Davis & Elwell, Jr.

Ship Building.

No. 94,948. Patented Sept. 21. 1869.

Fig 1.

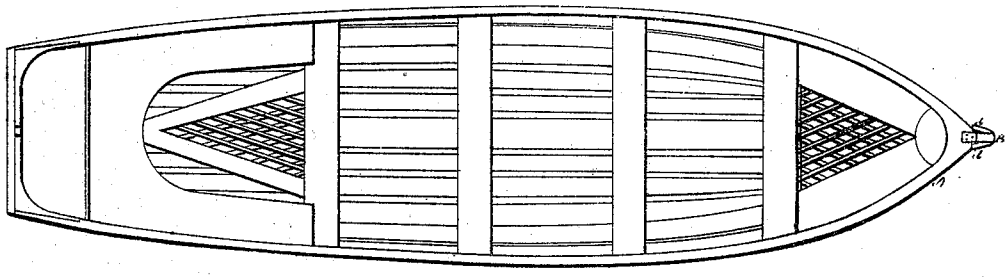


Fig 2.

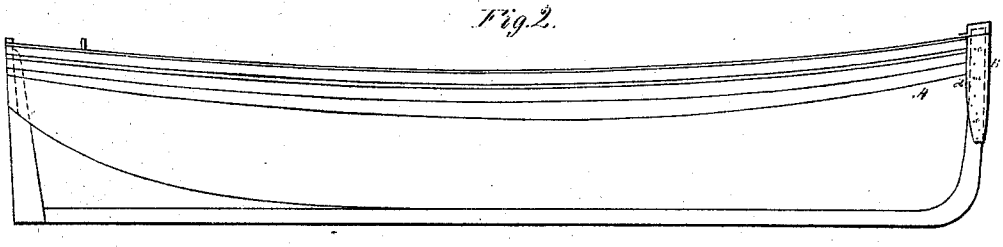


Fig 3.

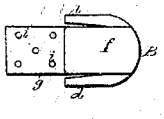


Fig 4

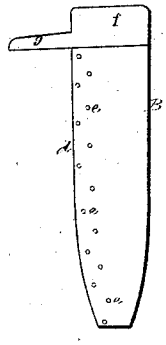
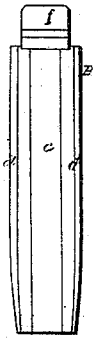


Fig 5.



Witnesses

S. N. Pope

J. R. Brown

W. P. Davis and S. Elwell Jr.

by their attorney

N. U. Eddy

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

United States Patent Office.

WILLIAM P. DAVIS AND SAMUEL ELWELL, JR., OF GLOUCESTER, MASSACHUSETTS.

Letters Patent No. 94,948, *dated September* 21, 1869.

IMPROVED PROTECTOR FOR STEMS OF BOATS.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents may come:

Be it known that we, WILLIAM P. DAVIS and SAMUEL ELWELL, JR., of Gloucester, in the county of Essex, and State of Massachusetts, have made a new and useful invention, having reference to Boats; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view, and

Figure 2, a side elevation of a boat, provided with our invention, or elastic safety-head.

Figure 3 is a top view,

Figure 4, a side elevation,

Figure 5, a rear elevation of the elastic safety-head.

The purpose of the said head is to preserve the bow or cutwater of the boat from injury, as well as to prevent it from doing damage to a vessel, or other object, against which it may be forced.

It is often the case that damage results, either to a boat or vessel, by reason of the forcible contact of the cutwater of the boat with the vessel. Sometimes the boat, while under the counter of a vessel, will be thrown upward with great force by the waves, so as to drive the head of the cutwater against the counter, in which case injury to the boat or the vessel, or both, generally results, all of which may be avoided by the invention to be hereinafter described.

In carrying out our said invention, we fix to the bow or the cutwater, or nose, *a*, of the bow of a boat, A, so as to extend down in front, and over the top thereof, an elastic head or mass, B, of India rubber. This elastic head we generally extend down to or a little below the light water-line, and, for the purpose of applying it to advantage, we form it in manner as represented in figs. 3, 4, and 5.

In these figures, the said elastic head is shown as recessed at *c*, to receive the nose or cutwater, the parts *d d*, which are the flanks of the recess, being to fit against the sides of the nose or cutwater, and to be fastened thereto, by screws going through holes *e e e*, made in the said flanks.

There is, above the recess *c*, a thick mass or bunter, *f*, from which there projects backward a tongue or lip, *g*. This bunter may be recessed to receive the head of the cutwater, when projected above the bows. It should be about an inch or more in thickness, in order that it may be sufficiently elastic and durable.

The lip *g* is to be provided with holes *i*, to receive screws, to hold it to the flat surface of the deck, or top of the bow of the boat.

When a boat, of whatever kind it be, is provided with our said elastic head, it may be shoved bow foremost against an object without danger of injury thereto, or to the cutwater or bow of the boat. So, when the bow of the boat may be under the counter of a vessel, the elastic bunter of the head will prevent chafing of the vessel by the head of the cutwater or bow when the boat is moved upward by the waves.

The elastic head we construct of India rubber or gutta percha, or an elastic composition of which either is a material constituent.

We claim the combination and arrangement of the elastic head B, as described, with the bow or cutwater of a boat, A, the said elastic head being for the purposes or objects as set forth.

WILLIAM P. DAVIS.
SAM. ELWELL, JR.

Witnesses:
R. H. EDDY,
S. N. PIPER.