, they shall be properly protected from flies, dust, and any other substance which would tend to contaminate them or any of them.

Every manager, owner, or other person in control of any store, market, or other place where any of the food products heretofore mentioned in this section are prepared for sale, stored for sale or sold, or where food prepared for immediate consumption is prepared for sale, stored for sale or offered for sale, or sold, shall cause the same to be screened in such manner as to prevent flies and other insects from obtaining access to such food, and to prevent handling of the same by patrons or prospective purchasers.

All fruit, vegetables, meats, and other food kept or sold or offered for sale shall be kept in receptacles free from decayed matter of all kinds.

SEC. 4. Every person who shall bring into, hold, keep, offer, or expose for sale, or sell or deliver for sale or consumption within the city of Des Moines any milk or milk product, meat, vegetable, fish, or bread in any wagon, cart, or other vehicle shall provide such wagon, cart, or other vehicle with a suitable clean canvas cover, which shall be used at all times; and such cover shall be kept in a cleanly condition.

SEC. 5. It shall be unlawful to prepare, keep for sale, or sell any kind of meat, milk product, fish, game, vegetable, fruit, bread, cake, candy, or other food in any room in which a toilet is located, or in any room opening directly into a toilet room.

SEC. 6. All dealers in meats, fowls, fish, vegetables, fruits, groceries, or other foods intended for human consumption shall maintain in their respective places of business and in the part of the building occupied by them for business purposes at least one water faucet connected by pipes with a suitable water supply. Sanitary lavatory conveniences must be provided for the use of employees.

SEC. 7. The baking of bread, cakes, pies, the manufacturing of candy, or the cooking of other food is prohibited from being done in a cellar or basement or other room where there is no direct ventilation to the outer air.

It shall be unlawful for any person to sell or offer for sale any bread, cake, pastry, or other baked food products having attached to it a label or stamp which is affixed thereto by any foreign adhesive substance.

SEC. 8. Any person or persons owning or managing or in charge of any canning establishment, or other place where meats, fish, oysters, fowls, fruits, vegetables, or other foods are canned or preserved for human consumption, who shall keep or conduct said places in an unclean, unwholesome, or unsanitary manner, and any person canning, curing, or otherwise preserving any meats, fish, oysters, fowls, fruits, or vegetables for human consumption who shall utilize in this way any diseased or decayed or un-

wholesome fruit or vegetables or any fruit or vegetables from filthy boxes, baskets, or other container, or use any chemicals therein deleterious to health, shall be deemed guilty of violating this ordinance.

SEC. 9. It shall be unlawful for any person in charge of any restaurant, hotel, boarding house, or other place where meals or lunches are served in a cooked state or otherwise to serve or cause to be served any tainted or diseased meats, fish, oysters, fowl, or any diseased, decayed, or partially decayed or unwholesome fruit, vegetables, or any unwholesome food whatever to any person or persons, either at said place or sent to any person or persons to be eaten at any other place.

SEC. 10. It shall be unlawful for any person in charge of any restaurant, hotel, boarding house, or other place where food is sold or served in cooked or raw state to keep such place in an unclean or unsanitary condition, and all persons employed in or about such places shall keep themselves and their clothing in a clean and healthful condition.

SEC. 11. It shall be unlawful for any person or persons to keep live chickens, ducks, geese, turkeys, calves, or pigs, or other live fowl in any cellar or basement underneath any grocery store, market, or other place where foodstuffs are kept for sale. It shall also be unlawful for any person or persons to keep any live chickens, turkeys, ducks, geese, calves, or pigs, or live fowl of any kind in any building where any kind of foodstuffs, such as are enumerated in section 2 and section 3 hereof, are kept, prepared for sale, or sold.

SEC. 12. If the health officer or his assistants shall find any public or private market, stall, shop, bakery, storehouse, cold-storage warehouse, stockyard, slaughter house, boat, cart, wagon, or other vehicle in an unclean or unwholesome condition, notice shall be given to the person in charge thereof to clean and purify the same, so as to put the same in a clean, wholesome, and proper sanitary condition within 24 hours from the time of such notice; and if any person so in charge shall not put the same in a clean, wholesome, and properly sanitary condition within such time, then such person shall be guilty of violating this ordinance and subject to the punishment provided therefor.

SEC. 13. No person shall sell or offer for sale, or have in his possession with intent to sell, in this city any unwholesome, decayed, or stale fruit, vegetables, or provisions of any kind whatever, or any tainted, diseased, corrupt, decayed, or unwholesome meat or fish or any adulterated article of food.

SEC. 14. Any person violating any of the provisions of this ordinance shall be guilty of a misdemeanor and upon conviction thereof shall be punished by a fine of not less than \$10 nor more than \$100, or by imprisonment not less than 1 day and not more than 30 days.

SEC. 15. All ordinances or parts of ordinances in conflict herewith are hereby repealed.

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