WEATHER CONDITIONS AT THE SHARON SANATORIUM.

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THESE observations were taken at the Sharon Sanatorium, an institution for the treatment of incipient pulmonary tuberculosis. It is situated about eighteen miles from Boston at an elevation of some 250 feet above the sea. This report is not intended to prove that the weather conditions at the Sanatorium are ideal, but they may be taken in connection with the results of treatment of tuberculosis at this institution, as shown in the annual reports and in various papers by Dr. Bowditch, to indicate how much may be accomplished in a climate not naturally favored, provided the patients are given the right sort of regimen.

A record of the amount of sunshine has been kept for three years. The data were collected for half that time by the nurses at the Sanatorium, and for the rest of the time by the author. The fact that there has been but little variation in the amount recorded in the whole time argues something for the method of making the data, by personal observation. There has been an average of 168 days each year when the sun shone all day, and 85 days when there was no sun. The other 112 days of the year had sun for one fourth of the time or longer, and these various fractions of sunny days have amounted on an average to the equivalent of 65 whole days of sunshine per year. These added to the 168 days already mentioned would make an average of 223 sunny days each year. Such a grouping seems fair since many of the days sunny only in part are really as pleasant as those on which the sun shines all the time. How the amount of sun was distributed each year is shown by the following table:

	Sun all day.	Total sum of sunny days.	Per cent of sunny days.	Days entirely without sun.
1902	163	224	61	86
1903	172	221	62	87
1904	170	224	61	83

The amount of sun does not vary in different months as much as might be expected. The average by months for the three years follows:

Month.	Total amount of sun.	Per cent.	Days entirely without sun.
Jan.	18	58	9
Feb.	18	64	8
March	17	55	13
April	18.5	62	7
May	22	71.4	4
June	18.5	62	7
July	20	64.5	4
Aug.	18.5	60.2	6
Sept.	20	66.6	4
Oct.	17.8	57.5	9
Nov.	18.5	62	7
Dec.	15.7	50.8	9

About a year and a half ago maximum and minimum thermometers and a rain gauge were set up. A sling psychrometer was also bought. This instrument consists of a wet and a dry

bulb thermometer from the reading of which may be computed, with the aid of tables furnished by the government, the vapor pressure, relative humidity and temperature of the dew point. Records have been taken once a day, as near 8 A.M. as possible.

The average mean temperature in the year and a half has been 46.5 degrees. The highest record was in July, 1903, when 94 was reached. Only three times has the thermometer registered above 90°. The lowest temperature was 14° below zero.

The relative humidity has been high as one would expect from the nearness to the New England coast. It has been above 90° about six times each month. It rarely goes below 35%, and averages 73%. There has been but slight differences in different months. The absolute humidity has not been worked out.

The rainfall was 41.7 inches for 1904 and 16 inches for the last six months of 1903. It is to be noted that rarely is there less than 2 inches in a month. Because of the gravelly nature of the soil surface water is quickly taken up. How the temperature, humidity and precipitation have varied by months is shown by the following table:

Month.	Highest temp.	Lowest temp.	Average mean temp.	Av. relative humidity.	Precipitation.
1903.					
July	94	49	70		2.52
Aug.	84	44	62	79	3.49
Sept.	87	35	62	78	1.27
Oct.	75	22	51	79	4.26
Nov.	70	5	37	76	1.32
Dec.	53	—8	25	71	3.25
1904					
Jan.	46	—14	12	78	4.60
Feb.	49	—7	20	72	3
Mar.	68	0	32	66	3
April	72	12	43	68	8.62
May	85	32	58	65	2.66
June	92	35	61	73	1.97
July	88	43	72	79	2.51
Aug.	88	45	66	74	2.35
Sept.	85	27	60	77	6.22
Oct.	79	18	48	73	2.68
Nov.	58	8	32	74	1.39
Dec.	52	0	22	67	2.71

No record has been made of the direction or velocity of the wind, but in general all west winds are fair and east winds bring foul weather. Sudden changes are frequent, but the harshness of the east wind is not felt so keenly as in Boston because of the intervention of the Blue Hill of Milton. The Sanatorium is so well protected by woods that there is seldom any hardship to patients from winter winds.

A SUGGESTION FOR A PRACTICAL APPARATUS FOR USE IN INTRA-THORACIC OPERATIONS.*

BY FRED T. MURPHY, M.D., BOSTON.

SINCE the field of intra-thoracic surgery seems to offer so great opportunities for work, and since with a suitable apparatus all danger of collapse of the lungs can be eliminated, I present the

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