first place, that that \$7 per horsepower includes ob- will not argue with the methods of bookkeeping I solescence, depreciation, or contingencies. Then again, am just pointing out that the evidence presented in it is based on the full capacity of the plant. We do the legislature was not in accordance with the facts. not know exactly what that means but if the plant runs at half capacity due to low water, I would presume that costs would remain the same and the cost per horsepower would be doubled. However, we cut to almost half that of 1933. This was due chiefly the Ottawa Valley Power Company's costs.

Power Company had to pay more for its financing question had not cropped up it could have got money and remember that 60 to 70 percent of the cost of power is due to the cost of money. If you can float cent of the cost of power depends on the cost of 5 percent bonds instead of 6 percent bonds you can money. I am suggesting that with cheaper money decrease your power costs about \$2 per horsepower. Then again, the Ottawa Valley Power Company had a lot of other expenses that the Hydro did not have. For instance, it has to pay taxes to the Quebec government; it has to pay a water rental to the Quebec Streams Commission; and finally, it has to pay the Hydro for the use of its high-tension station. Those figures of \$7 and \$15 are getting closer together.

There is another nigger in the woodpile we were not told about and that is, that power is bought from the Ottawa Valley Power Company at 70 percent load-factor for which it is paid \$15. If, for some reason or other there is low water on the Ottawa and they can only supply 35 percent load-factor power, they only get \$7.50 per horsepower. Figure out the profit on that. And now that company will probably be stuck with half a power plant containing 25 cycle equipment which generates power of use only to Ontario.

Ontario Hydro Buys Well

Returning to this question of contract prices. The Chats Falls plant, due to unusually favourable conditions, was built extremely cheaply. You can gather from that that some of these other power companies are not getting very much change out of the Hydro. I know from experience that Hydro engineers buy very closely and, in fact, lean over backwards in their enthusiasm to get the best bargain for the people of Ontario. Sometimes, if they think they can't buy a thing cheap enough they make it themselves.

Yearly Burden of Contracts

We are told that the burden of these Quebec power contracts will increase every year. We are given the deficits of the Niagara system. I have checked them and they are correct. The first year there was a deficit was in 1932 when there was a deficit of \$2,545,-000. The next year, 1933, there was a deficit of \$4,-237,000 and last year, there was a deficit of \$2,870,000. We were also told in these figures there is no charge for obsolescence or contingencies and no sinking fund on the Chats Falls and DeCew developments and the Hamilton steam plant. There was no charge on the Chats Falls development because it is new and was only put in service during the year 1932 to 33. There is no sinking fund charge on the DeCew development and Hamilton steam plant, for obvious reasons as those funds should be complete by now. But to say these deficit figures contain no charge for obsolescence or contingencies is absolutely incorrect. For the big year 1933, if we look on page 154 of the annual report we will find obsolescence and contingencies renewals and say: "I want to buy an electric refrigerator." and sinking funds which total \$3,637,000. Any private company that year would not have charged such large making preparations for a big sales campaign. I hope sums to obsolescence and contingencies. For renew-

a statement is utter rubbish. I do not believe in the als alone some \$1,628,000 was charged. Although I

Burden Gets Lighter

Now then, please note that the deficit in 1934 was only know the Hydro's costs, but we do not know to increasing revenue and to cheaper money. A few years back the Commission was paying between 5 We do know, for instance, that the Ottawa Valley and 6 percent for its money. Today, if this repudiation for 21/2 percent. Remember, between 60 and 70 perand increasing revenues there would have been no deficit on the Niagara system next year.

And yet we are told, providing the power load does not grow these deficits will get larger. The power load is growing and the Niagara system (if left alone)

is through the worst of its worry.

During the year 1933 when the Niagara system experienced its largest book deficit the Commission's total reserves increased \$3,287,000 and the Niagara reserves alone amounted to \$52,380,000.

After meeting all expenses in respect of operation, including interest, charging up the usual standard depreciation reserve (which amounted to \$1,604,000) and providing \$2,108,000 for the retirement of instalment and sinking fund debentures, the total net shortage for the year for the municipal electric utilities served by the Niagara system amounted to \$652,000. I submit that the Niagara system's financial structure is in a pretty healthy state.

Planned Selling Needed

The only criticism that I have to offer about Tydro is that it does not know anything about selling. This is due to the fact that it always considered itself a supply authority and in past years was always scrambling around to supply the rapid growth. When its load began to fall off it should have jumped in and sold power like all other systems in Canada. However, it is not too late today. There is a tremendous market; there is no need for the Commission to sit back and wait for ordinary automatic growth which comes year by year with new inventions. It should help and assist the retail merchant and also the manufacturer in the sale of domestic appliances and it should encourage industry to turn out better products at less cost by the use of more electricity.

Take the domestic field alone. The average annual consumption per customer in Ontario is 1,558 kilowatt-hours. In Manitoba it is 3,756 kilowatt-hours; the average annual consumption per capita in Ontario s 262 kilowatt-hours, whereas, in Manitoba it is 381 kilowatt-hours. The average cost per kilowatt-hour in Ontario is 1.77 whereas, in Manitoba, it is 1.06. The average domestic bill per year in Ontario is \$27.63. In Manitoba, the average bill per year is \$39.93. What does this mean? It means that in Manitoba, particularly in Winnipeg, the utility systems know how to merchandise. There, you will find a great many more people using electric ranges, electric refrigerators and electric water heaters than you do in Ontario. The fact of the matter is that about 90 percent of the electrical appliances sold to the home have to be really sold. Very few people come in

I understand that the Commission's engineers are (Continued on page 53)

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CANADIAN MINERAL INDUSTRY

Establishes All-time Records for 1934

URING 1934 the Canadian mineral industry established all time records for the value of the gold, platinum metals and nickel outputs and the quantity of copper, lead, zinc and platinum metals produced.

In 1929, at what might be described as the crest of the boom period, Canadian copper production totalled 248,121,000 pounds; in 1932 it was recorded at 247,-679,000 pounds or, compared with 1929, a decrease of less than one percent. In 1934, only two years later, the Canadian production of copper at 364,891,000 pounds represents an increase of over 47 percent above 1932 or the year that might be described as the darkest of the depression. It should be remembered that this record of endurance and progress was attained during a period that witnessed a fall in the price of copper on the New York market of from over 18 cents to 5½ cents, an all time low. It is also interesting to note the radical change in our foreign markets during the years under review. In 1928, 88 percent of Canadian copper went to the United States and only 2½ percent to the United Kingdom; in 1932 only 49 percent was consigned to the United States and 35 percent shipped to the United Kingdom while in 1934, 64 percent went to the Mother Country and only 13 percent to the United States.

Lead

Production of lead in Canada in 1929 totalled 326, 523,000 pounds; in 1932 it had fallen to 255,947,000 pounds, a loss of 21½ percent. In 1934 the high record output of the metal amounted to 346,270,000 pounds or a 35 percent increase over 1932. Prices on the London market for these years ranged from a high in 1929 to 23.24 pounds sterling per long ton to a low of 11.92 in 1932.

The record for zinc production during the depression is equally noteworthy. In 1930, with world trade on a general decline, the Canadian miner produced the then high record of 267,643,000 pounds of zinc. This was followed by a recession, with exceptionall low prices for the metal, to 172,284,000 pounds in 1932, a decrease in the annual output of 351/2 percent. The 1934 output, recorded at 298,580,000 pounds, represents an increase of 73 percent compared with 1932 and constitutes an all time high record for the industry.

The story of nickel through these years is as interesting: from an output of 110,276,000 pounds in 1929 the production fell 721/2 percent to 30,328,000 pounds in 1932 and then within two years realized, in the 1934 quantity of 128,687,000 pounds, not only a new high record but an increase of 324 percent over the production of 1932.

Non-Metallics

The miners or producers of the non-metallic minerals and structural materials have generally weathered the storm in an equally commendable manner. Coal production, after suffering a decline in tonnage of 33 percent from 1929 to 1932, shows in the 1934 output an increase of 171/2 percent over 1932. Asbestos, which had fallen from 306,000 tons in 1929 to 122,977 tons in 1932 has, in the 1934 output, registered a tonnage increase of over 26 percent above that of 1932.

Structural Materials

That the production of structural materials is definitely on the uptrend is evidenced by the 1934 statistics. The combined value of clay products, cement, lime, stone and sand and gravel totalled \$19,233,000, or an increase of 15 percent over 1933. This improvement is better appreciated when it is realized that the value of these materials had fallen from \$58,535,000 in 1929 to \$16,697,000 in 1933, a decrease of 711/2 percent.

A statistical story of mining for 1934 can be ended with nothing better than a few salient facts pertaining to the truly remarkable increase in value of Canadian gold production. In 1930, the last year in which the metal was entirely evaluated at \$20.67, the output in Canada totalled \$43,454,000; in 1934 the production of gold by mines of the Dominion amounted to \$102,-454,000, an increase of 211/2 percent over 1933, or compared with 1930 an increase of 136 percent in four years. While company returns for 1934 are not yet complete, the available statistics relating to Canadian auriferous quartz mining show a total tonnage of ore mined of 7,709,000, an increase of 18 percent over 1933; ore milled in 1934 totalled 7,625,000 tons or 18 percent more than 1933. Mines under development only totalled 215, an increase of 67 percent and producing properties at 111 represents an increase over the preceding year of 28 percent. Salaries and wages paid during 1934 totalled \$25,048,000, an increase of 22 percent as compared with 1933.

The economic importance of primary gold production to the Dominion of Canada may be better appreciated when it is stated that, in the estimate by the Dominion Bureau of Statistics of the balance of International Payments for Canada in 1934, the net value of gold exports was surpassed only by the favorable balance of exports in the entire commodity trade of the Dominion, the favorable balance of \$145,000,000 in the entire commodity trade being raised to 239,200,000 when the balance of gold exports is included. Again the net value of gold exports equalled 41 percent of the net interest and dividend payements to foreign holders of Canadian securities, whether government, municipal or corporation were \$19,200,000 in excess of the Dominion's requirements to meet its capital payments on maturing bonds.

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