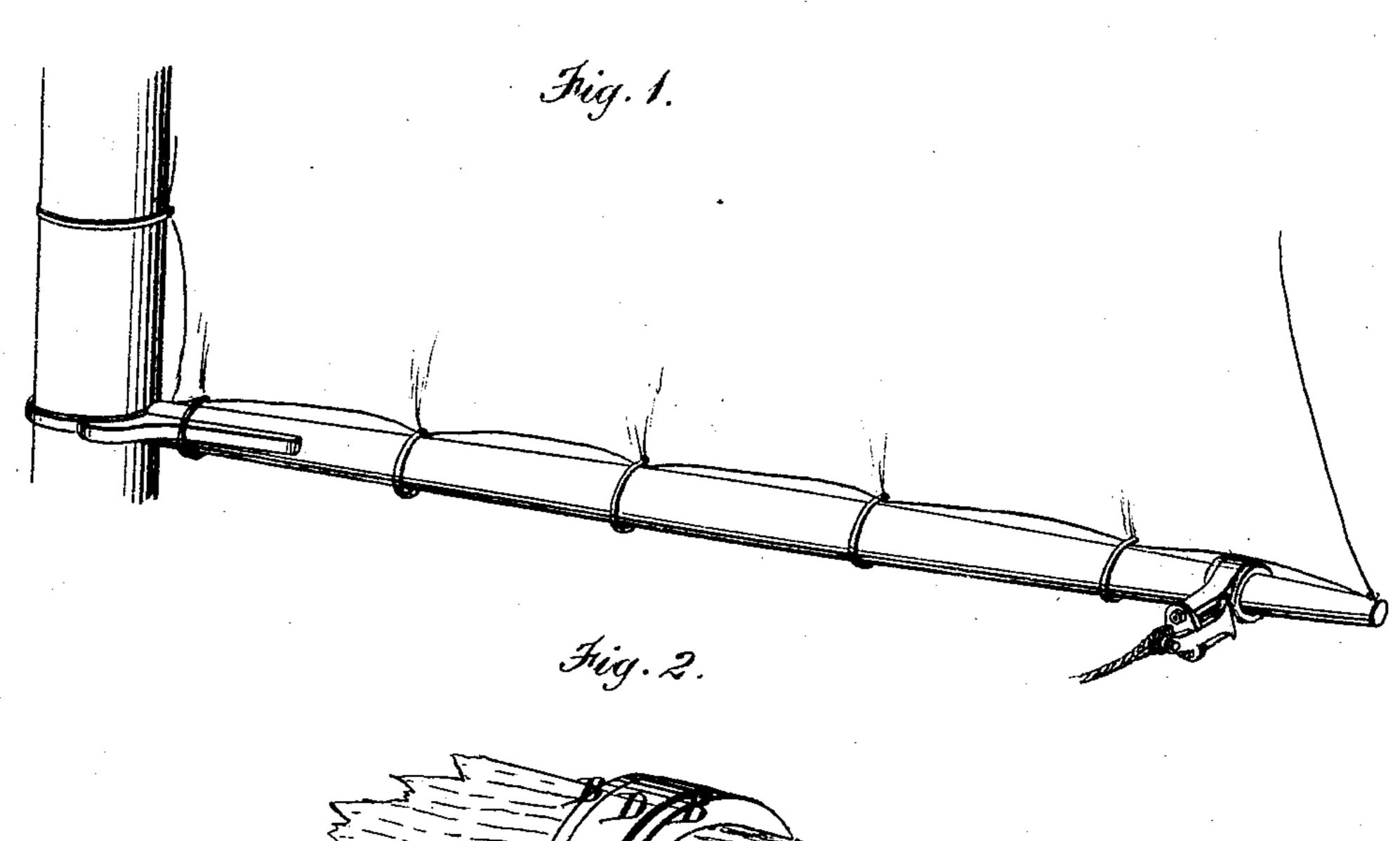
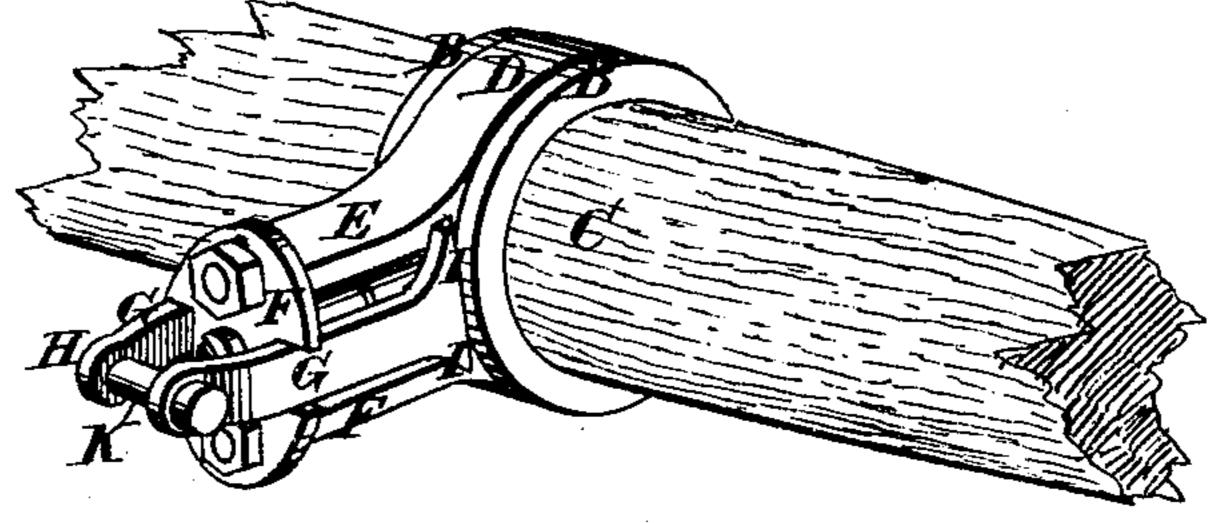
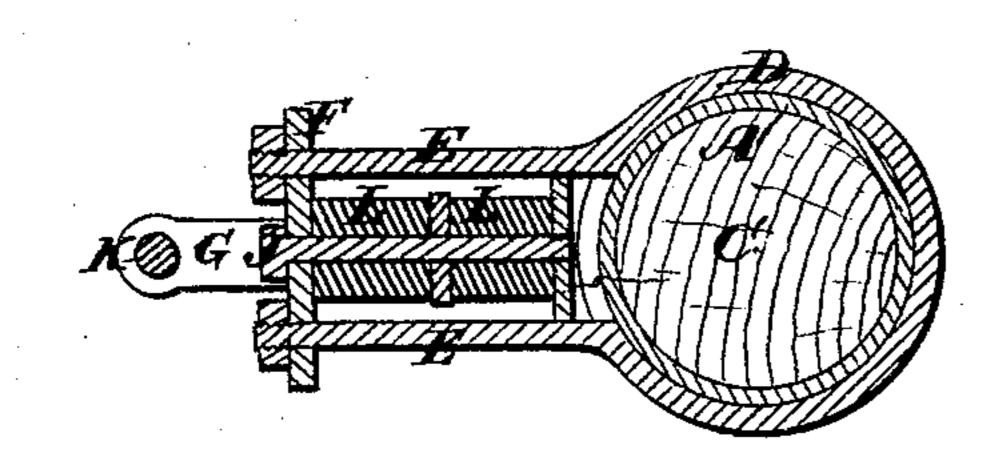
H. GREGORY, Jr.

Elastic, Antifriction Attachments for Vessels' Booms. Patented Nov. 25, 1873. No. 144,975.







WITNESSES

6 H. Brown. Melville Churche. By

INVENTOR

Attorneys.

## UNITED STATES PATENT OFFICE.

HANSON GREGORY, JR., OF ROCKLAND, MAINE.

IMPROVEMENT IN ELASTIC ANTI-FRICTION ATTACHMENTS FOR VESSELS' BOOMS.

Specification forming part of Letters Patent No. 144,975, dated November 25, 1873; application filed October 20, 1873.

To all whom it may concern:

Be it known that I, Hanson Gregory, Jr., of Rockland, in the county of Knox and State of Maine, have invented a new and useful Improvement in Elastic Friction-Band for Booms of Vessels; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawing.

Similar letters of reference in the accompanying drawings denote the same parts.

In the ordinary attachment for securing sheets and blocks to the booms of vessels there is no yielding motion between the sheet or block and the boom, consequently in severe weather when the boom jibes, the slat resulting from the jibe frequently breaks or injures either the boom or the top of the mast, or parts the sheet. The object of this invention is to obviate the danger of such results by applying to the outer end of the boom a ring surrounding it, and provided with an annular groove for the reception of a revolving friction band or strap, the free ends of which serve as a socket for a springing shackle, adapted to yield under strain, and form an anti-friction and elastic attachment, as is hereinafter more fully set forth.

In the accompanying drawing, the metallic band A is provided with a vertical flange, B, at each side, and tightly fitted to the boom C of a vessel. The revolving friction-band D

works in the way formed by the flanges B B. The ends of the revolving friction-band D are extended as arms E, and connected by a crossplate, F, securely held in place by nuts. The cross-plate F is slotted to receive the arms G G of the springing shackle H, which is kept in place by projections I I bearing against the edges of the arms E E of the revolving friction-band D. A headed bolt or pin, J, passes through the cross-plate F, and is securely attached to the upper part of the springing shackle H. The lower part of the shackle H is formed by a screw or key-bolt, K, which will admit of the attachment of a block or other gear thereto. Springs L L composed of rubber or other suitable material are placed upon the pin or bolt J, and every strain or slat of the boom is received by the springs L L.

The operation of the invention is obvious.

I claim as my invention—

The combination, with the boom C, carrying thering A provided with an annular groove, of a friction band or strap, D, the free ends E E of which serve as a socket for the springs L L, the whole being constructed and operating to form an anti-friction and elastic attachment, substantially as set forth.

HANSON GREGORY, JR.

Witnesses:

J. C. CILLEY, H. T. BEVERAGE.