

appeared by the Water Board's perennial habit of taking a few chemical analyses, and by the natural disappearance of the plants.

Another clear source of the dirty water observed in our bath-tubs lies in the fact that many of the water mains were laid before the practice of coating the insides with tar was in vogue, and that the roughnesses of the surfaces cause vegetable *débris* to collect and to be unevenly distributed.

It needs no elaborate argument from us to prove that the public health is not sufficiently attended to in that city where only the rich can have pure water to drink, and where the temptation to the poor to drink bad rum is increased. Nor shall we endeavor to show that the public morality is low where important public trusts such as the management of water supplies are made subservient to politics.

Beyond this question as applied to Boston, and partly in connection with it, comes the difficult problem of water and sewerage for the State, which can be properly treated only by general laws. Let us hope that such legislation will not be like that of the Butler-fearing Solons, who allowed the shoemakers of Natick, by special enactment, to bathe in Lake Cochituate rather than lose a few votes.

If we are to become so extravagant in the use of water as to require one hundred gallons daily to each individual, there must be either separate supplies, as in every farm house, for drinking and for other purposes, or else water metres must be introduced, as has already been done in other cities.

MEDICAL NOTES.

—The burning of the Ring Theatre, at Vienna gave rise to many important medico-legal investigations respecting the sex and identity of charred corpses, of which Ed. Hofmann and Schultze give a description (*Wiener Med. Blätter*, 1881, No. 50, page 1538). In determining the sex in cases where the external genitals were completely destroyed, the chief point relied upon was the absence or presence of the uterus and ovaries. In ascertaining the approximate age, external appearances were quite unreliable. The union of the epiphysis with the diaphysis of the humerus, which first takes place at twenty-four years of age; the ossification of the ribs, and more especially the ossification of the larynx, which generally begins between the thirtieth and thirty-fifth year, and is completed in the fortieth year, were found to be the best and most easily ascertained data. In women, the state of the ovaries was important; these being smooth in girls and young women, cicatrized in older women. The hair of the head and beard was generally black, and had to be washed before its natural color could be ascertained. The cornea was generally milky and turbid, as if boiled. Often the obsolence of the cornea gave to the iris a deceptive blue appearance. The teeth, though calcined and crumbled, were, nevertheless, serviceable in determining the age. The nails, too, in some cases, served for identification. In a large num-

ber of cases the blood was of a florid color; and this may have been due to the inhalation of carbonic oxide gas. — *London Med. Record*.

—Martin P. Avery, who for some time past has been exhibited as a "living skeleton" at Bunnell's Museum on Broadway, died on the 16th of July. He was forty-six years of age, and was born in Chenango County, New York, where he was engaged in the grocery business until eight years ago, when his health failed him. He was a man of small stature, being little more than five feet high, and weighed only about one hundred and fifteen pounds when in good health. He complained of dyspeptic symptoms, and the small amount of food he could retain did not seem to be properly assimilated, so that he rapidly lost flesh, and being unable to attend to his usual avocations he finally set up as a "curiosity" in order to gain a livelihood. From the account of the medical man who was called in to attend him, it would seem not to have been a case of true progressive muscular atrophy, but rather of exhaustion from want of nourishment. There was no intestinal digestion whatever, and his physician attributed this to failure of the pancreatic secretion or an entire obliteration of the thoracic duct, or both. No fatty matter was absorbed into the system, and the result was slow starvation. Unfortunately no autopsy was held in the case.

—A valued contributor sends us the following transcription from a tombstone in the Charter Street burying-ground, Salem:—

HERE LYETH BVRIED
 y BODY OF
 EDWARD MOULD
 CHYRURGIAN AGED
 D
 58 YEARS DECEASE
 y 5 OF NOUEMBER
 1688.

Miscellany.

A CASE OF TRAUMATIC TETANUS.

BY F. B. FULLER, M. D., PAWTUCKET, R. I.

R. M., a somewhat delicate boy, nearly eleven years of age, received a wound in the hand from the explosion of a blank cartridge in a toy pistol, July 5th. The wound seemed insignificant, but after two or three days some swelling and pain occurred in it, and poultices were applied for two or three days.

On the sixth day the wound bled moderately but was not tender or painful.

On the seventh day the boy complained of stiffness of the neck and jaws, which made it somewhat difficult for him to eat his dinner. These symptoms increased, and at seven P. M. I saw him for the first time; no physician had attended the wound.

The boy was found sitting in a noticeably erect position. He could bend his neck and back, but at once resumed the rigidly erect position. His jaws could be separated one inch. Liquids could be swallowed easily, but mastication was difficult. His pulse was 90; temperature normal.

The wound, situated in the palm, at the junction of the second and third fingers, was small. It had an unhealthy appearance, edges ragged, granulations gray and flabby, and a bloody serum escaped on a slight manipulation. It was not tender or painful. The tissues around it were somewhat œdematous. There was no sinus to be found.

Large doses of bromide of potash were given. The boy slept well until four A. M. of the next day, when he awoke with a spasm, in which the tongue was slightly bitten. Opisthotonos was considerable, and the jaws could be separated but one half of an inch.

At seven A. M. his pulse was 120; temperature 98° F.; respiration 22. During the day he steadily grew worse. The jaws remained separable only one half inch. The opisthotonos increased. Pain was complained of in the back. The spasms increased in frequency, and toward the last occurred every few minutes. He remained in a doze between them, but the least disturbance would bring them on.

The pulse increased in frequency and grew feeble. At five P. M. it was 160, and after that it could not be accurately counted. The pupils dilated only during the spasms. There was profuse sweating.

His temperature began to increase at about two P. M., and when he died, at eight P. M., it was 108.1° F. Death seemed to be from exhaustion. He could swallow until a short time before death, and no froth appeared in the mouth.

Wine and chloral hydrate were given in moderately large doses during the earlier part of the day, and at four P. M., at the suggestion of Dr. L. Morton, who saw the patient in consultation, physostigma was administered.

The fluid extract of physostigma, made by H. T. Thayer, Cambridgeport, was the only form in which the drug could be obtained, and that was given subcutaneously three times, at intervals of half an hour, in doses of five minims, ten minims, and twenty minims. No effect was obtained, and its administration was stopped on account of the evident hopelessness of the case.

DEATH UNDER ETHER.

THE following account of a case of death under ether, administered by Ormsby's inhaler, was written by Mr. Lawson Tait, of Birmingham, to the *British Medical Journal*:—

"A patient, aged forty-five, was sent to me from Liverpool with a large abdominal tumor, for which she was very anxious to have an operation performed. She was extremely anæmic and feeble, and at first sight it appeared to me perfectly hopeless to attempt anything. Rest and care in the hospital so far improved her that I agreed to her urgent request to attempt either the removal of the tumor, which was clearly uterine, or of the uterine appendages. At nine A. M., on June 26th, she was put under the influence of ether by my assistant, Mr. Raffles Harmar. The ether used was supplied by May and Baker, of London, and is described as 'absolute anhydrous methylated sulphurous ether, .717.' Less than half an ounce was put on the sponge of the inhaler, and the instrument was placed over the patient's face, with the air-valve open. It is difficult, under such circumstances, to give an accurate statement of time and the sequence of events, but I think the air-valve was kept open

about three minutes, and was certainly not closed more than two minutes before I noticed that the pulse of the right wrist, which I was observing, was gone. Dr. Burnie, of Nottingham, was observing the pulse of the left wrist, and, in answer to my remark, stated that the pulse could be felt in the wrist on his side. The breathing was perfectly regular and deep. I lifted an eyelid, and saw the peculiarly dilated pupil which I have seen once before, and which meant death. Dr. Burnie now said the pulse was gone, yet breathing was still going on. The inhaler was immediately removed, and the breathing was assisted. It rapidly failed, however, and in spite of the inversion of the patient and the continuation of artificial respiration, we got nothing more from the patient than one groan. Death took place at the heart at least one minute before respiration was interfered with. No incision had been made. Dr. Saundby made a careful post-mortem examination, and reports that the tumor was uterine, and that the chief feature was the remarkably small size of the heart. It weighed only four ounces, and Dr. Saundby says: 'I have never seen so small a heart in an adult.' The right side was filled with clot, and the left side was empty. The muscular tissue of the organ was somewhat granular, but this may have been due, Dr. Saundby thinks, to post-mortem change. The right kidney had some cysts, and there was some puckering of the left. The capsules were a little adherent, and the surfaces smooth, rather pale, and the cortices narrow. Nothing else of note was observed. At the time of the death I regarded it as one of asphyxia, due to the inhaler, and the condition of the heart confirms, it seems to me, this view. Until three weeks before this death I had for years used ether dropped outside a single layer of a towel, spread over the patient's face. I had a strong prejudice against the use of an inhaler, by which the patient breathed over and over again the same volume of ether and air. That such a plan may be safe in the great majority of cases may be true, that it saves both time and ether cannot be denied, but that it will prove unsafe in such an exceptional case as this was, I think, is quite evident. My conclusion is that as no economy of time or ether will compensate for such a disaster, I shall revert to the use of the towel, and certainly shall never again employ any inhaler in which the same fluid is re-breathed."

CORRECTION.

MR. EDITOR,—Will you please make the following correction. In the transactions of the Boston Society for Medical Observation, published in the *JOURNAL* of July 13th, I am reported as relating a case of menstruation, occurring at the age of eighty. What I did say was that the woman died at eighty, at which time her youngest child was fifteen years old. This would make her sixty-five at her last pregnancy, up to which event she was known to have menstruated regularly. Yours truly,
FRANK WELLS.

Boston, July 29, 1882.

SCIATICA.

IN a clinical lecture on sciatica, Mr. Jonathan Hutchinson¹ says, "In nineteen cases out of twenty in which the diagnosis of 'sciatica' is suggested, there is no af-

¹ *Medical Times and Gazette*.

fection of the sciatic nerve whatever. They are simply cases of arthritic disease of the hip in one or other of its various forms, acute gout, chronic gout, rheumatic gout, subacute rheumatism, or chronic senile rheumatism. Both by the public and the profession these cases are constantly called 'sciatica.' Our work-house infirmaries are full of chronic cases under that name, and I speak advisedly when I say I feel sure that they are almost all examples of *morbus coxæ senilis*. Of the cases of 'sciatica' which are not hip-joint rheumatism some are probably affections of the fascia or peri-

osteum near to the hip; a minority are possibly affections of the sciatic nerve itself. In these latter it is the sheath of the nerve which becomes painful. The pain may be darting or may radiate, but it does not pass down the nerve-tubules or in any way make the patient conscious of their course. The diagnosis of true sciatica is to be based upon the discovery of tenderness restricted to the trunk of the nerve, and involving a considerable part of its course. Examples of this are decidedly rare, and their recognition without risk of error is a matter of great difficulty.

REPORTED MORTALITY FOR THE WEEK ENDING JULY 22, 1882.

Cities.	Population by Census of 1880.	Reported Deaths in each.	Deaths under Five Years.	Percentage of Deaths from				
				The Principal "Zymotic" Diseases.	Lung Diseases.	Diarrhoeal Diseases.	Diphtheria and Croup.	Whooping-Cough.
New York.....	1,206,590	1016	638	47.04	5.12	36.49	1.97	2.26
Philadelphia.....	846,984	495	274	7.67	—	—	3.64	—
Brooklyn.....	566,689	—	—	—	—	—	—	—
Chicago.....	503,304	281	178	45.57	4.98	30.97	3.21	1.42
Boston.....	362,535	174	83	31.05	5.75	27.03	.57	1.15
St. Louis.....	350,522	—	—	—	—	—	—	—
Baltimore.....	332,190	216	112	41.21	2.32	29.17	4.17	1.85
Cincinnati.....	255,708	—	—	—	—	—	—	—
New Orleans.....	216,140	—	—	—	—	—	—	—
District of Columbia.....	177,638	80	42	40.00	3.75	34.00	—	—
Pittsburgh.....	156,381	115	73	49.56	3.47	41.74	.87	2.58
Buffalo.....	155,137	74	50	46.45	4.05	17.55	4.05	2.70
Milwaukee.....	115,578	32	16	12.50	9.38	—	6.25	—
Providence.....	104,857	50	25	32.00	4.00	30.00	—	2.00
New Haven.....	62,882	39	25	12.82	2.56	2.56	4.13	—
Charleston.....	49,999	38	18	15.79	2.63	5.26	5.26	2.63
Nashville.....	43,461	26	13	26.95	3.85	11.55	—	—
Lowell.....	59,485	26	17	34.65	—	30.80	—	7.68
Worcester.....	58,295	32	24	71.88	6.25	59.38	—	6.25
Cambridge.....	52,740	16	8	12.50	18.75	6.25	6.25	—
Fall River.....	49,006	31	19	38.70	—	25.80	6.45	—
Lawrence.....	39,178	14	7	35.70	7.14	28.56	—	—
Lynn.....	38,284	13	4	22.07	7.69	7.69	—	—
Springfield.....	33,340	10	3	30.00	—	20.00	—	—
Salem.....	27,598	6	4	33.33	—	16.66	—	16.66
New Bedford.....	26,875	7	2	14.28	—	—	—	—
Somerville.....	24,985	7	3	—	—	—	—	—
Holyoke.....	21,851	22	17	77.27	—	77.27	—	—
Chelsea.....	21,785	14	8	7.14	—	—	—	—
Taunton.....	21,213	3	1	—	—	—	—	—
Gloucester.....	19,329	5	2	—	—	—	—	—
Haverhill.....	18,475	6	1	—	—	—	—	—
Newton.....	16,995	—	—	—	—	—	—	—
Brockton.....	13,608	3	1	3.33	—	—	3.33	—
Newburyport.....	13,537	1	0	—	—	—	—	—
Fitchburg.....	12,405	—	—	—	—	—	—	—
Malden.....	12,017	6	4	16.66	—	16.66	—	—
Twenty-one Massachusetts towns..	158,765	37	11	18.91	8.40	2.70	8.40	—

Deaths reported 2895 (no reports from Brooklyn, St. Louis, Cincinnati, and New Orleans): 1683 under five years of age: principal "zymotic" diseases (small-pox, measles, diphtheria and croup, diarrhoeal diseases, whooping-cough, erysipelas, and fevers) 1028, consumption 303, lung diseases 108, diarrhoeal diseases 741, diphtheria and croup 72, whooping-cough 44, scarlet fever 38, measles 33, typhoid fever 32, cerebro-spinal meningitis 24, malarial fevers 20, small-pox 14, puerperal fever 10. From scarlet fever, New York 16, Philadelphia six, Chicago five, Buffalo three, Lynn two, Boston, Baltimore, District of Columbia, New Haven, Worcester, and Springfield one each. From measles, New York 19, Chicago five, Baltimore four, Pittsburgh two, Philadelphia, Buffalo, and Worcester one each. From typhoid fever, New York and Philadelphia seven each, Chicago, District of Columbia, and Pittsburgh three each, Boston and Baltimore two each, Nashville, Fall River, Lawrence, Springfield, and Chelsea one each. From cerebro-spinal meningitis, New York eight, Chicago three, Buffalo and Milwaukee two each, Phila-

delphia, Baltimore, Lowell, Worcester, Fall River, New Bedford, and Chicopee each one. From malarial fever, New York 14, Baltimore two, Chicago, New Haven, Charleston, and Nashville one each. From small-pox, Chicago six, Philadelphia four, Baltimore three, Buffalo one. From puerperal fever, Chicago five, Buffalo two, Philadelphia, Boston, and Chicopee one each.

Thirty-three cases of small-pox were reported in Baltimore, Buffalo two, Pittsburgh one; typhoid fever 10, scarlet fever five, diphtheria six, in Boston; diphtheria five and scarlet fever five, in Milwaukee.

In 40 cities and towns of Massachusetts, with a population of 1,072,901 (population of the State 1,783,086), the total death-rate for the week was 21,— against 19.87 and 16.61 for the previous two weeks.

For the week ending July 1st, in 173 German cities and towns, with an estimated population of 8,509,488, the death-rate was 25.5. Deaths reported 4167: under five 2233; pul-