

in order to have low-tension current available. To favor the findings of the Commission again, however, allow that they referred to power at 1,000 volts when they compiled "Table XVII," vide top of sheet, which reads, "At sub-station, low-tension bus-bars." This, then, would give three losses beside the line loss up to this point, each one of $2\frac{1}{2}$ per cent., or a total for these three items of $7\frac{1}{2}$ per cent. But, as it has been shown, they have only allowed for these three items and the line loss either $8\frac{1}{4}$ or 9 per cent., the latter having been chosen to favor their findings. Now, 9 per cent. less $7\frac{1}{2}$ per cent. only leaves $1\frac{1}{2}$ per cent. loss allowed for the high-voltage transmission line.

The next move is to calculate what would be the cost for copper to transmit 50,000 horse-power at a commencing voltage of 60,000 volts from Niagara to Toronto, a distance, according to the report of the Commission, of 88 miles—Toronto to Hamilton, 42 miles, and Hamilton to Niagara, 46 miles—the line loss being $1\frac{1}{2}$ per cent., the base price of copper in the Canadian market being at present 20 cents or somewhat higher per pound, and one K.W. (one kilowatt) being equal to 1.34 horse-power. Before making the estimate, it is advisable for the reader to turn back to Westinghouse figures, before quoted.

1 K.W.
Four dollars (\$4) multiplied by ——— multiplied
1.34 H.P.

100²
by ——— (power factors—80 per cent. power factor is a high
80²

88²
allowance) multiplied by ——— (distances in miles—instead
60²

of the distance in miles being equal to the voltage in thou-
sands of volts, that is 60 miles, it is 88 miles) multiplied
20 cents 10%

by ——— (price of copper) multiplied by ——— (losses
15 cents 1½%

allowed on line) gives the resulting equation as simply as
it is possible to give it in letter form. Simplified, this

100 10000 7744 20 20
equation becomes $4 \times \frac{100}{134} \times \frac{10000}{6400} \times \frac{7744}{3600} \times \frac{20}{15} \times \frac{20}{3}$ or

\$89,183,711. The cost for copper alone, according to the figures of the Commission, therefore, would be over \$89 per horse-power to be delivered, or \$9,183,711 multiplied by 50,000, that is, \$4,459,185.80 for 50,000 h.p. to be delivered.

But, turning to page 19 of the report before men-
tioned, it will be found that the Commission has stated that the total investment which would be required for copper, steel towers, right of way, transformer stations and equip-
ment, inter-switching devices, etc., would only be \$2,117,978.

Am I to understand, therefore, that the engineer of the Commission has made a mistake in regard to his allowances for losses, or am I to understand that he has made a mis-
take in his calculations?

J. STANLEY RICHMOND.

Wellman House, Wellington, Ont., May 15, 1906.

"THE WEST" ON "THE EAST."

No one who has gone from the Eastern Provinces of Canada to the prairie country or British Columbia can have failed to notice the impatient and contemptuous way in which the Western men generally speak of the business people and the institutions of the East. They rebel at "Eastern" banks, which they say squeeze them; at "Eastern" fire insurance companies, which they say rob them; at "Eastern" capitalists, when that capital's interest goes in part down "East"; at "Eastern" manufacturers, because they dare to make goods which the Western man ought to make for himself, but cannot. And yet these same Western men, unreasoning grumblers as they are in this respect, are delightfully hospitable people to spend a week or two amongst.

A man, recently from the British Islands, writes to us marvelling at this illogical disposition. He dates from Vic-
toria, which is a very English place, and very pretty, but

he hardly seems to like it. "The same feeling exists here," he says, "as in Vancouver, against putting money in Eastern pockets, and the place seems to be characterized by a lot of petty jealousy and small-minded sentiment. Some of the people seem to spend their time grumbling and growling about what other people have not done for them. Why don't they wake up and help themselves, and 'boost' their own good things. It is a pretty but a dull place—even more than typically English. Its commercial drowsiness exceeds that of the English village or the 'great tired young man' of Snobland. To my thinking the city is submerged by shabby gentility. The Yankee, with all his faults, is badly wanted to stir them up, if the place is to become of any commercial importance."

SASKATOON.

It is not for lack of self-reliance that Western towns fail to progress. Saskatoon is no exception to the rule of confidence. For example, we learn from the first number of a new paper, the "Tri-Weekly Capital," published there, that Saskatoon is the "hub of the hard wheat belt, the youngest and most progressive city in Saskatchewan, beautifully situated on the South Saskatchewan River." And, indeed, we believe that this brief reference to its situation is not unwarrantable. All speak of it as beautiful and in-
spiring. An advertisement in the same number goes to the point in an even more trenchant manner. Saskatoon, it tells us, "is the hub, the distributing point, the commercial centre of the world's future bread-basket, where fortunes will be made," etc. . . . And further, "that it is the most advantageously situated of any of the prospective towns of the farthest and last West. In ten years from to-day Saskatoon will be to this country what Kansas City and Chicago are to the Middle West."

But Saskatoon may be proud of itself even from the view, not of what it will do or will be, but of what its citizens have already actually achieved. Three years ago it possessed a scattered population of about one hundred; now it is a city of nearly 5,000, and strangers are arriving from all parts of the world daily. Much of this phenomenal growth is due to the activity of its city council and of its very live Board of Trade. But these are features which usually distinguish Western towns and cities—the unity with which all classes work together for the one aim—the advancement of their own locality. The council, under its energetic mayor, Mr. Clinkskill, is now figuring on putting in waterworks and sewerage, for which the city's situation on an elevation overlooking the banks of the Saskatchewan admirably adapts it. The city's indebtedness at the present time we are told, amounts only to \$24,000, a very small item when it is considered that its assessed valuation for next year is estimated to reach considerably over a million. Electric lighting also is now under consideration, and a plant is likely to be established by the municipality.

Perhaps one of the main factors in the progress of Saskatoon is its admirable position so far as transportation is concerned. Placed on the South Saskatchewan River, it is the divisional point on the Prince Albert line of the C.P.R., and it will be an important point on the C.P.R. branch to Edmonton. Besides this, the Grand Trunk Pacific has already bought the right of way for its main line through the city, and contracts are let for its immediate construction from Portage la Prairie to Saskatoon and on to Edmonton. Finally, we cannot do better than make an extract from the "Capital's" admirable, even if glowing, account of Saskatoon and its prospects:

"Saskatoon is worthy of having its history written. In the generation of its existence it has not been an ideal paradise, free from rivalries, divisions, depressions, and discouragements; it is unexampled in Canada as the arena of great physical and material energy; it is the theatre of great hopes and sanguine anticipations; it has gathered a large population, speaking various languages; it has the character of a busy metropolis, conscious of the fact that it commands the backing of thousands of miles of fertile prairie, the home of coming millions, regarding merit rather than history, and free from fierce distinction of class, rank or creed."