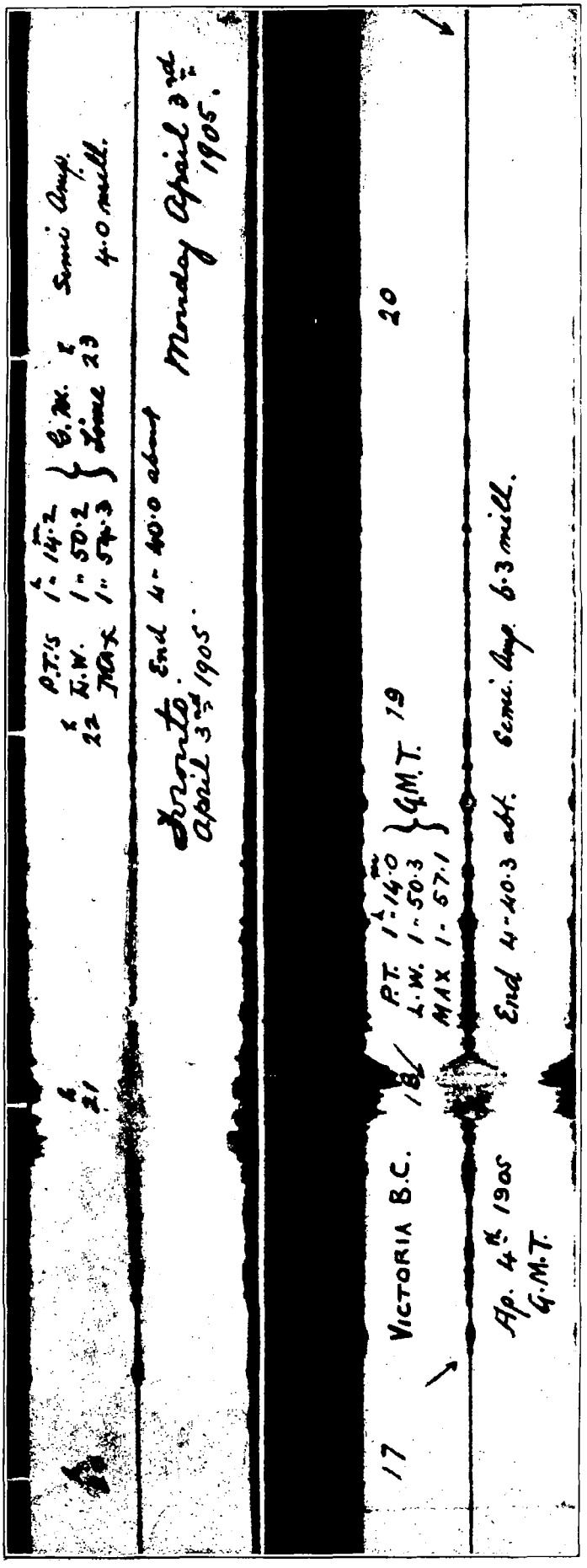

TABLE 2.—*Register from Victoria, B. C.*

Scale value—one millimeter of displacement of outer end of boom = a tilt of 0.76″.

No.	Date, 1905.	P. T. Commence.		L. W. Commence.		Max.		End.		Max. Amplitude.	Duration.		Remarks.
		h.	m.	h.	m.	h.	m.	h.	m.	mm.	h.	m.	
583	April 4	1	14.0	1	50.3	1	57.1	4	40.3	6.3	3	26.3	Large, began abruptly, India.
584	April 12	3	3.0	.....		.....		3	9.0	0.1	0	6.0	Brief thickening.
585	April 16	17	30.8	.....		.....		17	40.8	0.1	0	10.0	Slight thickenings.
586	April 19	12	44.6	.....		12	56.0	14	10.5	0.15	1	25.9	Thickenings, quiet intervals.
587	April 23	23	22.6	.....		.....		23	32.0	0.15	0	9.4	Thickenings.
588	April 24	24	46.3	.....		.....		0	52.3	0.10	0	6.0	Very slight thickening.
589	April 22	13	0.4	.....		13	9.4	13	18.4	0.4	0	18.0	Marked thickening.
590	April 26	6	4.4	.....		.....		6	8.4	0.1	0	4.0	By slight thickening.
591	...do	21	55.0	.....		.....		23	40.0	0.1	1	45.0	Brief thickening at intervals.
592	May 9	6	58.6	.....		7	2.6	7	42.6	0.55	0	44.0	Very small, southern Mexico.
593	May 11	17	23.4	.....		.....		18	28.4	0.1	1	5.0	Extended and minute thickenings.

SUPPLYING MOISTURE IN CONNECTION WITH ARTIFICIAL HEATING.

By Mr. G. A. LOVELAND, Section Director.

In the report for April, of the Nebraska Climate and Crop Service, Mr. G. A. Loveland, Section Director, writes as follows:

In the absence of more accurate data in the matter of the cost of supplying moisture in artificial heating a few estimates have been made from the experience of four winters in supplying moisture to a dwelling house.

In southeastern Nebraska, with a difference between the inside and outside temperature of from 35° to 50° as is usually the case in winter, from 20 to 40 quarts of water should be evaporated daily in a dwelling house containing 14,000 cubic feet. Experience has shown that this does not increase the relative humidity by more than 10 per cent, nor maintain it above 35 per cent in the house, while that of the outside air is from 60 to 75 per cent.

Experience also seems to indicate that the relative humidity inside the house should not exceed 40 per cent at the most and probably should not exceed 35 per cent in an ordinary dwelling house in winter, else the condensation on the windows will be sufficiently great to be very troublesome. However, the increase of 10 per cent makes a material difference in the feeling of the air. Double windows throughout the house would probably allow a decidedly greater increase in relative humidity without inconvenience.

To evaporate 20 to 40 quarts of water would require 43,000 to 86,000 units of heat (British thermal units) or a very approximate estimate of 3 to 7 pounds of anthracite coal.

In actual experience the temperature of the room was maintained nearly as high with the added moisture as though it had been dry. Certainly the difference did not exceed 2° on the average. The number of units of heat required to evaporate the 20 quarts of water, 43,000, would be sufficient to raise the temperature of the air in the dwelling house, 14,000 cubic feet, 2° and allow for a complete change of air three and one-half times each hour. This is in excess of the probable number of times such change occurs. The slightly additional expense required to increase the moisture in a room is fully compensated by the improvement in comfort and health.