# ABSTRAC'T OF SANITARI REPORTS. 

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## UNエTモD STATES. <br> Report of official experiments with the Koch lymph in progress.

Washington, D. C., February 25, 1891.

SIR : I have the honor to submit the following report upon the progress of the experiments with tuberculosis. The case of lupus, mention of which was made in the last Abstract, has been subjected to four injections, the maximum dose attained being .003 gram. It can now be said that the disease is apparently yielding to the remedy. Probably onefifth of the ulcerated surface has cicatrized, and the remainder presents a healthy granulating appearance.

As to the cases of pulmonary and laryngeal tuberculosis under treatment, it can only be said that as yet there is no definite change in their condition for better or worse. Under doses of .006 gram of the lymph. repeated on three occasions, two patients showed no febrile reaction and complained of no discomfort. An increase to .007 gram produced in both of them a "reaction," reaching $38.5^{\circ} \mathrm{C}$., and accompanied by more pain and general malaise than has ever before been produced.

A microscopical examination of the sputum, on February 23 and 24, showed an absence of tubercle bacilli in cases Nos. 1, 3, and 4. In cases Nos. 7,9 , and 11 they were diminished somewhat in number.

In none of the cases is there any important change in the physical signs. In case No. 11 (tubercle of larynx) the huskiness of voice has markedly disappeared, the patient has gained slightly in weight, and cough has somewhat diminished.

I append further tabulated statement as to weight of patients and other matters of detail :


Very respectfully, your obedient servant,

> H. D. GEDDINGS, Assistant Surgeon, M.-H. S.

To the Supervising Surgeon-General.

The following letter has been received, by reference, from Hon. W. H. Crain, M. C., with request for opinion in relation to the remedy suggested :

House of Representatives, Austin, Tex., February 17, 1891.
DEAR SIR: * * $*$ I am constrained to write for various reasons. First, and to the point, our State, or the western part of it, is suffering greatly from the ravages of that direful scourge of the human family, the smallpox, and you will see by a casual glance at the papers of the State, as well as all those of the western portion of all the Southwestern States, that this infliction has been introduced into our country from the sister republic of Mexico. Every case, even to one developed in northwest Illinois, comes by our Mexican citizens or those from Mexico. Now we want protection by our national authorities, and I would most respectfully suggest that a system of quarantine be concocted, in connection with a system of hospitals established along our southwest border, that shall effectually protect us from this curse. I have not digested the matter sufficiently to formulate a plan, yet I believe the wisdom of our nation should be brought to bear upon this matier until we receive all the protection necessary to insure us perfect immunity to our people of all the States. The present prevalence of this disease threatens to become epidemic. If it should, the horrors of the situation can better be imagined than described. Now there are many ways of preventing; one of the most effective would be a national law making vaccination compulsory in connection with the quarantine laws. It is asserted that the presentation of a certificate of vaccination is indispensable in the empire of Prussia to consummate matrimony, and it is a well-established fact that all subjects of the German and Prussian Empires give three or more years of their early lives to compulsory military service of their respective Governments, and the first thing, after passing the medical examination requisite, is the immediate vaccination of the party. Now this is the reason of the entire exemption of those nations from this pest of the human family, and within my recollection no severe visitation of this plague has ever occurred in those countries, and it is derogatory to our standing as a nation that we are behind the world in any or all sanitary measures conducive to the welfare of our entire nation.

Give this matter your earnest thought, and let me hear from you on this subject at as early a date as possible. Now one of my thoughts as to the management of this matter is the establishment of hospitals at. the five principa! points of entry to our domain along the Rio Grande, or our border on the Mexican Republic from whence comes our misery. A hospital at El Paso, at Eagle Pass, at Laredo, at Rio Grande City, at Brownsville, with a patrol or police system between these points, would almost insure immunity with forceful vaccination from this scourge. If the General Government will not take this matter in hand and provide the remedy our State will be obliged to attend to this matter and shoulder a burden that should be carried by the mother Government. I can assure you that the legislature has been well stirred up on this matter, and our whole State well exercised, as you have doubtless seen. * * * * * * * * * * * * * * * * * *

Yours truly,
Hon. Wm. H. Crain, Washington, D. C.

The following reply was sent :
February 25, 1891.
SIR : I have the honor to acknowledge the receipt yesterday by reference from yourself of the letter of Hon. John J. Dix, dated Austin, Tex., February 17, 1891, concerning the prevalence of smallpox in Texas, and suggesting the establishment by the General Government of temporary smallpox hospitals at several points on the Rio Grande opposite the Mexican border with a patrol system and compulsory vaccination.
In reply, your attention is invited to the Congressional Record of this date, and to the debate in the Senate touching upon this same matter.
The epidemic fund from which all the expenses of like measures have previously been paid is not available under the appropriation act now in force, for use against smallpox.
For the ensuing fiscal year, as will be seen by the Record, smallpox has again been included by Senate amendment in the appropriation bill, but, even if it become a law, no expenses under its provision could be incurred until July 1.

I have the honor to remain, very respectfully yours,
JOHN B. HAMILTON, Supervising Surgeon General, M.-H. S.

Hon. Wm. H. Crain, M. C.

Cerebro-spinal meningitis.
Under date of February 17, 1891, Assistant Surgeon Woodward of the Marine-Hospital Service, at Cairo, Ill., reports the outbreak of epidemic cerebro-spinal meningitis at the village of Wyckliffe, Ky., two miles below Cairo, on the Mississippi River. The disease appeared last Thursday, February 12, and so far 7 cases have been reported with 3 deaths, the fatal result occurring within twenty-four hours from the onset. It was not learned what precautions are being taken.

The epidemic of scarlet fever at Cairo, reported by the same officer January 18, 1891, is now declared over, no new cases having been reported for several weeks. No deaths occurred.

Reports of States, and yearly and monthly reports of cities.
Alabama-Mobile.-Month of January, 1891. Population, 40,000. Total deaths, 126, including phthisis pulmonalis 14 and croup 3.

California-Sacramento.-Month of January, 1891. Population, 30,000 . Total deaths, 36 , including phthisis pulmonalis 7 and diphtheria 3.

San Francisco.-Month of December, 1890. Population, 300,000. Total deaths, 580, including phthisis pulmonalis, 79; enteric fever, 10; smallpox, 3 ; diphtheria, 33 ; croup, 20 ; and whooping cough, 1.

Month of January, 1891. Total deaths, 612, including phthisis pulmonalis, 87 ; enteric fever, 13 ; scarlet fever, 2 ; diphtheria, 38 ; croup, 16 ; and whooping cough, 1.

Iows-Davenport.-Month of January, 1891. Population, 28,500. Total deaths, 35 , including phthisis pulmonalis, 5 ; scarlet fever, 1 ; and diphtheria, 1.

Dubuque.-Month of January, 1891. Population, 35,000. Total deaths, 42 , including enteric fever, 1 ; scarlet fever, 3 ; diphtheria, 3 ; and membranous croup, 2.

Massachusetts-Boston-Measles in fishing fleet.-Under date of February 16, 1891, Surgeon Fairfax Irwin reports the existence of quite a number of cases of measles in the fishing fleet trading from Boston and Gloucester, three cases having been treated in the marine hospital during the last ten days.

Michigan.-Week ended February 14, 1891. Reports to the State board of health, Lansing, from 50 observers, indicate that measles increased, and that cerebro-spinal meningitis, inflammation of brain, cholera morbus, membranous croup, typhoid fever, diarrhœea, and dysentery decreased in area of prevalence.

Diphtheria was reported present during the week at 32 places, scarlet fever at 38 places, enteric fever at 14 places, and measles at 29 places.

Minnesota-Minneapolis.-Month of January, 1891. Population, 164,738. Total deaths, 105 , including phthisis pulmonalis, 24 ; enteric fever, 12 ; scarlet fever, 1 ; diphtheria, 15 ; and measles, 1.

Montana-Butte City.-Month of January, 1891. Population, 30,000. Total deaths, 55 , including phthisis pulmonalis, 4 ; enteric fever, 1 ; diphtheria, 3 ; and membranous croup, 4.

New Hampshire-Manchester.-Month of January, 1891. Population, 44,700. Total deaths, 56 , including phthisis pulmonalis 8 and enteric fever 2.

New York-Buffalo.-Month of January, 1891. Population, 255,000. Total deaths, 413 , including phthisis pulmonalis, 42 ; enteric fever, 10 ; scarlet fever, 2; diphtheria, 19; measles, 7; and croup, 23.

Rhode Island.-Month of January, 1891. Reports to the State board of health from the principal cities and towns representing a population of 293,452 , show a total of 438 deaths, including phthisis pulmonalis, 43 ; enteric fever, 8 ; scarlet fever, 2 ; diphtheria, 8 ; croup, 3 ; and whooping cough, 4.

Tennessee-Nashville.-Month of January, 1891. Population; 76,309. Total deaths, 92 , including phthisis pulmonalis, 19 ; enteric fever, 1 ; diphtheria, 1 ; croup, 2 ; and measles, 2.

Washington-Seattle.-Month of January, 1891. Population, 48,000. Total deaths, 45 , including 4 from enteric fever.

MORTALITY TABLE, CITIES OF THE UNITED STATES.


Table of temperature and rainfall, week ended February 20, 1891.
[Received from War Department, Signal Office.]

| Locality. | Mean temperature in degrees Fahrenheit. |  |  | Rainfall in inches and hundredths. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Normal. | Excess. | Deficiency. | Normal. | Excess. | Deficiency. |
| New England States: |  |  |  |  |  |  |
| Eastport, Me.......................... | 23 |  | 24 | 1.05 | ....... | 78 |
| Portland, Me........................ | 24 |  | 3 | . 91 |  | . 10 |
| Boston, Mass.......................... | 29 | 11 |  | . 87 |  | . 18 |
| Block Island, R. I..................... <br> Middle Atlantic States: | 31 | 20 | ............. | 6 |  | 26 |
| Middle Atlantic States :      <br> Albany, N. Y............................ 26 0 0 .63 .90 |  | 0 | 0 | . 63 | . 90 |  |
| New York, N. Y...................... | 32 | 45 |  | . 95 | . 10 |  |
| Philadelphia, Pa | 35 | 52 |  | . 84 | . 52 |  |
| Atlantic City, N. J.................. | 34 | 50 | . | . 81 | . 44 |  |
| Baltimore, Md....................... | 37 | 65 | ............ | . 91 | .............. | 07 |
| Washington, D. C................... | 36 | 74 |  | . 84 |  | 29 |
| Lynchburg, Va....................... | 41 | 53 | ............... | . 84 |  | . 53 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Wilmington, N. C................... | 51 | 49 |  | . 83 |  | 28 |
| Charleston, S. C..................... | 53 | 68 | .............. | . 84 |  | . 82 |
| Augusta, Ga | 52 | 71 | ..... .......... | . 91 |  | . 34 |
| Savannah, Ga. | 56 | 66 | ................ | . 77 |  | . 67 |
| Jacksonville, Fla | 60 | 74 |  | . 77 |  | . 69 |
| Key West, Fla .. | 72 | 25 |  | . 42 |  | 26 |
| Gulf States: |  |  |  |  |  |  |
| Pensacola, Fla | 58 | 59 | ................ | 1.21 .96 | . 59 | . 7 |
| Mobile, Ala................................ | 56 | 63 | ..................... | 1.19 |  | 1.10 |
| Montgomery, Ala | 54 | 86 | $\cdot$ | 1.33 |  | . 97 |
| Vicksburg, Miss. | 54 | 72 | 迷 | 1.19 | 20 |  |
| New Orleans, La. | 59 | 70 |  | 1.05 | 1.83 |  |
| Shreveport, La....................... | 53 | 59 | ................ | 1.19 | . 83 |  |
| Fort Smith, Ark. | 44 | 26 |  | . 91 |  | . 20 |
| Little Rock, Ark | 47 | 38 |  | 1.60 | . 65 |  |
| Palestine, Tex. | 53 | 57 |  | . 78 | 96 |  |
| Galveston, Tex. | 58 | 27 |  | . 75 | 2.38 |  |
| San Antonio, Tex................... | 57 | 42 | ................ | . 56 | . 70 |  |
| Corpus Christi, Tex | 59 | 47 |  | . 59 |  | . 43 |
| Brownsville, Tex .................. | 64 | 42 |  | . 48 | . 50 |  |
| Ohio Valley and Tennessee: |  |  |  |  |  |  |
| Memphis, Tenn.............. | 46 | 62 |  | 1.38 | . 34 |  |
| Nashville, Tenn. | 43 | 70 |  | 1.30 |  | . 15 |
| Chattanooga, Tenn.................. | 47 | 59 | ............... | 1.33 | .... | . 62 |
| Knoxville, Tenn | 44 | 78 |  | 1.26 |  | . 75 |
| Louisville, Ky ........... ............. | 40 | 59 | - | 1.19 | . 28 |  |
| Indianapolis, Ind . ................. | 33 | 51 | ............... | . 84 | 3.31 | ............... |
| Cincinnati, Ohio...................... | 37 | 56 |  | . 98 | . 89 |  |
| Columbus, Ohio...................... | 32 | 72 |  | . 91 | 2.28 | ................ |
| Pittsburgh, Pa........................ | 34 | 70 |  | . 69 | 2.57 | ................ |
| Lake Region: |  |  |  |  |  |  |
| Rochester, $\mathbf{N} .7$ Y........................... | 24 | 41 | ..................... | .63 | 1.34 | ................ |
| Buffalo, N. Y.......................... | 24 | 52 | .................... | . 67 | 1.36 |  |
| Erie, Pa... | 28 | 55 | ................ | . 88 | 1.72 |  |
| Cleveland, Ohio ........ ............. | 28 | 69 |  | . 76 | 1.68 | ................ |
| Sandusky, Ohio .......... ........... | 28 | 51 | ................ | . 84 | 1.62 | ................. |
| Toledo, Ohio.......................... | 28 | 50 |  | . 49 | 1.86 |  |
| Detroit, Mich......................... | 38 | 35 |  | . 62 | 1.80 |  |
| Port Huron, Mich................... | 23 | 57 | ................ | . 63 | . 80 | ................ |
| Alpena, Mich.: ..................... | 18 | 52 |  | . 56 | . 36 | ................ |
| Marquette, Mich....... ............. | 16 | 48 | .... ........... | . 42 | . 69 |  |
| Grand Haven, Mich................ | 25 | 46 |  | . 56 | . 31 | ................ |
| Milwaukee, Wis........................ ${ }^{\text {Chicago, Ill. }}$. | 23 | 51 |  | . 46 | . 37 | ........ ........ |
| Chicago, Ill........................... | 13 | ${ }_{34}^{51}$ | ............... | . 62 | . 79 | ................ |
| Upper Mississippi Valley: |  |  |  |  |  |  |
| St. Paul, Minn. | 16 | 16 |  | . 21 | . 32 |  |
| La Crosse, Wis....... ................ | 19 | 29 |  | . 24 | . 16 |  |
| Davenport, Iowa.................... | 25 | 45 | ............... | . 39 | . 08 |  |
| Dubuque, Iowa | ${ }_{23}^{23}$ | 40 | ….. | . 42 | . 21. | . 06 |
| Keokuk, Iowa.... | 29 | 29 |  | .49 | . 69 |  |
| Springfield, Ill........................ | 32 | 33 |  | 1.03 | 1.27 |  |
| Cairo, Ill............................... | 40 | 62 | ................ | 1.05 | . 45 |  |
| St. Louis, Mo .......................... | 36 | 30 |  | . 77 | 1.05 |  |

Table of temperature and rainfall, week ended February 20, 1891-Continued.

| Locality. | Mean temperature in degrees Fahrenheit. |  |  | Rainfall in inches and hundredths. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Normal. | Excess. | Deficiency. | Normal. | Excess. | Deficiency. |
| Missouri Valley : |  |  |  |  |  |  |
| Kansas City, Mo.................... | 33 | 1 |  | . 42 | 1.24 |  |
| Leavenworth, Kans................. | 31 | 7 |  | . 36 | . 59 |  |
| Concordia, Kans..................... | 30 | 14 | . | . 14 | . 09 |  |
| Omaha, Nebr........................... | 25 | 7 |  | . 21 | . 07 |  |
| Valentine, Nebr ...................... | 24 |  | 37 | . 14 | . 11 |  |
| Huron, Dak............................. | 13 |  | 7 | . 14 | . 24 | .. ............... |
| Extreme Northwest: <br> Moorhead, Minn |  |  |  |  |  |  |
| Moorhead, Minn............................................... | 5 | 26 |  | . 21 | . 81 | ............... |
| Bismarek, Dak....................... | 9 | 10 |  | . 15 | . 30 |  |
| Buford, Fort, Dak................... | 9 |  | 38 | . 14 |  | . 05 |
| Rocky Mountain Slope: |  |  |  |  |  |  |
| Assinniboine, Fort, Mont........ | 15 | ......... | 140 | . 14 |  | . 10 |
| Helena, Mont.......................... | 23 | , | 126 | . 14 | . 60 |  |
| Custer, Fort, Mont..................: | 21 |  | 98 | . 12 | 0 | 0 |
| Salt Lake City, Utah................ | 34 | 18 |  | . 35 |  | . 22 |
| Cheyenne, Wyo........................ | 28 | 6 |  | . 07 | . 36 | .................. |
| North Platte, Nebr.................... | 27 |  | 6 | . 07 | . 02 | ................. |
| Denver, Colo........................... | 34 |  | 8 | . 14 | . 05 | ................ |
| Pueblo, Colo ........................... | 35 | 28 |  | . 19 |  | . 19 |
| Montrose, Colo......................... | 32 | 18 | .............. | . 07 | . 52 | .................. |
| Dodge City, Kans.................... | 33 | 10 |  | . 14 | . 01 |  |
| Abilene, Tex.......................... | 49 | 17 | ................ | . 28 | . 48 | .................. |
| El Paso, Tex............................ | 50 | 42 | ....... | . 14 |  | . 10 |
| Sill, Fort, Ind. T ...................... | 43 | 14 |  | . 39 |  | . 30 |
| Fort Grant, Ariz ...................... | 47 | 14 |  | . 35 | 1.90 |  |
| Santa Fé, N. Mex ..................... | 33 | 19 |  | . 14 | . 79 | ...... |
| Pacific Coast: |  |  |  |  |  |  |
| Olympia, Wash ....................... | 39 | ............. | 28 | 1.88 | 0 | 0 |
| Portland, Oreg........................ | 42 |  | 14 | 1.68 |  | . 30 |
| Roseburg, Oreg ........................ | 43 | . | 28 | 1.18 | . 50 | .............. |
| Red Bluff, Cal................................ | 50 | .............. | 42 | . 84 | 6.46 | ……................. |
| Sacramento, Cal | 51 | ............ | 14 | . 75 | 1.80 | ............... |
| San Francisco, Cal................... | 52 | .......... | 14 | . 92 | . 40 |  |
| Los Angeles, Cal...................... | 55 |  | 14 | . 89 | 2.40 |  |
| San Diego, Cal .. ....................... | 55 |  | 14 | . 63 | 1. 40 | ....................... |
| Yuma, Ariz .............................. | 66 |  | 28 | . 11 | 1.00 | .......... |

## FOREIGIN.

(Reports received through the Department of State and other channels.)

## SPECIAL REPORTS.

Sanitary Commission at Constantinople-Report of U. S. commissionerCholera in Asiatic Turkey.

Constantinople, January 26, 1891.
SIR: I beg to inclose report No. 16 of Dr. Zavitziano, representative of this legation upon the sanitary commission of Pera.

I have the honor to be, sir, etc.,

## SOLOMON HIRSH.

Hon. James G. Blaine,
Secretary of State, Washington, D. C.
Sanitary Report No. 16.
My last report, dated January 10, stated that cholera had nearly disappeared. In fact, since 3 deaths from cholera, which occured up to the 10th of this month at Marash, only 4 deaths have been registered at Tripoli in Syria on the 19th instant ; two of them in the inland town, and the two others at the seashore. (It is known that the town of Tripoli is divided into two quarters, one of them being inland and the other on the sea.) In the other vilayets-that is, Diarbekir, Maennriet-el-Aziz, Adana, and Aleppo-we can not know precisely what happens, for after the official declaration which has been issued, stating the disappearance of the epidemic, we receive strange news about a sickness from which a few deaths occurred whose symptoms resemble the symptoms of cholera.

At the same time it is noticed that by way of precaution new sanitary cordons have been established at Erigh in the vilayet of Maennriet-el-Aziz. This cordon has been established for the travelers coming from Aleppo. We can not be sure of the total disappearance of the epidemic, but still if this one has disappeared a new one may break out very easily. Turkish authorities put under quarantine the pilgrims who go to Slejaz, and we must avow that is a very good measure, but at the same time they ought to take care on the southeast of Arabia, in the Persian Gulf, where there is an uninterrupted communication between Bombay and the Turkish ports.

In India cholera is always and continually raging, though the British representative in the sanitary commission ascertains that the deaths from cholera are, at the most, 10 per week. Having from one side these official British statements, we read on the other, in the official reports sent by the sanitary inspector at Bagdad, that more than 600 men died from cholera on board the steamships between Bombay and Bassora within five months. Besides this, we know that the epidemic which is ending now in Syria had broken out two years ago at Shug-elShug on the Euphrates, and the report of Dr. Gazola, sanitary physician at Bagdad, states that the first cases of cholera appeared in Nejid, a Turkish province which is in continual communication with India. I wish to call your attention to the fact that there is no lazaretto in the

Persian Gulf. Speaking of lazarettos, I wish to mention the following fact: Two weeks ago the German consul at Beirut having shaken hands with his wife, who was under quarantine, was likewise compelled to undergo quarantine and enter the lazaretto of Beirut, from which place he sent a dispatch to the German embassy in Constantinople, in which he stated that he will fall surely ill, the lazaretto being in quite a filthy condition. The sanitary administration, in consequence of strong remonstrances on the part of the German representatative in the sanitary commission, inquired, on the statement of the latter. The answer of the physician appointed to the lazaretto was that this one is perfectly clean.
Little by little the number of all the deaths registered in the various localities where cholera has raged is communicated to the central sanitary administration. This number, from the beginning of the epidemic up to the present date, is as follows: In the vilayet of Mannriet-el-Aziz 71 deaths occurred; Aleppo, 2,361; Adana, 97; Damascus, 1,189; Mutessariflic of Tripoli, 416 ; making a total of 4,134 deaths.

## SPIRIDION C. ZAVITZIANO.

Constantinople, January 23, 1891.
Azores-Fayal-Smallpox.-The United States consul, under date of January 26, 1891, writes as follows:

SIR: On January 30, 1890, I had the honor to inform you that smallpox had appeared in epidemic form at the island of San Miguel (St. Michaels); on March 29 that it continued; and on July 1 that it had decreased very much in the city, but among the villages, or some of them, it prevailed.

On July 9 I was informed that the civil governor of that island had ordered clean bills of health to be given to all vessels clearing for Portuguese ports.

Latterly it has been reported as dying out in the villages, but now I learn from an English resident in the "Furnas," a village distant 28 miles from the city, that he left because it was full of smallpox, and this account has been corroborated.

I therefore at once report this fact, which you may wish to communicate to the sanitary officers of Boston, New Bedford, and New York, the ports to which numerous emigrants proceed from these islands, and at the same time to request them to call for the bills of health issued at the consulate at Fayal, on which particulars will be found when any of the contagious diseases in epidemic form existin any of these islands.

Ceylon-Galle-Cholera.—Under dates of January 19 and 26, 1891, the United States consul at Colombo reports an epidemic of cholera at Galle. During the week ended January 17, 1891, there were 26 cases and 14 deaths therefrom.

Week ended January 24, 26 cases and 9 deaths.
Cuba-Havana.-Under date of February 7, 1891, the United States sanitary inspector sends the following mortality report :

There were 137 deaths in this city during the week ending the 5th instant. One of those deaths was caused by yellow fever with 4 new cases, 6 by so-called pernicious fever, 2 by enteric fever, 1 by remittent fever, 1 by diphtheria, and one by hydrophobia.

Egypt.-Week ended January 15, 1891. The towns in upper and lower Egypt, including Gizeh and the Suez Canal, show a total of 726 deaths, including phthisis pulmonalis, 48 ; enteric fever, 4 ; diphtheria and croup, 2 ; and smallpox, 1.

Great Britain-England and Wales.-The deaths registered in 28 great towns of England and Wales during the week ended February 7 corresponded to an annual rate of 19.8 a thousand of the aggregate population, which is estimated at $9,715,559$. The lowest rate was recorded in Derby, viz, 12.6, and the highest in Preston, viz, 37.8 a thousand. Diphtheria caused 3 deaths in Manchester.

London.-One thousand six hundred and thirty-nine deaths were registered during the week, including measles, 15 ; scarlet fever, 22 ; diphtheria, 34 ; whooping cough, 37 ; enteric fever, 6 ; and diarrhoea and dysentery, 11. The deaths from all causes corresponded to an annual rate of 19.0 a thousand. Diseases of the respiratory organs caused 428 deaths. In greater London 2,072 deaths were registered, corresponding to an annual rate of 18.4 a thousand of the population. In the "outer ring" the deaths included measles, 6 ; whooping cough, 8 ; and diphtheria, 4.

Ireland.-The average annual death rate, represented by the deaths registered during the week ended February 7, in the 16 principal town districts of Ireland, was 26.6 a thousand of the population. The lowest rate was recorded in Wexford, viz, 8.6, and the highest in Lisburn, viz, 38.7 a thousand. In Dublin and suburbs 180 deaths were registered, including scarlet fever, 1 ; enteric fever, 3 ; diphtheria, 1 ; and whooping cough, 2.

Scotland.-The deaths registered in eight principal towns during the week ended February 7 corresponded to an annual rate of 21.9 a thousand of the population, which is estimated at $1,345,563$. The lowest mortality was recorded in Greenock, viz, 9.7, and the highest in Paisley, $\mathrm{viz}, 25.8$ a thousand. The aggregate number of deaths registered from all causes was 594 , including measles, 24 ; scarlet fever, 13 ; diphtheria, 7 ; whooping cough, 29 ; fever, 8 ; and diarrhœa, 4.

Turkey in Asia-Cholera.-The United States consul at Beirut, Syria, reports as follows:

Week ended January 20, 1891, three new cases of cholera and thirteen deaths in the city of Tripoli and three new cases and twenty-one deaths in the dependencies of Tripoli, Syria.

Week ended January 27, one death in the city of Tripoli.

## MORTALITY TABLE, FOREIGN CITIES.

| Cities. |  |  | ! | Deaths from- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\begin{aligned} & \text { 呙 } \\ & \text { e } \\ & \text { e } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  | Diphtheria. |  | $\begin{aligned} & \text { an } \\ & \text { en } \\ & \text { en } \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |
| Paris | Jan. 31.... | 2,260,945 | 1,103 |  |  | 2 |  | 16 | 5 | 37 | 15 | 7 |
| Vienna | Jan. 17..... | 840,000 | 424 |  |  |  |  | 1 |  | 15 | 14 |  |
| Liverpool | Jan. 31..... | 620,443 | 247 |  |  |  |  | 1 | 1 | 1 |  |  |
| Glasgow. | Jan. 31.... | 545,678 | 361 |  |  |  |  | 2 | 6 | 1 |  |  |
| Buda Pesth | Feb. 5..... | 507, 000 | 28 |  |  |  | 5 |  | 6 | 9 |  |  |
| Brussels | Jan. 24..... | 469, 459 | 227 |  |  |  |  | 1 | 2 | 1 |  |  |
| Warsaw | Jan. 24.... | 455,852 450,000 | 250 |  |  | 10 |  | 4 | 1 | 14 |  |  |
| Rio de Janeiro .................... | Jan. ${ }^{\text {Jan. }} 17 \ldots$. | 450,000 450,000 | 251 |  | ${ }_{10}^{8}$ |  |  | 2 |  |  | 1 |  |
| Rio de Janeiro ..................... | Jan. ${ }^{\text {J4,..... }}$ | 450,000 450,000 | 275 |  | 13 | 11 | 4 | 3 4 | . | 1 |  |  |
| Amsterda | Jan. 31..... | 417, 484 | 206 |  |  |  |  | 2 |  | 4 |  |  |
| Rome. | Feb. 4..... | 417, 392 | 184 |  |  |  |  | 5 |  | 6 | 1 |  |
| Lyons ............................ | Jan. 24..... | 401, 930 | 212 |  |  |  |  | 1 |  | 6 |  |  |
| Leipzig ......................... | Jan. 24..... | 360, 671 | 131 |  |  |  |  | 2 | 2 | 8 |  |  |
| Leipzig | Jan. 31..... | 360,671 345,000 | 121 |  |  |  |  | 2 | 1 | 2 |  |  |
| Cologne. | Jan. 24..... | 280, 206 | 141 |  |  |  |  |  | 2 | 4 | 2 | 2 |
| Barcelona | Jan. 30.... | 272,000 | 308 |  | ..... | 7 |  | 12 |  | 11 |  |  |
| Palermo | Jan. 24..... | 250,000 | 156 |  |  |  |  | 1 |  | 1 |  |  |
| Bristol | Jan. 31..... | 235, 171 | 114 |  |  |  |  | 2 | 4 |  |  |  |
| Belfast Antwer | Jan. 31..... | 234,822 232,418 | 143 |  |  |  |  | 1 | 1 | 2 |  |  |
| Rotterdam | Jan. 31..... | 209, 13i | 110 |  |  |  |  |  |  |  |  |  |
| Prague | Jan. 24..... | 188, 992 | 127 |  |  | 1 |  | 1 | 3 | 1 |  |  |
| Florence ........................... | Jan. 31..... | 182,534 | 176 |  |  |  |  | 20 |  |  |  |  |
| Genoa. | Jan. 31..... | 180,598 | 103 |  |  |  | 2 |  |  | 1 |  |  |
| Frankfort-on-the-Main | Jan. 17..... | 179,850 | 71 |  |  |  |  | 2 |  | 10 |  |  |
| Frankfort-on-the-Main ....... | Jan. 24..... | 179,850 | 86 |  |  |  | .... | 1 | 1 | 13 |  |  |
| Hanover ........................ | Jan. 24..... | 165, 800 | 64 |  |  |  |  |  |  | 6 |  |  |
| Konigsberg ................................................. | Jan. 25....... | 161,200 |  |  |  |  |  | 1 | 1 |  |  |  |
| Trieste ............................................ | Jan. ${ }^{\text {Jan...... }}$ | 158,054 | 122 |  |  | 1 |  | 1 | 2 | 5 |  |  |
| Venice. | Jan. 24..... | 158, 019 | 130 |  |  | 3 |  |  |  |  |  |  |
| Venice... | Jan. 31..... | 158, 019 | 114 |  |  | 1 |  |  | 4 |  |  |  |
| Nuremberg........................ | Jan. 10..... | 142, 403 | 77 |  | ...... |  |  | 1 | 1 | 5 |  |  |
| Nuremberg .......................' | Jan. 17..... | 142, 403 | 76 |  |  |  |  | 1 | 3 |  |  |  |
| Stunchal........................................ | Jan. $31 . . .$. | 139,659 | 46 |  |  |  |  |  |  | 4 |  |  |
| Fremen | Jan. 24...... | 124,940 | 44 |  |  |  |  |  |  | 1 |  |  |
| Cardiff............................... | Jan. 17..... | 121,477 | 63 |  |  |  |  |  |  |  |  |  |
| Cardiff | Jan. 24..... | 121,477 |  |  |  |  |  |  |  |  |  |  |
| Cardiff. | Jan. 31..... | 121, 47\% | 53 |  |  |  |  |  |  |  |  |  |
| Danzig.............................. | Jan. 24..... | 119, 000 | 76 |  |  | ..... | .... | 1 | .... | 2 |  |  |
| Stettin............................... | Jan. 24...... | 116,000 | 62 |  |  |  |  |  |  | 5 |  |  |
| Havre.............. | Jan. ${ }^{\text {Jan....... }}$ | 112,074 111,604 | 48 |  |  |  | . | 1 |  |  |  |  |
| Crefeld ............ | Jan. 31...... | 108, 000 | 75 |  |  |  |  |  |  | 2 |  |  |
| Gothenburg........................ | Jan. 24...... | 106, 246 | 38 |  |  |  |  |  |  | 2 |  |  |
| Leghorn. | Feb. 1..... | 104, 021 | 78 |  |  |  |  |  |  | 1 |  |  |
| Zurich.................. ............. | Jan. 24..... | 91, 323 | 20 |  |  |  |  |  | 2 | 8 | 2 | 5 |
| Messina............................. | Jan. 31..... |  | 52 |  |  | 1 |  |  |  | 5 |  |  |
| Mayence ........................... | Jan. 24..... | 73,271 46566 | 31 |  |  |  |  |  |  | 5 | .... |  |
| Merida .......................................... | Jan. 31...... | 46,566 43,095 | 10 |  |  |  |  |  |  |  |  |  |
| Marsala | Jan. 24..... | 40, 131 | 21 |  |  |  |  |  |  |  |  |  |
| Cape Tow | Jan. 13..... | 36,000 | 24 |  |  |  |  | 2 |  |  |  |  |
| Schiedam | Jan. 31..... | 25, 300 | 18 |  |  |  |  |  |  |  |  |  |
| Gibraltar | Jan. 25..... | 23, 981 | 8 |  |  |  |  |  |  |  |  |  |
| Gibraltar | Feb. 1..... | 23, 981 | 11 |  |  | 1 |  | 2 |  |  |  |  |
| Girgenti............................. | Jan. 24..... | 23,547 | 14 |  |  |  | 1 |  |  |  |  |  |
| Licata............................... | Jan. 24..... | 19,000 | 17 |  |  |  |  |  | 1 | 1 |  |  |
| Kingston, Canada | Feb. 13.... | 18, 264 | 11 |  |  |  |  |  |  |  |  |  |
| Rio Grande do Sul .............. | Dec. 20.... | 16,000 | 20 |  | ...... |  |  | .... |  |  |  |  |
| Hamilton, Bermuda Flushing | Feb. 12... | 15,700 13.200 | 3 |  |  |  |  |  |  |  |  |  |
| Queenstow | Jan. 31..... | 10,340 | 10 |  |  |  |  |  |  |  |  |  |
| Queenstown | Feb. $7 . . .$. | 10,340 | 2 |  |  |  |  |  |  |  |  |  |
| Chatham | Feb. 14..... | 8,730 | 3 |  |  |  | ..... |  |  |  |  |  |

Official :
JOHN B. HAMILTON,

