WEEKLY ABSTRACT OF SANITARY REPORTS.

Vol. III. $\left\{ egin{array}{l} {f Abstract} \\ {f No.} & 52. \end{array} \right\}$

TREASURY DEPARTMENT,

OFFICE SUPERVISING SURGEON-GENERAL,

U. S. MARINE-HOSPITAL SERVICE,

Washington, D. C., December 28, 1888.

Abstract of Sanitary Reports received through the Department of State from foreign countries during the week ended December 28, 1888, and information received through other channels.

(Published in accordance with section 4, act approved April 29, 1878.)

England and Wales.—The deaths registered in 28 great towns of England and Wales during the week ended December 8 corresponded to an annual rate of 18.6 a thousand of the aggregate population, which is estimated at 9,398.273. The lowest rate was recorded in Derby, viz., 9.2, and the highest in Cardiff, viz., 29.8 a thousand. Diphtheria caused 3 deaths in Nottingham, 2 in Birmingham, 2 in Salford, and 2 in New Castle upon Tynes.

London.—One thousand four hundred and sixty-one deaths were registered during the week, including measles, 139; scarlet fever, 30; diphtheria, 35; whooping-cough, 13; enteric fever, 12; typhus, 1; diarrhœa and dysentery, 19. The deaths from all causes corresponded to an annual rate of 17.8 a thousand. Diseases of the respiratory organs caused 277 deaths; different forms of violence, 62; and 5 cases of suicide were registered. In greater London 1,764 deaths were registered, corresponding to an annual rate of 16.7 a thousand of the population. In the "outer ring" the deaths included measles, 12; diphtheria, 9, and scarlet fever, 4.

Ireland.—The average annual death rate represented by the deaths registered during the week ended December 8 in the 16 principal town districts of Ireland was 22.4 a thousand of the population. The lowest rate was recorded in Wexford, viz., 4.3, and the highest in Armagh, viz., 31.0 a thousand. In Dublin 183 deaths were registered, including whooping-cough, 1; enteric fever, 8; scarlet fever, 1; diphtheria, 1, and diarrhea, 1.

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Scotland.—The deaths registered in 8 principal towns during the week ended December 8, corresponded to an annual rate of 19.3 a thousand of the population, which is estimated at 1,314,274. The lowest mortality was recorded in Dundee, viz., 13.6, and the highest in Paisley, viz., 32.0 a thousand. The aggregate number of deaths registered from all causes was 487, including measles, 8; scarlet fever, 12; diphtheria, 11; whooping-cough, 7; fever, 3, and diarrhea, 8.

Calcutta.—Eight hundred and thirty-eight deaths were registered during the month of September, 1888, including 66 from cholera, 239 from fevers, and 3 from small-pox.

Havana, Cuba,—Infected ballast.—The following letter has been received:

HAVANA, ISLAND OF CUBA, December 14, 1888.

SIR: Your note inclosing a communication to the Secretary of the Treasury relating to vessels reported as taking sand ballast at yellow-fever hospital wharf in this port, &c., and requesting information in reference to it, is received.

In reply I would say that although there is no yellow-fever hospital proper, for that disease exclusively, in this city or vicinity, there are two hospitals situated along the line of the wharves on the Havana side of the harbor and immediately adjacent to them. One of them is the military hospital, and though not exclusively a yellow-fever institution, none the less, yellow fever can be found in it without doubt every day in the year, and sometimes in large numbers. This hospital is located immediately contiguous to Tallapiedra wharf and between it and the arsenal and San José wharf.

The former wharf must receive much of its drainage and sewage (the others perhaps less) around and under it.

The other hospital, in which cases of yellow fever are often found, occupies a site very near the eastern or windward end of San José wharf. Drainage and sewage from that institution must be deposited under and along side of that wharf. In fact all the wharves on the Havana or city side of the harbor have sewers emptying under them, and their locale, as well as the pile and wooden constructed affairs themselves, are doubtless frequenty infected by the cause of yellow fever, as is abundantly proven by the number of vessels invaded by it while lying at them.

A small proportion of vessels bound to American ports have and do take in, sand or earth, or other kind of ballast, while Iying at these wharves, and after the first of May, when the heavy crops of sugar are sent forward, as also at other seasons of the year. Three vessels have just left here for the United States after having taken in a quarter or more of their ballast at the wharves, their captains claiming it was necessary to stiffen the vessel while concluding her discharge that she might not tip over.

Both steamers and sailing vessels sometimes discharge and load at and sail from these wharves for ports in the United States, and at all seasons of the year.

The danger to the sanitary condition of the vessel, ballast, and cargo consequent on all of the above practices is recognized by your sanitary

inspector as being so great that mention is made of those facts in the consular bill of health for the information of the health officers at the vessel's port of destination.

A report is also made to the supervising surgeon-general of the marine-hospital service, the facts being stated in the Abstracts of the Bills of Health which are forwarded to him.

Very respectfully, your obedient servant,

D. M. BURGESS, Sanitary Inspector, M.-H. S.

To Surgeon-General Hamilton.

During the week ended December 15, 1888, there were 10 deaths from yellow fever at Havana.

Cardenas, Cuba.—December 14. Good health is reported in town and harbor. Weather cool and fine.

Nassau, N. P.—December 15. City healthy.

Buenos Ayres.—The United States consul reports for the month of September, 1888, that "The health of the city has greatly improved since last report." Nine hundred and eighty-two deaths were registered during the month, including 11 from small-pox, 13 from enteric fever, and 66 from diphtheria.

Venezuela.—The United States consul at Laguayra, under date of November 24, states that "The Government of Venezuela on yesterday announced an epidemic of small-pox at Ponce, Puerto Rico, and communicated the information to the health officers of the ports of the country."

Bordeaux, France.—Four hundred and forty-seven deaths were registered during the month of November, 1888; including small-pox, 1; enteric fever, 11; and diphtheria and croup, 17.

Cartagena, Colombia.—The United States consul reports, under date of November 24, "Only 1 death from Beri Beri during the past week. No case has resulted fatally amongst the better class."

MORTALITY TABLE, FOREIGN CITIES.

Cities.		popula-	from	Deaths from—								
	Week ended.	Estimated por tion.	Total deaths from all causes.	Cholera.	Yellow fever.	Small-pox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping-
Hasgow	Dec. 8	545, 678	224					\ 1	10	7		
Warsaw	Dec. 1	444, 814	240			5	١	1` -	15	13	١	
Calcutta	Oct. 27	433, 219	256	46		, ,			10	i		
Calcutta	Nov. 3	433, 219	234	54				ļ		1 *	ļ	1
Amsterdam	Dec. 8	389, 916	167	0.				i	l	7		1
Rome	Oct. 27	393, 496	156					3		١.	ļ	
Rome	Nov. 3	393, 496	181					2		3	٠٠٠٠٠٠	1
Rio de Janeiro	Nov. 18	300,000	226		9	2	2	5		1 "		1
Rio de Janeiro	Nov. 25	300,000	233		15	ī	2	3		1		
Copenhagen	Dec. 4	300,000	99		10	١.	-	٥		5	;	••••
Edinburgh	Nov. 3	262, 733	76				1		ļ	ĭ	•••••	
Edinburgh	Nov. 10	262, 733	62				1 *	ļ		1		****
Palermo	Dec. 8		88							1		1
Belfast	Dec. 8	$250,000 \\ 227,022$	89			1		4	2	1		·····
			69			1	1	*	2			•••••
Genoa	Dec. 8	179, 910	74			5	1	ļ	ļ	1		
Prieste	Dec. 1 Dec. 15	154,500	22			Э				li		
Coronto		130,000	40							ı .		ļ
Stuttgart	Dec. 8	125, 510	43			•••••					·····	ļ
Bremen	Dec. 1	122,000						1	1			ļ
Havre	Dec. 8	112,074	53				:	3	ļ	1		ļ
Barmen	Dec. 1	109,000	38				1	ļ				·····
æghorn	Nov. 9	102, 540	44					····				•••••
eith	Nov. 3	74, 320	24									
eith	Nov. 10	74, 320	22									ļ
Mayence	Nov. 10	65, 802	24					1	1		ļ	
Mayence	Nov. 17	65, 802	25				1			1		ļ
Callao	Dec. 1	• 34,000						ļ	ļ	ļ		ļ
Juayaquil	Nov. 27	32,000	103					2			53	ļ
Juayaquil	Dec. 4	32,000	85		1	1				ļ	45	
Vera Cruz	Dec. 6	23,800	32						1		ļ	ļ
Vera Cruz	Dec. 13	23,800	23					1				ļ
Kingston, Can	Dec. 21	17, 300	2			i '		l	l	l	 .	١
San Domingo	Nov. 10	16,000	3					l	l	l		
San Domingo	Nov. 17	16,000	8	 			ļ	 	ļ	l		
Cartagena, Colombia	Dec. 1	13,000	6	l			J	ļ		l		ļ
Laguayra	Dec. 1	7, 428	9								l	ļ
furk's Islands	Nov. 28	5,000	8	1			l		1	l	l	l
Paita	Dec. 1	4,000										
Bluefields, Nic	Dec. 8	2,000	1	1						l		
San Juan del Norte	Nov. 26	1,004	î								1	1

UNITED STATES.

Florida.—The following inspection reports have been received:

Ocala, Fla.—Ocala, the county seat of Marion, was incorporated three years ago; it is about 100 miles south of Jacksonville, and has a population of nearly 4,000. This place has many advantages, being in the heart of a rich and productive country; it is also a railroad center, and only six miles from the celebrated Silver Springs. Like many other Florida towns, it has passed through a conflagration which swept away her wooden structures. These have been replaced by substantial brick buildings, giving the place an air of stability and permanence. The public spirit and enterprise of the people is further shown by the fact that there is now being erected a mammoth structure in which is to be held next month the "International and Semi-Tropical Exhibition," in face of the visitation that afflicted other portions of the State so recently.

The water-works are situated 800 yards south from center of town and 45 feet above it. The water is obtained from a bore 227 feet deep,

and is pumped into a receiving well, then carried to a stand-pipe 400 yards east at an elevation of 75 feet, thereby securing sufficient pressure in case of fire to throw a stream 60 feet high without the aid of an engine. This is only a temporary arrangement. In the near future it is proposed to complete an artesian well of sufficient capacity to supply the town. It is already commenced, being now 500 feet deep; 20 feet of sand was first penetrated, then a bed of clay 90 feet deep, next 335 feet limestone rock, when flint rock was found.

Cistern water is used to a limited extent, and surface wells, average depth 35 feet, are scattered all over town. In low places water can be

had 60 feet deep, while on the hills 30 feet is the average.

Numerous natural openings or sinks carry off the storm and spring waters in the county. Within the corporate limits, also, there are a few which seem ample for the purpose. A driven hole, 9 inches in diameter, communicating with a subterraneous passage, carries off the fluid sewage of two principal hotels and jail. There is no system for the disposition of privy contents.

In the suburbs are two limestone quarries and kilns in active operation. The lime is shipped all over the State and Georgia, and the débris is utilized on the sand streets and sidewalks to give firmness to them. An interesting fact is that these quarries abound in the skeletons

of fish and shell.

The soil of the county is composed of humus, lime, and sand; clay also enters into it, and predominates, as in nearly all hummock land.

The cemetery is within corporate limits. No burial permits are issued. Mayor and president of county board of health, Dr. Thomas P.

Gary; city physician, Dr. E. Van Hood.

The prevailing fever is remittent; of late there is no tendency to a hæmorrhagic form. This only prevails when there is extensive upturning of soil. After the rainy season in the fall, fever to any extent is seen. Intermittent or typhoid is rare.

Respectfully submitted,

J. F. HARTIGAN, M. D.

To Surgeon-General Hamilton.

Tavares.—Tavares, the county seat of Lake, is located on the west end of Lake Dora. Its population is 200. Average height above lake, 15 feet. The water supply is principally from driven-wells 25 to 30 feet deep; water is secured below a clay bed, which is found 4 or 5 feet thick under the sand. Pine woods surround the place, except on the north side, along the shore of Lake Eustis, where there is a strip of hummock land.

The town is built on a ridge, turtle-back shape, running northwest and southeast, the principal drainage being effected by ditching into Lake Dora. On the north side it is directed toward Lake Eustis. West of the railroad track there are several acres of marshy land which overflows from the lake. Five railroads center here; it is the terminus of four—Florida Railway and Navigation; Jacksonville, Tampa and Key West; Tavares, Orlando, and Atlantic; and Tavares, Apopka, and Gulf—the Florida Southern passing through.

Night-soil is required to be removed weekly outside the corporate limits, and dumped into a canal of rapid current, which communicates with the lake. The authorities require water-tight boxes to be used, and these, after being treated with lime, are emptied into the canal and

cleaned.

Cemetery is one mile west of town on a hill. No burial permits are issued.

Mayor, W. H. Latimer; member county board of health, Dr. J. M. Taylor.

There were three deaths this summer; two from "malaria,"—both children. They were seized with a chill, followed in an hour by fever, and died within twelve hours. More than a month elapsed between these deaths, and they lived in different parts of the town. Three deaths also occurred last year, only one an adult, from malarial fever. Very respectfully,

J. F. HARTIGAN, M. D.

To Surgeon-General Hamilton.

Brooksville, Fla.—Brooksville, the county seat of Hernando, is 327 feet above the Gulf—16 miles from the coast. It was incorporated in 1881 and has a population of 1,000; its area is 1 mile square. topography of the county is of a broken, hilly, and rolling character. On many of its hills springs, forming small rivulets, wind their way into the valleys, and with the storm water finally empty into what are called sinks. These curious and interesting provisions of nature are quite numerous, and consist of openings in the ground, some of which are large enough to enter and explore long distances, when others are encountered flowing into them, thus presenting somewhat a subterranean circulatory system. These natural sewers seem to be efficient for drainage purposes. Occasionally, however, they will become temporarily obstructed by branches of trees or vegetation, as I saw in one instance, resulting in the flooding of the surrounding area. this decays and softens, and, yielding to the superincumbent pressure, is forced through, and in a night large bodies of water will have dis-This natural drainage prevents what would otherwise necessitate a heavy outlay and contributes materially to a good sanitary condition.

To show the cavernous character of this portion of Florida, there was recently discovered under a hill a few miles from Brooksville a river 20 feet wide, reached by a zigzag descent of more than 300 feet,

which, so far, has been explored 700 yards.

The water supply of the town is chiefly from wells, 16 to 30 feet deep. There are a few cisterns. In digging wells red clay is found two or three feet below the sandy surface, averaging 10 to 12 feet in thickness; it then changes to a whitish color. The best water is below this. Just east of the corporate limits there is a ridge of rock. Artesian water is contemplated soon, a sufficient amount having been levied for the purpose.

There is no regular system for removal of contents of privies.

The cemetery is situated 14 miles from business portion of town, on a flat. No burial permits are issued.

Mayor, C. J. Bowden; city physician, Dr. S. Stringer.

The town is reached by the Florida Southern Railroad. It is practically on a clay hill, the principal drainage finding its way into an adjacent prairie, to be carried off by the natural sinks referred to. These are supposed to unite and form the coast streams, or the water meanders towards the interior, hundreds of feet under the surface, becoming purified in its turbulent course, finally contributing to supply the numerous lakes. East and northeast of the town are rolling high

pine hills, or hummock land, with a red clay subsoil. South two or three miles is flat level land. West for three or four miles it is rolling, and then becomes flat-dry sand-hills, covered with scrub pine, reach-

ing to the coast.

It is the experience of some physicians there that hæmaturia, when a symptom of remittent fever, was found where quinine had been used for any length of time. On its suspension this symptom would subside and recur after returning to the quinine. A dentist died about five years ago with symptoms that would be called yellow fever; perspiration stained his shirt a saffron color. Several physicians saw him, it being the only case of the kind that occurred during the season. He changed yellow, had a temperature of 105°, and for about twentyfour hours he vomitted black matter almost incessantly. The first ejecta was pure blood. No water was passed thirty-six hours before death.

Very respectfully.

J. F. HARTIGAN, M. D.

To Surgeon-General Hamilton.

Leesburg, Fla.—Leesburg, Lake County, lies on the peninsula between Lakes Griffin and Harris, at the intersection of the Florida Southern and Florida Railway and Navigation Railroads. It was incorporated

in 1873; population about 1,000.

The town is built on a ridge 1½ miles long, and ½ mile wide. Two or three of the main streets have been clayed on the surface for hard Most of the storm-water runs from these streets into ditches which communicate with Lake Griffin. In the northern part of the town the drainage is directed towards a pond, where it sometimes lays when the ditch becomes obstructed. In other parts on account of the porosity of the soil, the water soon disappears after the heaviest rain. The country east and west is pine wood; north and south hummock

There are fine artesian wells, the deepest a 4-inch is 500 feet; the one of least depth is 90 feet. Although more wells are contemplated, the present meet all requirements. More than half of the population use surface wells and cistern water. In sinking artesian wells 10 feet of sand is first penetrated, when a clay bed is struck which averages 80 feet thick; then sand-rock is found, perhaps 10 or 12 feet in thickness. A cavern is now reached and the drill is apt to drop 40 feet. The floor or bed of this cavern is flint-rock, which may be drilled from 50 to 300 feet before sufficient flow is found. Fissures are sometimes discovered 8 or 10 feet deep in the clay through which the loose sand drops. the sand-rock mentioned, and entering into its composition, there is also found petrified shell.

Night soil is required to be removed three times a week, when it is carried a mile from corporate limits, disinfected with lime and copperas. and then buried. The zinc-bucket system has been ordered by the council at the suggestion of the board of health, and will soon be

inaugurated.

Mayor, L. B. Lee; city physician and president county board of health, Dr. R. H. Dean. The cemetery is situated on a hill 1! miles

from the business portion. Burial permits are not required.

For two years the town was remarkably healthy, but lately there has been an outbreak of remittent fever, one case that I saw with Doctor

Dean assumed a hæmorrhagic form; the patient's business, however, exposed him to the night air and wet weather. There were 2 deaths last year between May and October, both from zymotic causes. year, during the same period, three deaths were reported—all children. As far as I can learn there has been no history of yellow fever in the county. A refugee from Tampa had the disease last year, but on isolation it did not spread, and the patient recovered. Very respectfully,
J. F. HARTIGAN, M. D.

To Surgeon-General Hamilton.

Eustis.—Eustis, Orange County, is situated on the east shore of Lake Eustis, on the Florida Southern Railway. The town is one and a half miles square, and has a population of 1,000. Its water supply is chiefly from wells 18 to 50 feet deep. A few cisterns are also in use. In digging the wells about 15 feet of sand is penetrated, then a light bed of

clay, under which the water is found.

The town is built on an incline towards the lake, formerly the site of piney woods. It is most favorably situated for drainage, hardly any artificial means being necessary for the purpose. are high rolling pine lands, and clear water lakes, the whole aspect impressing one with the attractiveness and salubrity of the place. night soil is systematically disinfected and removed a mile from town; it is then mixed with lime and muck and converted into a fertilizer. On a ridge one mile from the business center, the cemetery is located. Burial permits are required, but the law is not strictly enforced.

There is no history of yellow fever-indeed death from any disease of a malarious nature is comparatively unknown. Mayor, Ralph Badger; city physician, Dr. S. S. Sargent.

Respectfully submitted.

J. F. HARTIGAN, M. D.

To Surgeon-General Hamilton.

MacClenny, Fla. -- The town council has passed an ordinance in relation to the disinfection of that place, and ridding it of infected material. The ordinance is as follows:

AN ORDINANCE providing for the fumigation and disinfection of the town of Mac-Clenny.

Be it ordained by the mayor and common council of the town of MacClenny, Florida.

SEC 1. The work of the fumigation and disinfection of the buildings in which there has been cases of yellow fever shall be commenced at

once, and prosecuted to completion.

SEC. 2. The board of health of said town hereby delegates all its powers in this matter to Dr. J. L. Posey, U. S. sanitary inspector, M.-H.S., who is hereby authorized and empowered to enter each and all of said houses, and proceed with such work, in such manner, as he may deem necessary and proper, and he is authorized to remove or condemn any and all infected property belonging to private individuals, and to destroy the same by fire whenever he deems it necessary so to do, upon payment for same at its appraised value, or replaced by other articles of like character and of equal value.

SEC. 3. All persons are hereby forbidden to remove or conceal any article of personal property that may have become infected during the epidemic, but are requested to deliver each and every article that has been in infected rooms, to said Doctor Posey or his agents and servants without delay whenever same is called for.

SEC. 4. Any person violating any of the provisions of this ordinance, shall, upon conviction thereof, be imprisoned sixty days or fined the

sum of one hundred dollars in the discretion of the court.

Passed in open session by the council at 7.45 p. m., December 18, 1888. Approved by the mayor December 19, 1888.

J. D. MERRITT,

Acting Clerk.

Jacksonville, Fla.—The following letter has been received from Dr. J. Y. Porter:

JACKSONVILLE, FLA., December 19, 1888.

SIR: Confirming my telegram of last evening stating that there was a case of yellow fever amongst the returned refugees, I have the honor to explain further by saying that Colonel Thomas, treasurer of the Florida Railway and Navigation Company, arrived in town last Saturday morning, and was taken sick Saturday evening. He sent for Dr. Sollace Mitchell on Sunday, and I saw him in consultation with Doctor Mitchell yesterday morning. The case admits of no doubt of diagnosis of yellow fever, having all the characteristic symptoms, besides about 10 per cent. of albumen in the urine. As a matter of medical interest it is somewhat puzzling to find out just where the gentleman contracted the disease. The history of his whereabouts for the past ten days is as follows: He arrived in Tallahassee December the 11th from New York, where he had been for some time; left Tallahasat 8 a. m. on the 13th in a special car that had not been anywhere in the State, and, as I understand, in which he came through from New York in company with an official of the L. & N. Railroad. in Baldwin at 3 p. m. same date, being there only one hour, and not going into any house in the hamlet. From Baldwin, in the same car, he went to Tavares, arrived there at 11 o'clock and left the same night, arriving at Markham at 8 a.m. the next morning, the 14th, leaving at noon the same day; arrived at Sanford 11.30 p. m. of the 14th, and left at 2.55 a.m. of the 15th; arrived at Palatka, where he stayed all night, and arrived at Jacksonville at 9 o'clock a.m. on the morning of As I stated before, he was taken sick on the evening of the The query is, where did he contract the fever? as there had been none reported at any of the places where he is reported to have been during the past ten days. In addition to this case of Colonel Thomas, there is reported a child who came from Starke, Fla., some two or three days ago, and was taken sick the same evening or the morning afterwards with fever, and now has a case of yellow fever. very much fear that there has been yellow fever all through that portion of the peninsula this summer, and I am convinced in this opinion from the statement that I have heard from reliable authority, that some 'suspicious cases of fever occurring at Starke were guarded closely by the inhabitants. Whoever inspects that portion of the State should be acquainted with these facts for his information.

Very truly yours,

JOŠEPH Ý. PORTER, M. D.,

Surgeon in Charge Government Relief Measures, Florida. To Surgeon-General Hamilton.

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MORTALITY TABLE, CITIES OF THE UNITED STATES.

. Cities.		Estimated popula- tion.	from	Deaths from—										
	Week ended.		Total deaths f	Cholera.	Yellow fever.	Small-pox.	Varioloid.	Varicella.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping-
New York, N. Y		1,547,756 1,016,758 805,885 805,885 440,000 431,879 330,000	779 331 339 341 161 137 106					1		7 10 4 8 3 1 5	52 9 2 8 2	48 11 17 19 14 7 4	26 5 6	12 2 8 9
Cincinnati, Ohio New Orleans, La Milwaukee, Wis Kansas City, Mo Rochester, N. Y Denver, Colo	Dec. 22 Dec. 15 Dec. 22 Dec. 22 Dec. 21	255, 139 248, 000 195, 000 180, 000 120, 000 96, 000	93 119 52 28 47 25						1	2 2 3 2	1 1 5 	4 3 4 1 2 13	1	2
Toledo, Ohio Camden, N. J Nashville, Tenn Fall River, Mass Lynn, Mass Manchester, N. H Portland, Me	Dec. 22 Dec. 15	80,000 70,000 65,153 65,000 50,000 41,000	15 15 21 24 17 10							3 1	1	2 2 2		
Galveston, Tex	Dec. 7 Dec. 14 Dec. 15 Dec. 22	40,000 40,000 33,715 33,000 26,000 25,000	10 16 11 10 6 6									2 4		
Newport, R. I. Newton, Mass	Dec. 20 Dec. 22	22,000 21,105 16,000 15,000	7 6 6 5											

JOHN B. HAMILTON,

Supervising Surgeon-General, Marine-Hospital Service.