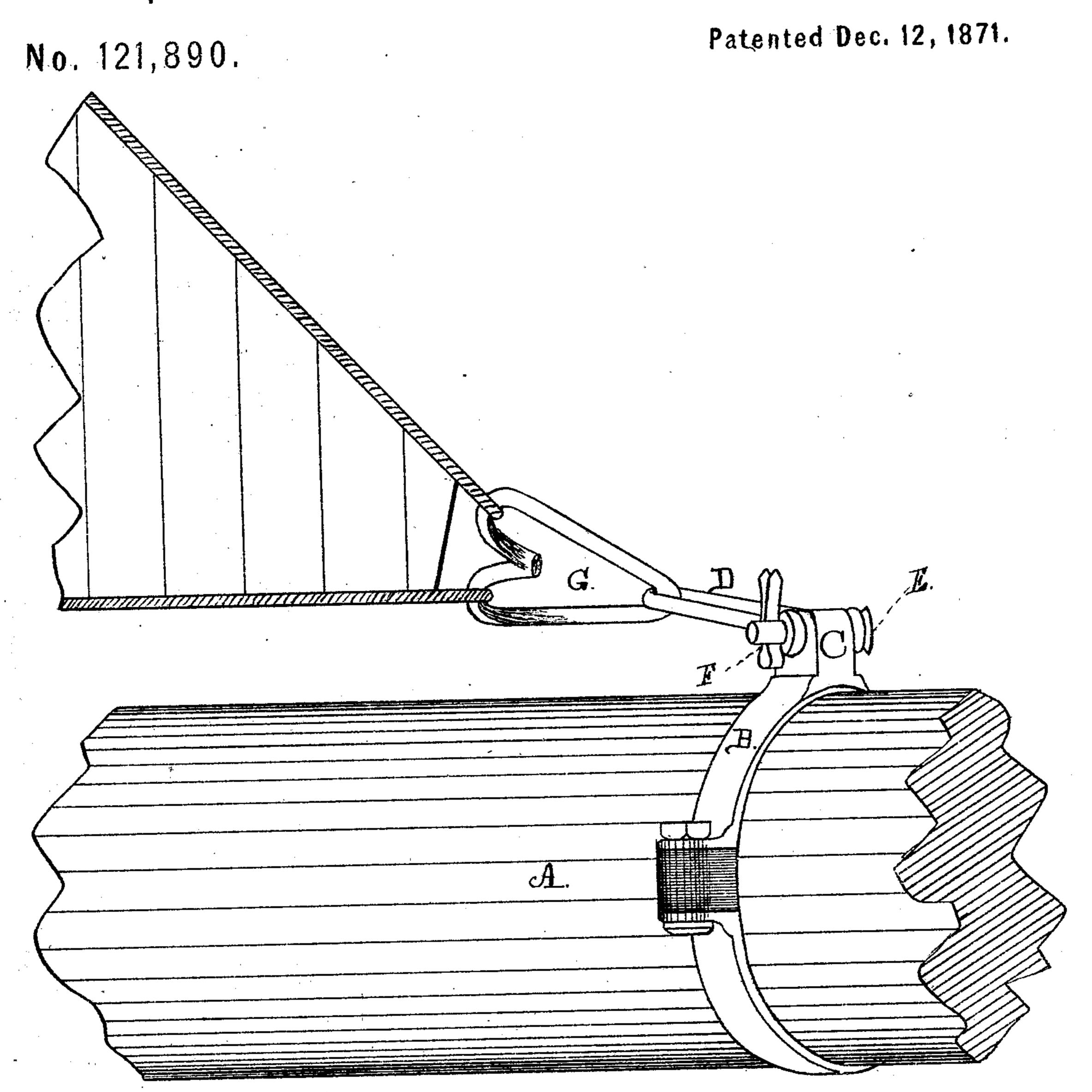
Improvement in Out-haul Bands for Booms.



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Seorge Nevenger.
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UNITED STATES PATENT OFFICE.

GEORGE NEVENGER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HARVEY J. MITCHELL, OF SAME PLACE.

IMPROVEMENT IN OUTHAUL BANDS FOR BOOMS.

Specification forming part of Letters Patent No. 121,890, dated December 12, 1871.

To all whom it may concern:

Be it known that I, George Nevenger, of the city and county of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in Outhaul Bands for Attaching Sails to Booms of Vessels; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, which is a perspective view of my invention.

As now generally constructed outhaul bands are made in two parts hinged together, and must be opened when the sail is to be attached to the end of the boom or detached therefrom. This operation requires the man to hold the sail with one hand and the band with the other, and in rough weather it frequently happens that the band is dropped and lost.

My invention consists in an improved method of attaching the sail to the outhaul band, whereby the danger of dropping the latter is avoided.

A in the drawing represents part of the boom of a vessel, upon which is the outhaul band B. This band is made with a lug, C. D is a clevis, through the eyes of which, as well as through

the lug C, passes the bolt E, provided with a slot and key, F. The sail is attached to the clevis in any convenient manner, as by cords passing through grommets and a clew, G.

In the operation of these devices, when the sail is to be attached to the end of the boom the clevis is put through the clew or equivalent device and applied to the lug C, the bolt pushed through the lug and the eyes of the clevis, and the whole fastened by pushing the key through the slot. When the sail is to be detached the key and bolt are withdrawn; and if from any cause the man should let go, the outhaul band, which remains fastened around the boom, will not be liable to drop, and the only thing lost will be the clevis, which can be easily and cheaply replaced.

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

The combination, with the outhaul band B, of the clevis D, bolt and key F, all constructed and operating as described.

GEORGE NEVENGER.

Witnesses:

JAMES HAGAN, THEO. E. WIEDERSHEIM.

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