

ERIE AND HURON RAILWAY.

OFFICE OF THE MECHANICAL SUPERINTENDENT.

G. R. JOUGHINS,
MECHANICAL SUPT.

CHATHAM, ONT. March 28 1889

Confidential

Sir William Dawson Bart.
Montreal.

Dear Sir

Having lived in Montreal some years and listened to many of your public lectures is my excuse for troubling you about an idea which I think is rather novel and if useful is of much value.

I don't know anyone in the shipbuilding line or a Professor of Engineering or I should bother them about it.

It is I think well recognized that a large part of the resistance to propelling vessels through the water at a high velocity is the friction of the water on the sides of the vessel. My idea is to interpose a stratum of air between the submerged portion of a vessel and the water, which I think would destroy a large portion of this friction; this could be easily accomplished so far as mechanical difficulties go, in many ways.

May I ask what you think of it, or perhaps you could give me the opinion of one of your Professional friends who has given more attention to theories of shipbuilding. I hope I am not intruding or asking too much.

I have the honor to be

Your obed^t. Servant G. R. Joughins.
Mech. Supt.

ERIE AND HURON RAILWAY.

OFFICE OF THE MECHANICAL SUPERINTENDENT.

G. R. LOUGHINS
MECHANICAL SUBT.

CHATHAM, Ont. March 28 1887

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Mr. William A. Gordon Bart.
Montreal.

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Prof. Loughins

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Yours truly
G. R. Loughins