in silt may last for thousands of years. Only when brought into the open air again does the process of decay go on with ordinary rapidity.

It is no light thing for any observer to feel obliged to differ from Dr. Newberry concerning the interpretation of facts in the field. It has been my fortune during the last three years to traverse regions previously trodden by him in New Mexico, Arizona, California, and Oregon, and I have left them with a profound admiration for the sagacity and the wonderful accuracy, rapidity, and penetration with which he mastered the facts. This, I believe, is the only instance in which I have been led to a conclusion differing in any important respect from his.

C. E. DUTTON.

THE HEALTH OF NEW YORK DURING DECEMBER.

THE department of health of the city of New York estimated that the population of the city on Dec. 1 was 1,457,356, or nearly one and one-half millions of inhabitants. Of this number, 3,502 died during the month. This latter statement is not strictly accurate, as in it no account is taken of the natural increase in the population, which, over and above those who die during the month, is not far from 3,300, or more than 100 each day. As compared with November, there were 426 more deaths in December. The greatest mortality on any one day was on the 6th, when 144 persons died. The deaths due to diarrhoeal disease were but 65, the smallest number since the month of April. Of children under five years of age, there were 1,531 deaths, 241 more than in the preceding month. Consumption caused 478 deaths, a slight increase over November; diphtheria, 218 deaths, 30 more than in the previous month; and scarlet-fever, 23 deaths, the identical number of deaths which the November records charge to that disease. As will be seen by a glance at the chart, measles figured very prominently among the mortality factors, causing 271 deaths, or more than scarlet-fever and diphtheria together. During the month of November there were 166 deaths due to measles.

The highest temperature of the month was 55° F., on the 24th at 10 P.M. This is not so high by five degrees as the corresponding month in 1878, which was the lowest maximum for the decade; the average for the ten years being 66.2° F. The minimum reached by the mercury was 13° F., on the 5th at 6 A.M., and again on the 17th at 8 A.M. During no December since 1877 has the thermometer been so low, while the average for the decade is 20.8° F. It will thus be seen that December, 1886, was an unusually cold month as compared with the corresponding month for ten years past. The amount of rainfall was 2.79 inches, including 10¼ inches of snow, 5¼ of which fell in one day, the 5th. During December of 1885, snow fell on but one day, and then in such small quantity as to make its measurement impossible. In the previous year, 10⅝ inches of snow fell in December, and in 1884 the amount was 22½ inches. The average December rainfall for the ten years commencing 1877 was 3.37 inches.

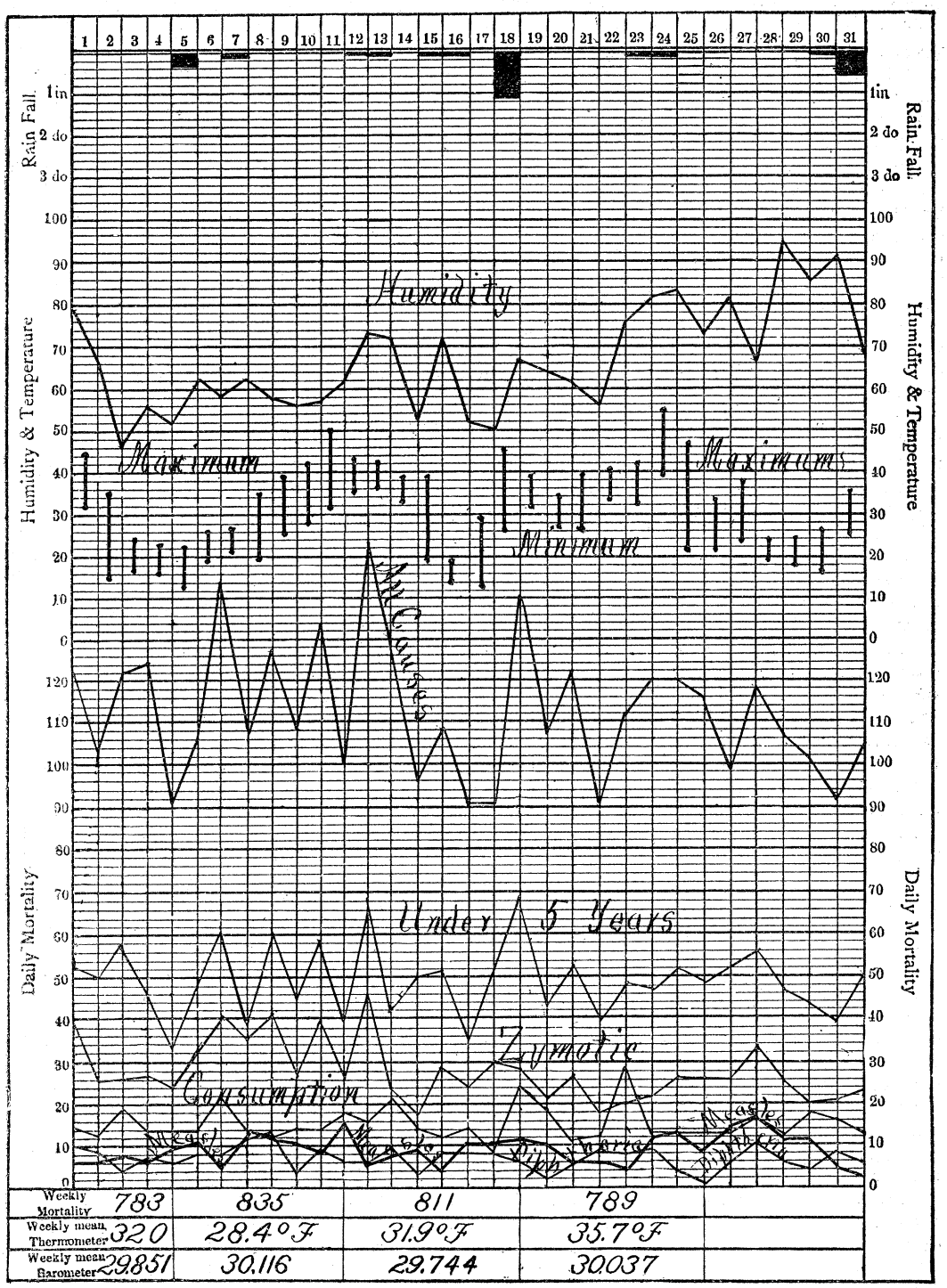
The following tables are of interest as showing the total mortality during the year ending Dec. 31, 1886, as compared with 1885: —

Deaths in New York for 1885 *and* 1886.

	1885.	1886.
Under 5	15,267	16,121
Zymotic	9,100	9,660
Scarlatina	559	371
Measles	736	663
Diphtheria	1,325	1,727
Typhoid	294	325
Diarrhoeal	3,426	3,494
Phthisis pulmonalis	5,196	5,477
Total	35,682	37,351

1886. DEATHS FROM	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Scarlatina	49	43	42	49	44	29	25	15	11	18	23	23
Measles	5	2	8	10	17	26	58	36	21	48	166	271

Scarlet-fever caused fewer deaths in the former than in the latter, while diphtheria and typhoid-fever have been more fatal. Measles has of late excited a good deal of public alarm, and justly so, as shown by the table. While in January it caused but 5 deaths, decreasing to 2 in February, and not notably increasing until the summer, when November set in, the mortality suddenly rose to 166, and continued its upward course in December, carrying off 271 persons. The total mortality of the year was less than in 1885, but more than one-third of it took place in the month of December, and more than two-thirds in the two months of November and December. Consumption (phthisis pulmonalis) is, as usual, at the head of the column of the causes of death. The researches of Koch and others, which have


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Rain Fall.
1in
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Humidity & Temperature
Daily Mortality
Humidity
Maximum
Minimum
Maximums
Minimums
Under 5 Years
Zymotic
Consumption
Measles
Diarrhœa
Weekly Mortality 783 835 811 789
Weekly mean Thermometer 32.0 28.4°F 31.9°F 35.7°F
Weekly mean Barometer 29.851 30.116 29.744 30.037

cleared up many obscure points in the causation of this disease, have not as yet shown us how to materially reduce the number of victims who are annually claimed by it. That more than five thousand persons annually die in a single city from one disease is a sad commentary on sanitary science, and yet the best of minds are at work to solve the problem of the measures which must be adopted to diminish its ravages. That three thousand and more individuals, mostly children, died from diarrhoeal diseases, does not surprise one who is familiar with the intense heat of our midsummer; and in great measure this is largely beyond control. It is true, something may be done to reduce this mortality by visiting the poor sick and prescribing for them, and by giving them opportunities to breathe the fresh air of the country and the sea; but, when all has been done that can be, diarrhoeal diseases will still carry off the little ones by the hundreds and thousands, if the temperature and the humidity are favorable for their development. Diphtheria, which was unknown in New York until the year 1852, caused 1,727 deaths in 1886, and has, ever since its appearance, figured prominently in the mortality returns, its origin unknown, and its treatment not understood even by the best of physicians, — a disease dreaded by the laity and the profession alike in all parts of the world where it has obtained a home. It should, however, be constantly borne in mind, that although this class of disease cannot be eradicated, still, if all restraint were removed, their mortality would probably increase tenfold. In view of this, the department of health, whose function it is to keep watch of the localities in which these diseases do most abound, should receive the hearty co-operation of every member of the community, and be furnished by the authorities with ample means to carry on its beneficial work.

PARIS LETTER.

AT yesterday's meeting of the Academy of medicine, Professor Grancher read a paper on the case of the man Réveillac, who died of hydrophobia after preventive inoculation, in which he corrected some erroneous statements made by Professor Peter at a previous meeting [see p. 96]. It appears that Réveillac submitted to only nineteen operations instead of thirty-six, as had been stated, and the treatment was much milder than in more serious cases. Moreover, the first information received at the Pasteur laboratory, of the unfortunate man's death, was from M. Peter's paper at the academy.

According to Professor Béclard, dean of the medical school, there are at present 108 women studying medicine in Paris. Of these, 83 are Russian, while only 7 are natives of France. The total number of female students would be much larger were it not for the necessarily stringent rules as to admission. Two women are among the present competitors for posts as assistants in the hospitals, of whom one, Miss Klumke, will doubtless succeed, much to the discomfiture of her male competitors. She is one of Vulpian's students, and has already published many interesting memoirs on neurological subjects.

Telephonic communication between Paris and Brussels will shortly be established; recent experiments between those cities, with wires of bronze instead of iron, having given excellent results. The distance is 330 kilometres, and the same wires will be used for both telegraphic and telephonic purposes, as it has been demonstrated that one wire can be used successfully for the simultaneous transmission of both kinds of despatches.

At a recent meeting of the Biological society, M. Laborde, director of the physiological laboratory of the medical school, read a paper on the use of water in fasting experiments. It is known that Succi and Merlatti drank water freely during their long fasts, and the public was divided in opinion as to the effects of the water. M. Laborde has ascertained by experimental tests that water is of great value in sustaining life during prolonged fasts. Two dogs, in good health, of the same age and breed, each weighing 15½ kilograms, were selected, one of which was entirely deprived of both food and drink, the other being given only a litre of water daily. Dog No. 1, that deprived of both food and water, died on the twentieth day, after having lost 7½ kilograms in weight. The other dog was well and lively on the fortieth day, though it had lost nearly 8 kilograms. It would undoubtedly have been able to live still longer on its water diet; but after its 40-day fast it was treated to a good meal, when, without apparent ill effects, it disposed of 1,200 grams of soup and 1 kilogram of meat. The dog is now doing well.

Two or three new books deserve notice. One is a translation, by Dr. H. de Varigny, of Preyer's 'Die Seele des Kindes,' a very interesting work, dealing with its subject in an entirely new and thoroughly scientific manner. Mr. Preyer is by training a physiologist, and has made a great many interesting physiological observations concerning children. It may be remarked that a French translation of another book of his, 'The physiology of the embryo,' to which the first-mentioned work is in many respects a sequel, will soon be brought out by the same publisher, F. Alcan. Preyer's books are very valuable, and it