

made at Lorain (Ohio)
erred Horse Power

Owners Atlantic Coast SS. Co.

Port belonging to Is Electric

Clv.42.

S. S. "INTERNATIONAL".

This vessel is intended for service in the River Lawrence and on the neighbouring coast.

She was built under special survey for a class 1 "for St. Lawrence River & Coasting service".

Two questions are raised in this case.

1st. that of spare gear.

2nd. that of the method adopted for securing the propeller to the screw shaft.

1st. as to spare gear. No spare gear has been supplied the Cleveland Surveyor states that this was agreed to at New York Office at the time the plans were approved.

The Rules of this Society for ordinary vessels provide for certain spare gear to be supplied. In the Rules which have been proposed for vessels trading in the Great Lakes no spare gear is required, and this position has been adopted for vessels classed for service in the River St. Lawrence. In the case of a vessel classed "for service in Chesapeake Bay" the Committee required spare gear to be supplied.

As this vessel's class will permit her to work in sheltered waters than Chesapeake Bay, it is submitted that spare gear should be required and the New York Surveyors should not have sanctioned its omission.

The other point is the method adopted for securing propeller to the screw shaft.

Along with the First Entry Report the Surveyors forwarded plans of the shafting and it was seen from them that the method of securing the propeller was an unusual one. Trials were made and details of the method have now been completed.

The only method adopted in this country is to bore the end of the propeller conical and to turn the end of the shaft to suit. This permits the propeller to be made a good fit upon the cone of the shaft and to be driven up until it

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takes a hard bearing. In addition a key is fitted half in the shaft and half in the propeller boss, and the propeller is prevented from working back and becoming loose by means of a large nut fitted on the shaft end.

In this case the hole in the boss is bored parallel for its whole length and the shaft is made an easy fit in it. A key is driven between the shaft and boss and a ring is afterwards shrunk on the protruding end of the shaft to prevent the propeller from coming off when going astern.

This method is most unusual and is considered to be unsatisfactory. It is regretted that it had not been submitted before the work was commenced.

It is submitted that the New York Surveyors should be asked to explain

1. Why they did not submit the question of the omission of spare gear when the plans were first approved.
2. Why they approved of the very unusual method of securing the propeller to the shaft without submitting the matter for approval as required by paragraph 2 of Section 3 of the Rules for engines and boilers.
3. Whether in the case of any other vessel classed by the Society built in the United States the propeller has been secured in a similar manner without attention having been drawn to it in the First Entry Report.
4. Has there been any experience in sea going vessels with propellers secured in a similar manner.
5. Any remarks they may have to make on the subject.

In the meantime it is submitted that the question of the classification of the vessel should be deferred.

A.R.J. 3.11.14.
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