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Floating Safes for Ocean Liners

When the ship sinks, the safes, containing

EVERY ship that goes down is to some extent a treasure ship. Her purser is in charge of much money, and her passengers carry valuables. Fortunes have been lost in trying to raise sunken treasure, but not until Menotte Nanni appeared on the scene did any one think of preventing the treasure from sinking, whatever happened to the ship. Why bother about ways to recover sunken treasure when a non-sinkable purser's safe would prevent the sinking? When a steamer passenger sees his jewelry stored away in the ship's safe he doesn't know whether it is going to a salt water grave or not.

Inspired by the knowledge of the lack of preventative measures of this kind, Menotti Nanni has devised a non-sinkable vault which is not only large enough to hold the purser's safe, but which also provides



The inventor in his floating safe, on his way to the bottom of Lake Michigan in a test

mail and valuables, rise to the surface

ample storage space for registered mail, gold bullion, and valuables owned by the passengers.

Nanni plans to install several of his floating safes in a large, vertical cylindrical steel casing placed in a well amidships, the top of the well being flush with the upper deck and covered with a loose-fitting, easily-removed cap. The safes are placed one on top of another, the first, second and third class passengers each having a safe for their valuables. The two lower safes serve as a repository for registered mail and for the most precious part of the ship's cargo.

Ready access is gained to the safes through doors provided in both the outer and inner casings at the various decks. Thus the first class passengers, for instance, could place their valuables in the safe at night and remove them in the morning. Of course there



Testing the fire resisting qualities of the safes. The boat was set on fire, after which it sank. The vaults floated to safety

would be a guard in charge of each safe.

If a ship equipped with such a system of floating safes should sink, the cover of the well would float off, the water would enter the steel casing and force the safes to rise to the surface. Once on the surface the safes bob about, to be eventually picked up by a passing craft. The inventor has also provided for hermetically-sealed floats to be placed at the extreme bottom of the well under the last safe. Attached to this float is a cable which serves to indicate the position and identity of the ship.

It is said that the value of cargos annually lost on the British coast in time of peace is \$45,000,000. Of course the loss has increased with the war. The *Merida*, sunk in collision with the Admiral Farragut, in 1911, sixty-five miles east of Cape Charles, in three hundred feet of water, had about \$200,000 in valuables in the purser's safe. The *Oceana*, sunk off Beachy Head, in 1912, had on board \$5,000,000 in gold and silver. The *Lusitania* had about \$1,000,000 in gold and jewelry and several millions in securities aboard. The *Islander*, sunk near Juneau, Alaska, had \$2,000,000 worth of Klondike gold aboard. The *Pawabiac*, sunk in Lake Huron, had \$800,000 in treasure. The *General Grant*, wrecked on the Auckland Islands, in 1866, in eighty feet of water, carried \$15,000,000 in gold bars and bullion. The flagship *Florentia*, lost in Tobermory Bay off the west coast of Scotland, also carried \$15,000,000.

Then, remember the fleet of seventeen Spanish galleons with an accumulated treasure of \$140,000,000, which was sunk in Vigo Bay, Spain. Six of the galleons, being in shallow water, were later raised, and about \$20,000,000 recovered. But the others, containing \$120,000,000, still rest at the bottom of Vigo Bay.

Delivering Orders to Conductors and Engineers on Speeding Trains

A DEVICE for delivering messages and orders to trainmen when the train is traveling at full speed has been invented by Edward Y. O'Connor and Carl N. McCaslin of Earl Park, Indiana. The station master simply places the messages in the device and holds it so that the conductor and engineer can catch

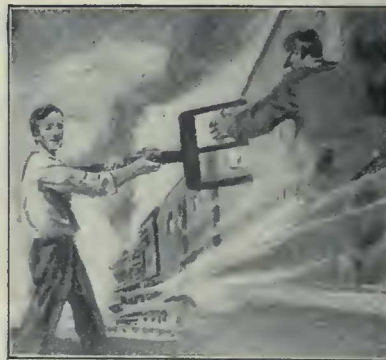
them as the train rushes by. This is an improvement over present methods, since it eliminates a stop at each station where orders are to be given.

The device is of wood and consists of three forks with clips or leaf springs attached to them. These clips serve as fastening points for the cord upon which the messages are hung. The cord is thus held firmly in place.

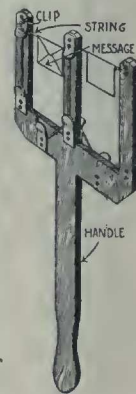
Two messages can be delivered at the same time, one to the engineer and the other to the conductor, by holding the device so that the engineer may snatch his message and then reversing the position so the conductor may get his.



Ship in the act of sinking, showing two of the safes which have floated immediately to the surface



The device is of wood and consists of three forks with clips on which the message is hung



The editor of the POPULAR SCIENCE MONTHLY wants to hear from readers who have interesting photographs and interesting articles to sell. New inventions, natural curiosities, queer ways of using old devices—all these make good pictures. Accepted contributions are paid for promptly and liberally. But readers must understand that only unpublished contributions offered exclusively to the POPULAR SCIENCE MONTHLY are desired.