## MOBILIZING NIAGARA.

by Charles P. Steinmetz.

The unprecedented and acute shortage of power. which now confronts us and threatens to seriously interfere with the efficient prosecution of the war, again turns our eyes to Niagara, where millions of KW rush uselessly over the cliffs.

At the same time, we must realize that the present situation is neither unexpected nor was it unavoidable. The emergencies of war times have merely made a sudden and acute condition of a situation, which has been coming on for a long time, and would sooner or later have overtaken us.

we thus turn again to a fuller use of Niagara's power, too late indeed to get the fullest benefit of it in our present emergency.

In the discussion of the development of Niagara's power, versus the preservation of the natural beauty of the Falls, two features have to be recognized:

1) The Falls are documed in any case, and sooner or later, with the increasing power demand of modern civilization, and increasing shortness of power, self preservation will force us to use Niagara's power to the fullest extent, that is, let the Falls run dry.

2) It is too late to preserve the natural beauty of the Falls; that could have been done a hundred years ago; but no more now, where there is no place at or around the Falls, where your sense for nature's wild beauty is not offended by the sight of some ugly modern hotel, some tower or steel bridge.

Some fifteen years ago I made a proposition, which, while using the full power of the Falls, would preserve their beauty to the sightseer. At that time, the suggestion was not taken seriously, the demand for the power was not yet as urgent as today, and therefore I repeat it now.

Suppose we permit the complete development of
Niagara's ten million KW, more or less, for electrical purposes, have the Falls run dry, but have at every holiday and
Sunday the power-house shut down, the power consumption reduced
to the minimum possible - say ten percent of the full capacity and then have on Sundays and holidays the Falls running again
in their ancient grandeur. We could thus satisfy the
demands of modern industry, and at the same time satisfy the
lovers of nature. And more than that, we would then see
a sight which can be seen no where in the world; the starting
of the Falls, when on Sunday morning the water first begins
to trickle over the bare cliffs, and then gradually rises and
rises, to the giant falls of old.

As the government controls the Falls, it would be no serious difficulty, probably not even require legislation, to

give the license for the unlimited use of power with the condition, that during Sundays and holidays the power consumption must be reduced to ten percent of the maximum.

In considering the full development of Niagara's power, we must appreciate that some hydraulic engineering work will be required to insure uniformity of the flow of water: for also Niagara is fluctuating in its quantity, with the shifting of the winds on Lake Erie. However, the cost of such a development, per kW, would be insignificant. It probably would mean a movable dam across the Niagara River at Buffalo, to restrict the flow when the Lake is high, open it wide, when the Lake is low.

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