again in December, but in the winter generally Stratford is the colder of the two by over 10. Through the rest of the year the Stratford curve lies below that of Toronto, the greatest divergence being in March.

Referring to the mean annual variations it is seen that at Stratford the winter, as compared with

the year, generally, is rather colder than at Toronto, and that the spring is later.

To the statement already given elsewhere as to the earlier occurrence than in former years of the epoch of greatest cold, further confirmation is given by the following table shewing the days in which the temperature reaches its highest, lowest, and mean values in the normal annual progression.

TABLE showing for Stratford and Toronto the highest and lowest temperatures in the normal annual curve, with the days at which the temperature attains its extreme and mean values :-

	Minima.		Spring Mean.	Max	ima.	Autumn Mean.		
	Day.	Temp.		Day.	Temp.	Day.		
Toronto, 1841-52,	Feb. 14	230.4	April 19	July 28	660.9			
Toronto, 1859-68		210.2	14 24	" 22	68°.5	" 23		
Stratford. 1861-69	Jan. 75	190.9	" 19	" 15	67° 1	11 20		

The above furnishes further corroborative testimony to the fact of the much earlier occurrence than formerly of the epoch of greatest cold; while, as regards the other principal epochs, it shows that no very material change has taken place.

It is hoped that Mr. Macgregor will continue his investigations, and furnish additional information

for the Year-Book before the time of its next issue.

## SUMMARIES FROM OTHER ONTARIO GRAMMAR SCHOOL METEOROLOGICAL STATIONS.

The following tables, I. to V., are confined to temperature. The numbers contained in them are the averages derived from the observations of at least three years. In the case of some stations, the observations have been continued over more years than those included in the average; but in cousequence of breaks occurring, either because the observations were not taken, or because the records have not reached me. I have been compelled to exclude altogether years so circumstanced. As the averages of fewer years than three are not taken, some stations, owing to the cause above mentioned,

will appear in some tables and be excluded from others.

Referring to table I., and taking the year as a whole, we have an annual temperature on the average of all the stations of 43 35, which is lower than at Toronto for ten years (44 10) by 0.84; of

average of all the stations of 43.35, which is lower than at 1 oronto for ten years (44.19) by 0.84; of these places Hamilton is the warmest, and Pembroke, as might have been anticipated, the coldest. As regards distribution of temperature through the year, July is the warmest month and January the coldest at all the stations. The mean amnual range, or the difference between the warmest and coldest months, is 510° 2 on the average of all stations, or 50° greater than at Toronto. Pembroke has the greatest, and Goderich the least, mean annual range.

July is warmer than August by an average amount 40° 1. At Toronto this excess is 20° 0. January is colder than February by an average difference of 20° 2, or nearly the same as at Toronto. The excess of Iuly above August and the decreasing of January show the Extraory is greatest at Rarie and least

of July above August and the depression of January below February is greatest at Barrie and least at Goderich. In Table II. the elevations and depressions are shewn relatively to their respective annual means. Here also it is seen that at Pembroke the temperature is raised higher and depressed lower than at all other stations, while at Goderich the elevations and depressions are least.

## TABLE I.

MEAN Monthly and Mean Annual Temperatures with the Mean Annual Ranges at certain Grammar' School Stations in Ontario, derived from three or four years.

Stations.	No. of Years.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Mean Annual Range.
	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
Barrie Belleville Goderich Hamilton Pembroke Peterborough Simcoe	4 3 4 3	18.4 23.4 23.3 12.0	21.0 24.2 25.1 13.5	26.9 27.6 29.2 23.3	41.8 39.3 42.5 37.4	51.9 48.5 50.9 51.0	54.2 61.2 64.2 64.1 65.0	71.3 68.4 72.9 70.5	66.6 66.0 67.7 66.7	59.0 59.2 60.3 57.8	46.0 46.2 47.3 42.6	34.8 36.9 37.9 29.8	23.1 21.4 26.0 26.0 12.7 19.3 25.3	43.61 43.92 45.61 40.12	52.9 45.0 49.6 58.5 54.2

## TABLE II.

MEAN annual variations or inequalities of Temperature at the stations named in Table I. :-

J:	an.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
	0	0	0	0	0	0	0	0	0		0	0
Barrie	20.5 22.3 28.1	-19 7 -20.5 -26.6	-16.3 -16.4 -16.8	- 3·1 - 2·7	+ 4.6 + 5.3 + 10.9	+17.3 +18.6 +24.0	-27.7 -24.5 -27.3 -30.4	-23.0 -22.1 -22.1 -26.6	+15.4 +15.3 +14.7 +17.7	+ 2.4 + 2.3 + 1.7 + 2.5	- 8.8 - 7.0 - 7.7 -10.3	-22.2 -17 9 -19.6 -27.4