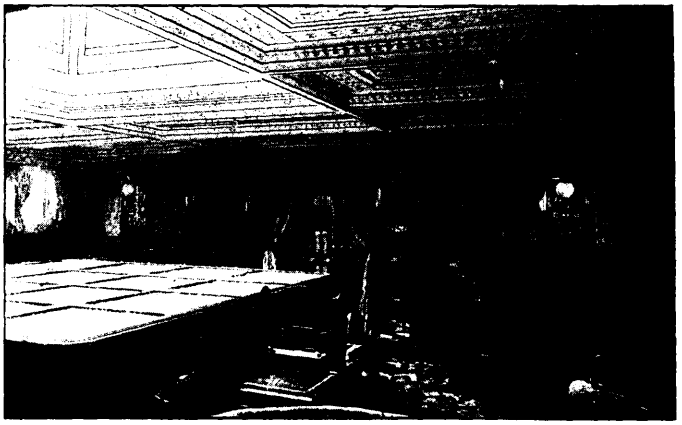
former, but not the latter, which sank in a few minutes. The Cunard steamship *Oregon*, of 7,000 tons, was sunk by a miserable little wooden schooner which struck her in a vital part near the engine-room. Her bulkhead might have saved her, but it was pierced by sliding doors: the grooves were filled with small coal and the doors could not be closed in time.



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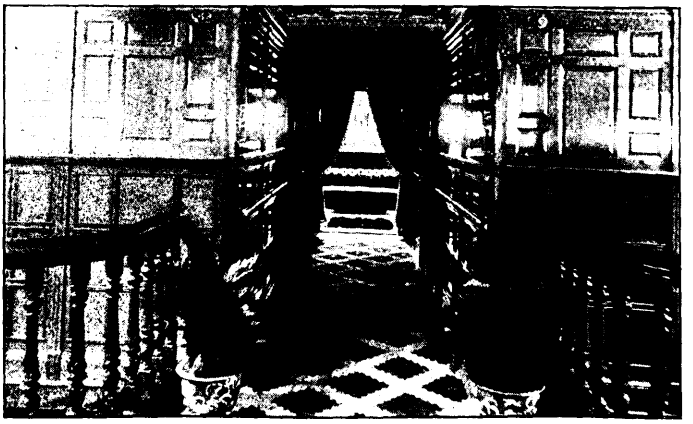
The Canadian Pacific Railway ships have two independent sets of engines and boilers, and have *central longitudinal* bulkheads running from the keels on to the main deck. The effect of this is fourfold: 1st, it cuts the space into halves; 2nd, it strengthens the transverse bulkheads; 3rd, it effectually separates the two sets of engines and boilers; and 4th, it gives the ship greater longitudinal strength. In fact it is possible to divide the whole ship into sections and thus render her unsinkable, without seriously interfering with either the engines, boilers, passengers or cargo. The *Empresses* have eleven bulkheads: six have no doors: the other five have water-tight doors with patent releasing apparatus.

There remains to be considered one other danger, common to all ships, and perhaps the most terrible of all to landsmen—that of fire. The great advantage of an iron ship, and especially of a "twin screw," over a wooden ship, is that the fire can be confined to one section and drowned out with water, or steam from steam pumps or direct from the boilers, without the passengers even being terrified by smoke.

Here it may be well to describe the extraordinary accident which befel the *City of Paris*, which is a "twin screw." She was being driven very hard to make a record; but such an accident is without a parallel, and may not happen again for a century. The



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