

two main branches, the Magog and the St. Francis, come together at Sherbrooke, and continue to the St. Lawrence as the River St. Francis. From the Lake Memphremagog source to the Lake St. Francis source the distance is about ninety-five miles, and from Richmond to the New Hampshire boundary from fifty to fifty-six miles; these boundaries including a watershed with a total area of about 3,080 square miles.

The country drained by the St. Francis is hilly, and many of the streams have a rapid fall. Numerous heights above sea-level, taken from White's "Altitudes on Canada," are marked on the map, and are sufficient illustration of this feature. On these streams and rivers the water is impounded by dams, whence power is obtained to run saw and grist mills. At Sherbrooke there is a noteworthy example of this, for there the Magog River drops about one hundred feet within the city limits. The Magog, Coaticook, Salmon and other rivers are likewise used for power purposes. There are numerous small ponds and lakes in this area which act as storage reservoirs, and assist materially in maintaining a satisfactory flow during the dry months.

Table 1 gives the total rainfall and snowfall during the year 1902 at the Richmond Station, and the averages for this and certain other stations in the district. The records from which these data are derived are somewhat incomplete and unsatisfactory. It is most unfortunate that the Dominion Government does not place sufficient funds at the disposal of the Meteorological Service as to enable it to secure observers at more numerous stations and to ensure that the observations that are taken will be complete and without any such omissions as those that appear in the Richmond record for 1902. The members of the Can. Soc. of C.E., who are directly interested in hydraulic work, might note that nearly all the meteorological data upon which they rely are obtained for the Government by volunteer observers, and that the department would probably welcome any offers of similar assistance, and be prepared to supply necessary instruments.

Along the north-western margin of the watershed lies the "Stoke Mountain" range, which can be traced from the shore of Lake Memphremagog, north-east, past the city of Sherbrooke, where it is well exposed, and thence to Lake St. Francis. East of Lakes Weedon and Aylmer, it forms a ridge with an elevation of from 500 feet to 600 feet above the level of these lakes. The rocks are