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the average for any time. and snow) egetation, or ilso be made n floods. The area over which this precipitation would be in reach for water power purposes, would embrace all the main land of Canada south of the St. Lawrence, as well as all north of it in the St. Lawrence valley, and so much of the Hudson Bay watershed as can be utilized, or imported by transmission.

As regards the power of the water thus estimated, we must embark in a much more speculative estimate as to the average fall which should be assigned to it for the whole region. We have in the undeveloped districts some scattered meteorological observations to assist us in estimating probable rainfall, and we have also a few barometrical observations giving the height above sea level of summit waters. On lower levels we have more numerons rain gauges, and summit levels ascertained by railway surveys.

For the whole river the total fall may be less than 100 feet, as in the case of the French river which has Lake Nipissing for a mill pond, or rise to 1500 feet or more as at the rivers below Anticosti. In the case of the French river (which is the lower part of a longer stream) we have surveys, and know that its whole fall can be utilized, as would be done if it is made navigable by locks and datas. In the others (where vo surveys have been made) some will be more or less like French river, while at others only a portion of the total fall upon them may be profitably utilized. The most valuable will be those which, like Montmorency, bring all their water with sufficient head to the point where it is worth most. The upper sections of the rivers will be the least valuable, as having less water and being more remote until reached by a new railway, or a transmission wire.

We can therefore only state a hypothetical case especially as to the power to be assigned to the available water. Where the rainfall is known, the proportions which reach the streams have been ascertained, in the construction of resevoirs for water supply and other purposes. The chief difficulty with respect to the quantity of water is the want of rain gauges over so great an extent of unoccupied territory.

Assuming therefore an average annual precipitation of twenty-four inches and taking one-half of this as available for water power, every ten square miles would yield an average of nearly one horse power for every foot of fall. A million square miles (and there is much more) would give nearly 100,000 Horse Power for every foot of fall: As there would be several hundred feet of fall which could be utilized our water power must be immense,—and commensurate with this country in other respects.

The above applies only to the tributaries of the St. Lawrence and the Ottawa, and to the Hudson Bay watershed so far as that may be utilized. The Canadian portion of the water power of the St. Lawrence, from