

D. R. PRATT.
Fenders for Vessels.

No. 156,233.

Patented Oct. 27, 1874.

FIG. II.

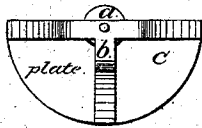
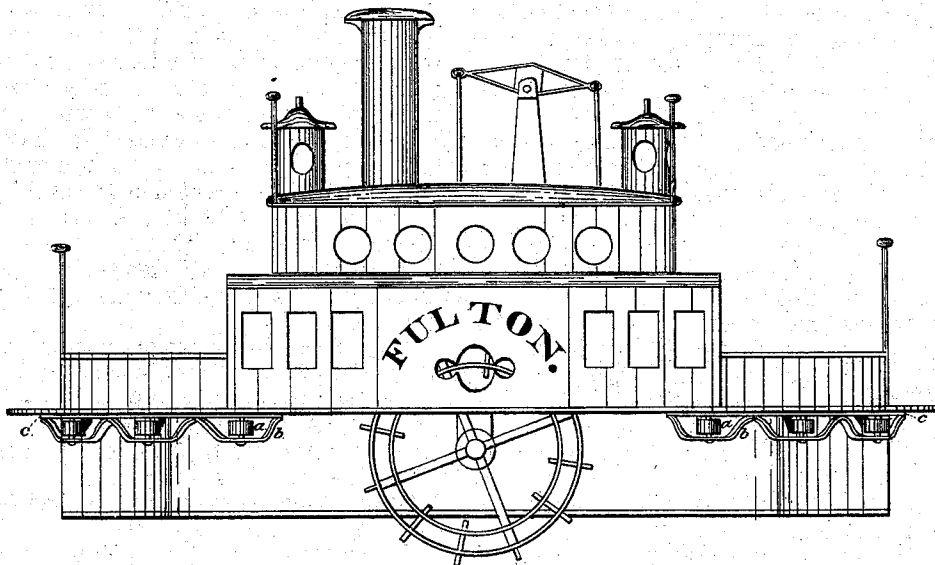


FIG. III.



FIG. I.



WITNESSES

Chas Jacobson
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INVENTOR

Daniel R. Pratt,
By his Atty,
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UNITED STATES PATENT OFFICE.

DANIEL R. PRATT, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN FENDERS FOR VESSELS.

Specification forming part of Letters Patent No. **156,233**, dated October 27, 1874; application filed August 10, 1874.

To all whom it may concern:

Be it known that I, DANIEL R. PRATT, of the city of Brooklyn and State of New York, have invented a new and useful Improvement in Revolving Fenders for Ferry or other Boats or Vessels, and either steam or sailing vessels; and I do hereby declare the following to be a true and correct description of the construction and operation of the same, reference being had to the accompanying drawings making part and parcel of my specification.

The nature and object of my invention are to protect from injury the ferry, steam, or other boats and vessels when coming in contact with the wharf or colliding against other vessels; and the same consists in applying to the projecting rail or beam of the vessel subject to such contact a series of revolving wheels or disks, that will receive the blow or impact, the revolution of which wheels will tend to an easy movement or passage by the obstacle with which they come in contact.

These wheels are placed and secured on either side or at the ends of the vessel, projecting beyond it, and firmly secured thereto. The ordinary fenders in use often fail to prevent injury to the vessel to which they are attached, or the wharf with which they come in contact, and are liable to loss.

Figure 1 represents a side view of a steam ferry-boat to which the revolving fender is secured. Fig. 2 shows the plate and braces attached thereto, and the revolving fender secured to the same. Fig. 3 is a cross-section, showing the revolving fender in position when ready to be applied to a vessel, &c.

The support or casing for the fender is composed of a plate and braces, of cast or mal-

leable iron, or other suitable material, that, by its construction, and when attached to the projecting beam on the outer side, and at one or both ends of the steamer or vessel, shall be able to resist any reasonable force, blow, or impact coming against it.

The revolving fender, consisting of a metallic wheel, *a*, secured within and between the plate *c* and braces *b*, when meeting any obstacle will revolve easily, and such movement cause the vessel to which they are attached to glide by without injury to vessel, wharf, or the object against which they come in contact. The plate *c*, with its braces *b*, is fastened to the under side of the guard of the steamer, or the projecting rib or beam of a vessel, by bolts, screws, or other suitable devices, and upon either or both ends of the same, and in such a position as that the fender or revolving wheel shall first come in contact with any obstruction.

The peculiar construction of said plate and braces is such as to enable the wheel or fender secured therein to resist any blow coming against it, thereby protecting not only the vessel, but the wharves or slips where they are moored, from injury.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the plate *c*, braces *b*, and revolving fender *a* with the guard or ends of steamers or vessels, in the manner and for the purpose herein described.

DANIEL R. PRATT.

Witnesses:

JOS. T. K. PLANT,
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