

The Bailairgé, Hurly Safety Raft.

The \$20,000.00 Pollok prize competition of Sept. 9th. 1901 for the best life saving apparatus in case of disaster at sea

This competition was instituted for October at the Paris Exhibition of the year 1900, by Anthony Polak, of the United States, who lost a relation by the wreck of the *Buceygue* of the French line of ocean steamers.

The prize is offered for the solution of three problems, to wit:

- 1° To prevent collisions at sea.
- 2° In case of collision, to save the vessel.
- 3° If the vessel must go down, to save the passengers and crew.

Useless to say that the solution of case No. 1 is almost hopeless or beyond human ken except it be by such a mutually repelling force between two vessels as might be brought about by magnetism, or by some system of pneumatic buffers, as of the Westinghouse on railway trains, or of the more powerful action of a superposed series of hydraulic jacks all the way down and in front or ahead of the stem of the vessel which might at least diminish the effect of the shock if not altogether neutralize it, and this I claim as a valuable suggestion and the only way in which the force of impact of one vessel against another can be reduced and rendered powerless, to wit: a series of as many springs of 9 to 10 inches in diam. as there are ft. in the height of the stem of a colliding vessel, the springs enclosed in cylinders sliding into other cylinders confined between the outer side plates of the vessel's stem and separated say by inch thick steel partitions double flanged at each end and riveted to side plates of stem in a way to allow the stem to be as strong as if of a solid beam or part of steel or iron. These according as each spring were of a force of resistance of 20 to 30 tons more or less, their combined effort would be one, according to height of stem, of a thousand tons or more and thus capable of producing the desired result of nullifying the force of impact (see sketch thereof).

A SYSTEM OF STEEL SPRING BUFFERS IN STEM OF VESSEL TO NEUTRALIZE COLLISIONS AT SEA

