

ers through a reducing valve so gradually that a large buoy will burn night and day for three months without attention. An ingenious invention in connection with this buoy is an automatic cut-off that withdraws the supply of gas at short intervals, so as to give the effect of an occulting light. This result is secured by alternately filling and emptying a chamber capped with a piece of flexible leather, and owes its success to the extreme simplicity of the mechanism. With this attachment there are three burners, which are extinguished, grouped about a small pilot burner, not affected by the cut off, and which relights the outer jets as often as the gas resumes its flow.

Pintsch gas is largely used for lighting cars. The brilliant lights on the Canada Atlantic trains between here and Montreal are Pintsch gas-lights, the tanks on the cars being supplied from a gas works in Montreal. This gas is also utilized in many small beacon lights.

Many experiments have been tried in maintaining electrically lighted buoys, and a dredged channel entering New York harbour, Gedney channel, is equipped with electrically lighted buoys, but the system has not proved an unqualified success, as any damage to the cable extinguishes all the lights, and the cost of maintenance has been excessive.

A proposition has lately been made to safeguard the River St. Lawrence, between Montreal and Quebec, by a similar system of electrically lighted buoys. Any electrician will tell you how extremely expensive the installation would be, and how precarious the maintenance. The Department sent the proposer of the scheme out on our steam tender this winter, when we were saving our ordinary buoys from the running ice, and I expect, after what he saw there, we shall hear nothing more of that scheme.

We have had many interesting experiences with buoys that have gone adrift from our Atlantic shore. It is nothing unusual to hear of them anywhere out in the open Atlantic. One has come back to us from Ireland, and we have heard of