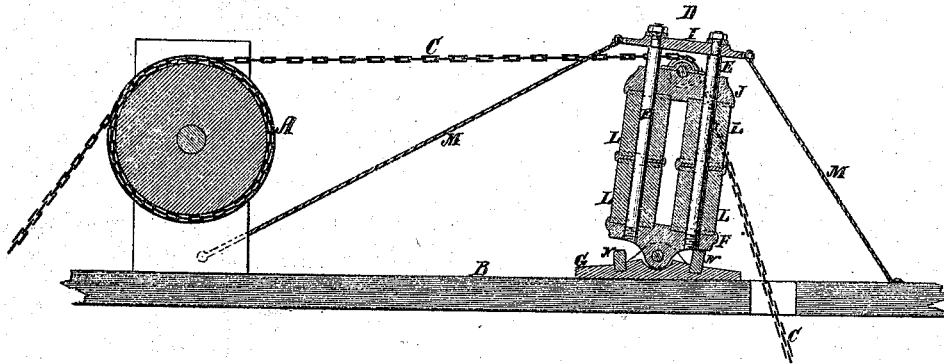


*J. E. Jones,*  
*Elastic Coupling.*

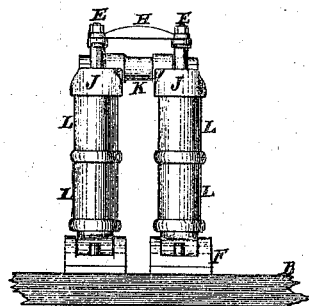
*No. 107,917.*

*Patented Oct. 4, 1870.*

*Fig. 1.*



*Fig. 2.*



**Witnesses:**

*A. Bernheimer*  
*S. S. Mable*

**Inventor:**

*J. E. Jones*  
PER *Wm. H. H.*

**Attorneys.**

# United States Patent Office.

JOHN E. JONES, OF WIRETOWN, NEW JERSEY.

Letters Patent No. 107,917, dated October 4, 1870.

## IMPROVEMENT IN SURGE-RELIEVERS.

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

### *To all whom it may concern:*

Be it known that I, JOHN E. JONES, of Wiretown, in the county of Ocean and State of New Jersey, have invented a new and useful Improvement in Elastic Cable Apparatus; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

The object of this invention is to provide means for giving elasticity to chain cables on board of ships and steamboats, designed for relieving the cable in breaking the anchor from the ground, and in the surging of the vessel; and

It consists in an adjustable frame, provided with elastic springs, so arranged as to receive the strain of the cable, and operating as hereinafter more fully described.

In the accompanying drawing—

Figure 1 represents a sectional side view of the apparatus, connected by the cable with the windlass.

Figure 2 is a front view of the apparatus, detached from the windlass and cable.

Similar letters of reference indicate corresponding parts.

A is the windlass.

B is the bed-plate, which may represent the deck.

C is the cable.

D represents a frame, of iron or other suitable metal, consisting of four upright rods, E, attached to base-pieces F, which pieces are pivoted to base-blocks G, as seen in fig. 1, so that the frame may rock on the base-blocks and be adjusted or adjust itself according to the position and strain on the cable.

H is a cap-piece, by means of which each pair of uprights are connected together in one direction; and

I is a cap-piece for each pair of uprights, which connect them in the other direction.

J J are metallic follower-blocks, which slide up and down with the springs on the uprights E, and which support the saddle-roller K, over which the cable is carried from the windlass, as seen in fig. 1.

L represents rubber springs, which are slipped onto each of the rods, and bear upon base-pieces F.

M are stays for supporting the frame D in the proper position.

N are blocks of rubber, which are let into the base-blocks G for receiving the base-pieces F when the frame is inclined in either direction.

It will be seen that, when the cable is strained, either by breaking anchor from the ground or by the surging of the vessel, the springs L will be compressed by the strain of the cable on the saddle-roll K. This will give sufficient elasticity to the cable to prevent all damage under such circumstances.

This is a most durable and efficient arrangement for the purposes intended, and its advantages will be readily understood by all sea-faring men.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

In combination with the cable of a ship, steamboat, or other marine vessel, the frame D, with the follower J, saddle-roll K, and springs L, constructed, arranged, and operating substantially as and for the purposes described.

JOHN E. JONES.

Witnesses:

CHAS. CRANE,  
SAMUEL O. CRANE.