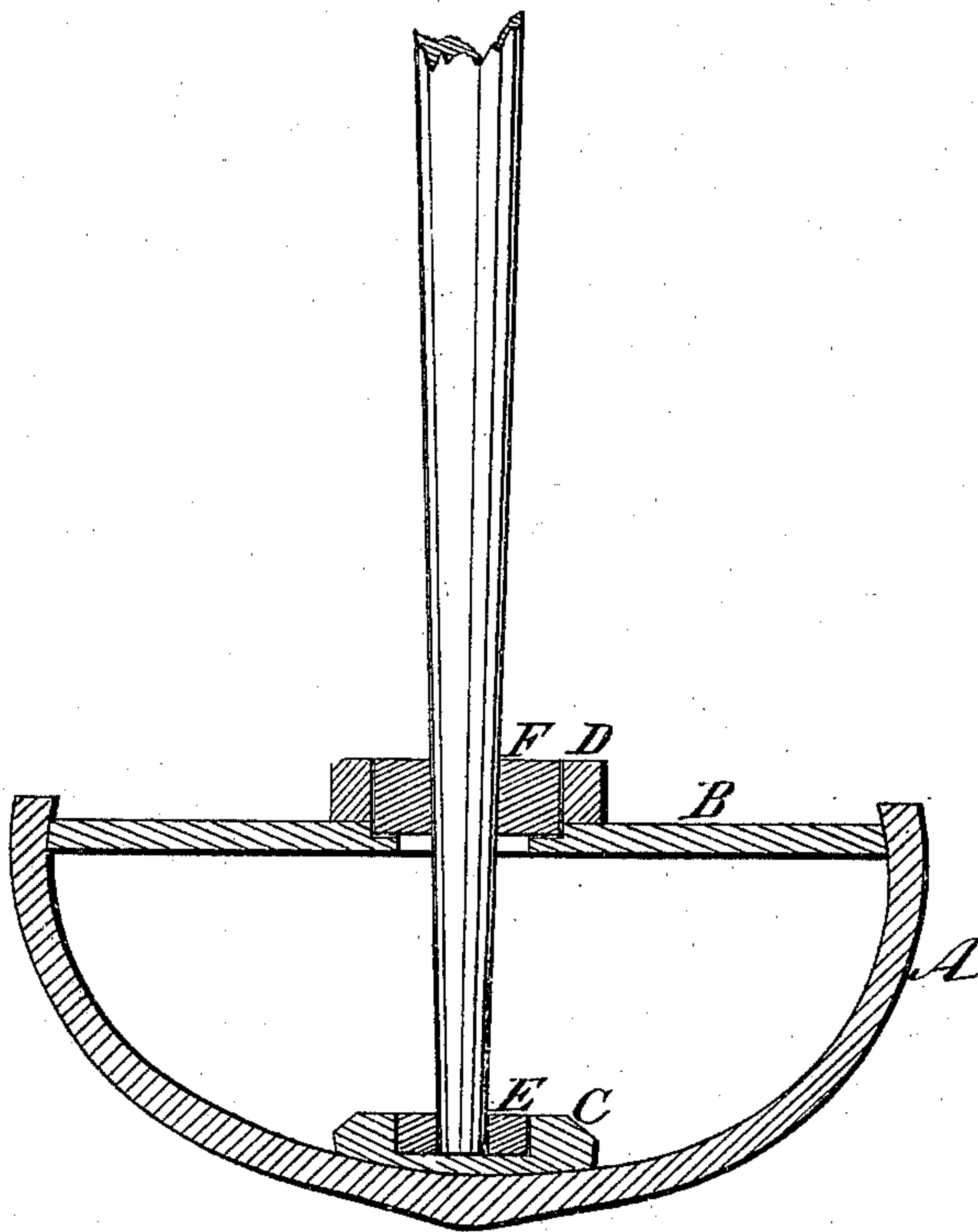


*Stevens & Snedecor,*  
*Securing Masts to Vessels.*  
*N<sup>o</sup> 80,884.* *Patented Aug. 11, 1868.*



*Witnesses.*  
*Wm A Morgan*  
*Theo Tuschel*

*Inventor*  
*D. G. Stevens*  
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*per Muny & Co.*

# United States Patent Office

D. S. STEVENS AND LAMBERT SNEDECOR, OF RED BANK, NEW JERSEY.

*Letters Patent No. 80,884, dated August 11, 1868.*

## IMPROVEMENT IN SECURING MASTS OF VESSELS.

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

### TO ALL WHOM IT MAY CONCERN:

Be it known that we, D. S. STEVENS and LAMBERT SNEDECOR, of Red Bank, in the county of Monmouth, and State of New Jersey, have invented a new and useful Improvement in Partners and Steps for Masts of Vessels; and we 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 drawings, forming part of this specification, in which—

The figure represents a cross-section of a vessel with our improvement applied thereto.

Similar letters of reference indicate like parts.

The nature of this invention relates to improvements in means for supporting masts in vessels, the object of which is to provide yielding and elastic supports for the same, whereby the strain upon them, caused by the irregularly-flowing gusts of wind, will, to a considerable extent, be relieved.

When the masts of vessels are set, as the present practice, in rigged partners and steps, the strain on them, due to the sudden gusts of the wind, is very severe, as while the impact, upon the sail, of the wind is very sudden, the vessel, owing to her great weight and the action of her keel, especially when in a "sea-way," moves but very slowly in response to the wind, exposing the masts for a considerable time to bear the strain before she rolls sufficiently to relieve the masts, whereby they are greatly endangered and often carried away.

To obviate this difficulty, we have prepared elastic and flexible partners and steps for the masts, whereby they may immediately give to the action of the wind, to a considerable extent, so as to greatly relieve them, until the vessel responds to the action of the masts under the strain of the wind.

On reference to the accompanying drawings, A represents the hull of a vessel, B the cross-tree, C the step, and D the support for the mast, when it passes through the deck of the vessel. E represents the yielding step, and F the yielding partner, which we propose to make of any suitable flexible and elastic material, of which the best at present known to us is India rubber.

The partner F is supported vertically by a rebate in the cross-tree, and laterally by the same, and any suitably-raised support, securely fixed to the cross-trees, fitting tightly therein, maintaining a water-tight joint.

By reason of the elastic quality of the said improved partners and steps, the masts will be immediately restored to their normal position when the excessive strain is relieved. The said supports being prepared with due consideration of the flexible and elastic qualities, with reference to the amount of strain they may be required to bear.

A metallic covering for the same may be provided, if preferred, for the boom to rest upon, either made larger in the opening than the mast, to allow for the movement of the mast, without disturbing it, or it may fit the mast snugly, and move therewith.

Having thus described our invention, we claim as new, and desire to secure by Letters Patent—

Supporting the masts of vessels in flexible and elastic partners and steps, substantially as and for the purpose described.

The above specification of our invention signed by us, this 25th day of April, 1868.

D. S. STEVENS,  
L. SNEDECOR.

Witnesses:

WM. F. McNAMARA,  
A. F. ROBERTS.