

quite conspicuous.) The label is then attached to the tree by bending the narrow end over about a side limb. As the tree grows this will expand, and not cut the bark. On this point thin tin plate is better than thick. The label should pass around but once, or it will not grow freely to the increase of growth.

This label is so simple that it can never get out of order, being nothing else than a single strip of tin; and any tin worker will cut them for scrap or refuse plate for about ten or fifteen cents per hundred. We have given them a full trial and know their success:

Grape Culture.

The following is a brief outline of an address on the culture of the grape in Canada, delivered by the President, J. Hurlburt, LL.D., before the Fruit Growers' Association of Upper Canada—a copy of which was asked by the society for publication in the *Canadian Agriculturist*:

THE CLIMATE OF CANADA AS ADAPTED TO THE CULTURE OF THE GRAPE.

Gentlemen,—In the discharge of that part of my duties which enjoins upon the presiding officer of this society "To deliver an address on any subject relating to the objects of the Association," I have selected the one here announced as being of sufficient importance to demand more attention than has been given.

The indifference manifested in most parts of the country to the culture of the grape is to be attributed, no doubt, in part to the impression that the climate of Canada is unpropitious to it, and in part to want of information upon the subject and indifference. Directions as to the best mode of culture are easily obtained. If this society can be the instrument of convincing the people of this country that many varieties of the grape can be grown here with profit, no doubt experiment will be made. Canada, covered with the vine, would appear to Europeans a very fertile country from their present estimation of it. This one fact would be worth volumes of eloquence on our climate, and would do much to attract the tide of immigration to our shores.

ask your attention—

First,—To the temperatures and quantities of rain in the vine-growing countries of Europe compared with large areas in Canada where the conditions of climate are found.

The accompanying table will give the conditions of climate as to temperatures and quantities of rain in the vine-growing countries of the old and new world. In all inland countries, the season is shorter, higher temperatures required than upon the sea coast. While the grape is somewhat exacting in requiring a mean temperature between 63 and 80, no

definite quantities of rain seem absolutely necessary, as it has been found to flourish in localities where there are twenty inches, and in others only one tenth of an inch in summer. In looking over this table it will be found that in the grape-growing regions in America the temperatures are higher and the quantities of rain greater than in Europe. California and New Mexico present, however, exceptions in the almost total absence of rain in spring and summer.

CLIMATES OF THE VINE-GROWING REGIONS.

EUROPE.	LAT.	ALT.	TEMPERATURE.		AMT. RAIN, INCHES.			
			sum.	year.	spring.	summer.	autumn.	year.
Lisbon.....	38.42		70.9	52.6	61.4			
Madeira.....	32.37	120.	71.3	61.9	66.9	6.1	2.3	7.0
Turin, Piedmont.....	45.11	857	71.0	33.5	53.1	8.2	9.0	11.5
Vienna, Lyons in the Valley of the Rhone.....	45.32	300	71.5	38.7	55.3	10.2	9.5	10.4
Bordeaux.....	44.60	31.4	71.1	33.1	57.7	7.3	7.4	10.3
Azores.....	37.60		72.6	37.3	63.6	6.6	3.6	9.2
Vevay, Switzerland.....	46.28	2,500	65.7	55.9	50.5	7.9	10.5	11.1
Mannin, Rhine.....	49.24	258	67.1	33.1	50.3	6.3	8.0	7.4
Dijon, France.....	47.19	740	69.6	35.4	52.9	7.1	7.5	9.3
Châlons, N. E. France.....	48.57	492	66.5	37.1	52.2	5.4	6.2	6.1
Bucharest, Danube.....	44.27	(?)	65.3	47.8	46.8			
As-trachan, Caspian Sea.....	46.21	1,100	75.0	19.2	50.0			
AMERICA.								
Camden, S.C.....	34.15	250	77.0	47.4	62.6	13.6	20.8	9.8
San Antonio, Texas.....	29.25	600	82.2	54.2	69.0	8.0	9.4	6.0
Cincinnati, Ohio.....	39.06	550	73.6	32.9	53.8	11.9	11.2	10.0
Cleveland.....	41.42	625	67.6	30.0	48.1	6.5	5.7	7.7
Ann Arbor, Michigan.....	42.10	750	66.3	32.5	46.4	7.3	11.4	7.6
St. Louis, Missouri.....	38.37	450	76.3	33.4	55.7	12.7	11.0	8.7
Albuquerque, N. M.....	35.13	4,700	73.1	34.7	53.8	0.6	5.6	1.2
Rancho del Chino, Cal.....	34.00	5,600	72.0	34.5	43.3	2.5	0.1	1.6
Hamilton, Canada W.....	43.15	332	71.9			5.87	9.51	8.66
Ancaster, Canada W.....	43.15	617	65.1	25.9	45.0	5.87	9.29	8.66
Toronto.....	43.39	3,104	82.4	34.4	57.7	7.16	9.55	10.33
Montreal.....	45.31	507	71.4	37.4	55.7		11.52	
Quebec.....	46.49	100	69.1	112.8	81.4			

Bordeaux, in the south-west of France, famous for its delicious vines, has a less summer temperature than Montreal in Lower Canada, or Hamilton, at the head of Lake Ontario. Indeed Hamilton and Montreal have higher summer temperatures than most of the vine-growing countries of Europe. Bossingault gives some interesting facts relating to vine culture at Schabzburg in Flanders. The lowest summer temperature was 63° 1', with 311 gallons per acre; the next 66°, and 184 gallons to the acre; the highest was 71°, and 544 gallons; the mean for summer of 67° gave 625 gallons per acre—the highest recorded. (We have a fact analogous to this in the yield of the Indian corn, as