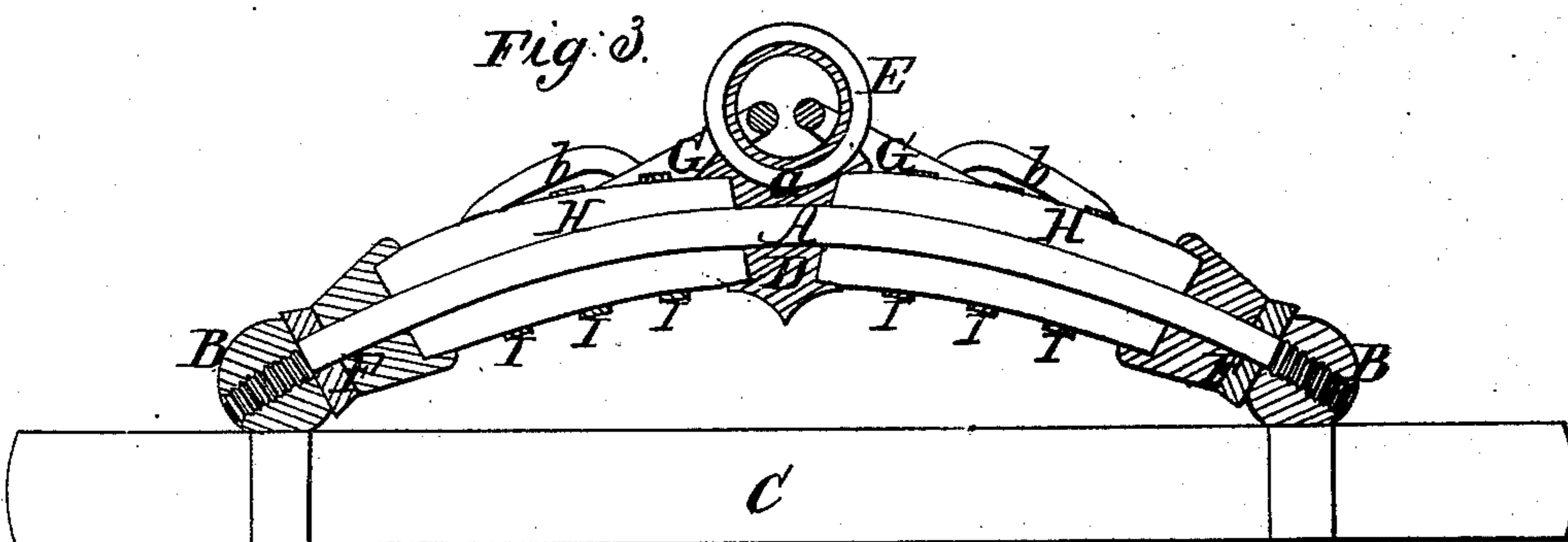
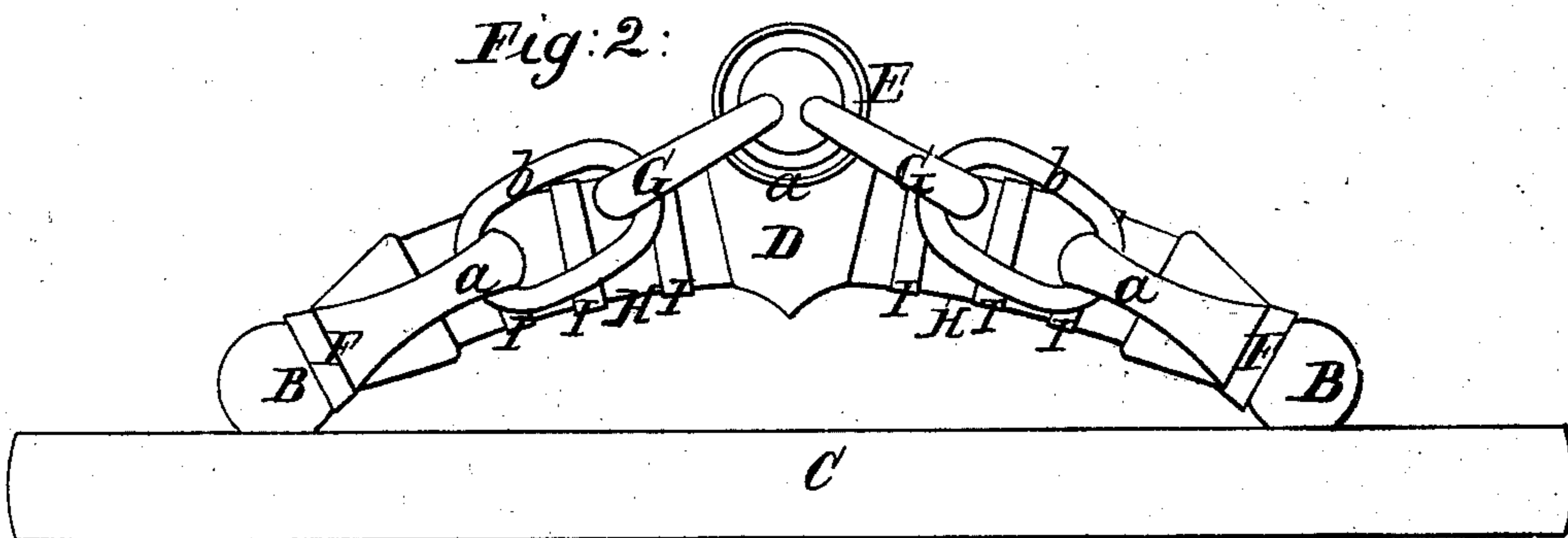
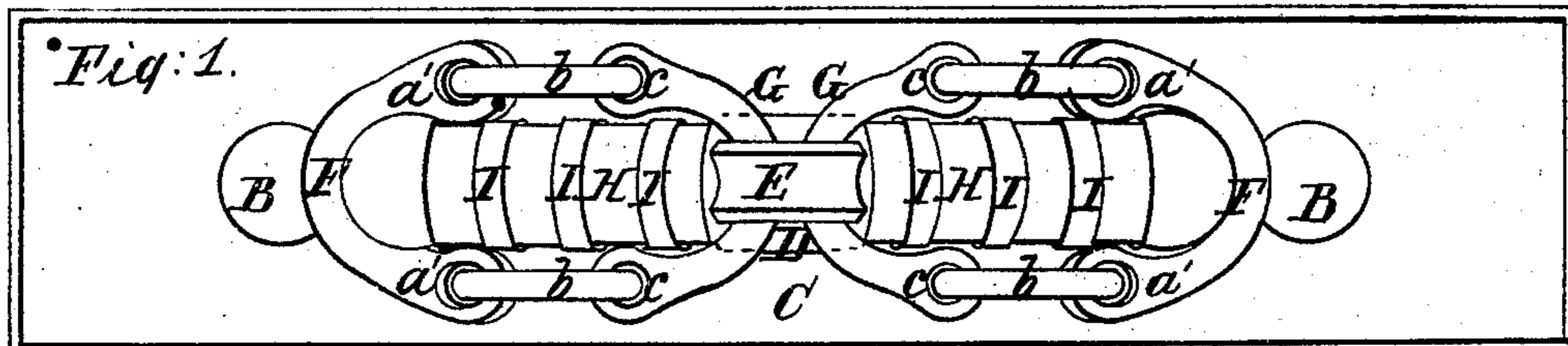


J. Edson.
Elastic Coupling.
N^o 80,278. Patented Jul 28, 1868.



Witnesses

S. N. Piper
J. B. Snow

Inventor

Jacob Edson

by B. B. Eddy atty

United States Patent Office.

JACOB EDSON, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 80,278, dated July 28, 1868.

IMPROVEMENT IN STOPS FOR FORE-AND-AFT SAILS.

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 I, JACOB EDSON, of Boston, of the county of Suffolk, and State of Massachusetts, have invented a new and useful or improved Elastic Stop for Fore-and-Aft Sails; and I 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,

Figure 2, a side elevation, and

Figure 3 a longitudinal section of it.

In such drawings, A denotes an arched or curved bar, supported at its ends by two abutments, B B, fixed in the decks, C, of a vessel.

The said bar, A, at its middle, extends through a saddle or grooved metallic block, D, formed with a recess, *a*, in its top, to receive and support a ring, E, in manner as represented.

The bar or rod, A, also goes through two sliders, F F, which are arranged next to the two abutments. Each of such sliders is provided with two eyes or perforated arms *a' a'*, through which two links, *b b*, extend. The said links also go through the eyes, *c c*, of one of two arched links, G G, which go through the ring E, the whole being as represented in the drawings.

Between each slider F and the saddle, and abutting against the two, is one of two India-rubber tubes, H H, each tube having the rod or bar A going through its bore.

Furthermore, each of such India-rubber or elastic tubes is to be encompassed by a series of metallic rings, I I I, arranged at equal or about equal distances apart, such rings being to prevent it from spreading laterally to such extent as to burst under longitudinal contraction of it.

The elastic boom-stop, so made, is to be arranged on the deck athwartships through and under the boom, when amidships, and a rope is to connect the boom with the ring, so that when the boom may sway either to port or starboard, it may be checked by the elastic stop, made as described.

While the saddle serves to receive the ring, and prevent it from chafing the India-rubber springs, the two arched links G G and arms *a' a'* of the sliders F F keep the connection-links *b* from chafing the said springs.

I make no claim to the sail-tackle described in the United States patent, No. 43,150, dated June 14, 1864, and granted to William Woodbury, as my invention, though in some respects like that, differs in others therefrom materially.

I do not make the springs in short annular sections, with washers interposed between such sections; nor do I place them on a rod separate from a traveller-rod, as represented in such patent.

What I claim as my invention, is as follows:

I claim the arrangement and combination of the saddle D with the springs H H, their rods A and the sliders F F, connected with the ring E.

I also claim the arrangement and combination of the arched and annular links G G *b b*, and the arms *a' a'* with the ring E, and the sliders F and springs H, applied to the rod or bar A, extending between and from abutments B B, as set forth.

JACOB EDSON.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.