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IMPERIAL WATER POWER BOARD

AN Imperial Water Board should be formed at once, including a representative nominated by each of the overseas Dominions. That is the conclusion that has been reached by the special committee of engineers and scientists which was appointed by the British Government not long ago for the purpose of investigating the power resources of the British Empire. This subject is of such tremendous import to Canada that it is hoped the Dominion Government will take prompt and favorable action upon any invitation extended by the Imperial Government in carrying out the committee's suggestion.

The Canadian Government has already given evidence of its appreciation of the prime importance of a thorough knowledge of our power resources, and of the urgent necessity of their development to meet all the needs of the country. By the creation of the Dominion Power Board, under the chairmanship of the Hon. Arthur Meighen, the government has provided a means for concentrating upon this great problem the experience and considered judgment of the Dominion and Provincial organizations concerned with the administration and the investigation of water power. While the board has but recently been constituted, it has already given evidence of its usefulness and will undoubtedly reach results of lasting benefit to the country.

The creation of an Imperial Water Power Board is essential to British efficiency in successfully competing with other nations and empires in the reconstruction period that will follow Germany's defeat.

ANOTHER ST. LAWRENCE CASE

FOLLOWING the favorable decision by the International Joint Commission on the St. Lawrence Power Company's application for a submerged weir in the St. Lawrence River, another company is applying for permission to build somewhat similar works. The New York & Ontario Power Co. wants to reconstruct the dam used in connection with its Waddington, N.Y., plant.

The company requests the privilege of increasing the flow through the channel between Ogden Island and the American mainland to 30,000 cubic feet per second.

To divert 30,000 c.f.s. through the smaller channel would, according to the Dominion Government engineers, seriously affect the flow in the main channel, lowering the level by about eighteen inches. The application is being considered this week by the International Joint Commission. If any further privileges are granted by the commission, they should be only of a temporary character for war purposes, as in the case of the St. Lawrence Power Company.

GLADSTONE WAS RIGHT

BRITAIN'S grand old man declared, "A Chancellor of the Exchequer is not worth his salt if he is not ready to save candle-ends and cheese-parings in the cause of the country."

Canadians at home are not worth the sacrifices now being made for them at the Front if they are not ready to save everything they earn, over the essential expenditures, to back up the army and make their victory sure.

SEWAGE PURIFICATION BY ACTIVATED SLUDGE PROCESS

(Continued from page 316)

baffle. Unless checked, the blanket will continue to rise until it flows over the outlet weir and will pollute the effluent.

In as much as a depth of 30 ins. provides good facilities for settling activated sludge, shallow basins with large surface areas can handle limited volumes of sludge if combined with a uniform flow of sewage.

Sludge settling to the bottom displaces water that formerly lay there. When the water so displaced is given ample room to rise, the columns of liquid flowing upward escape readily through the openings between the particles of descending sludge.

Under these conditions the suspended matter falls quickly to the bottom and the supernatant liquor remains clear.

But if the volume of water displaced is large and confined in a deep, narrow chamber with perpendicular walls, the rising currents of water do not have such favorable conditions for escaping between the particles of sludge. As a result, the rising columns of water get tangled up with the descending blanket of sludge, work through the blanket slowly and keep the solid particles suspended for long periods of time.

The efficiency of settling activated sludge, then, is not governed as much by the distance which the sludge has to fall as it is by the relation between the area over which the sludge can spread out, the amount of sludge entering in a given time and the velocity at which the mixed liquors enter.