C. H. GALLAGHER.

Lizards for Sails.

No. 136,988. Patented March 18, 1873.

Fig. 3

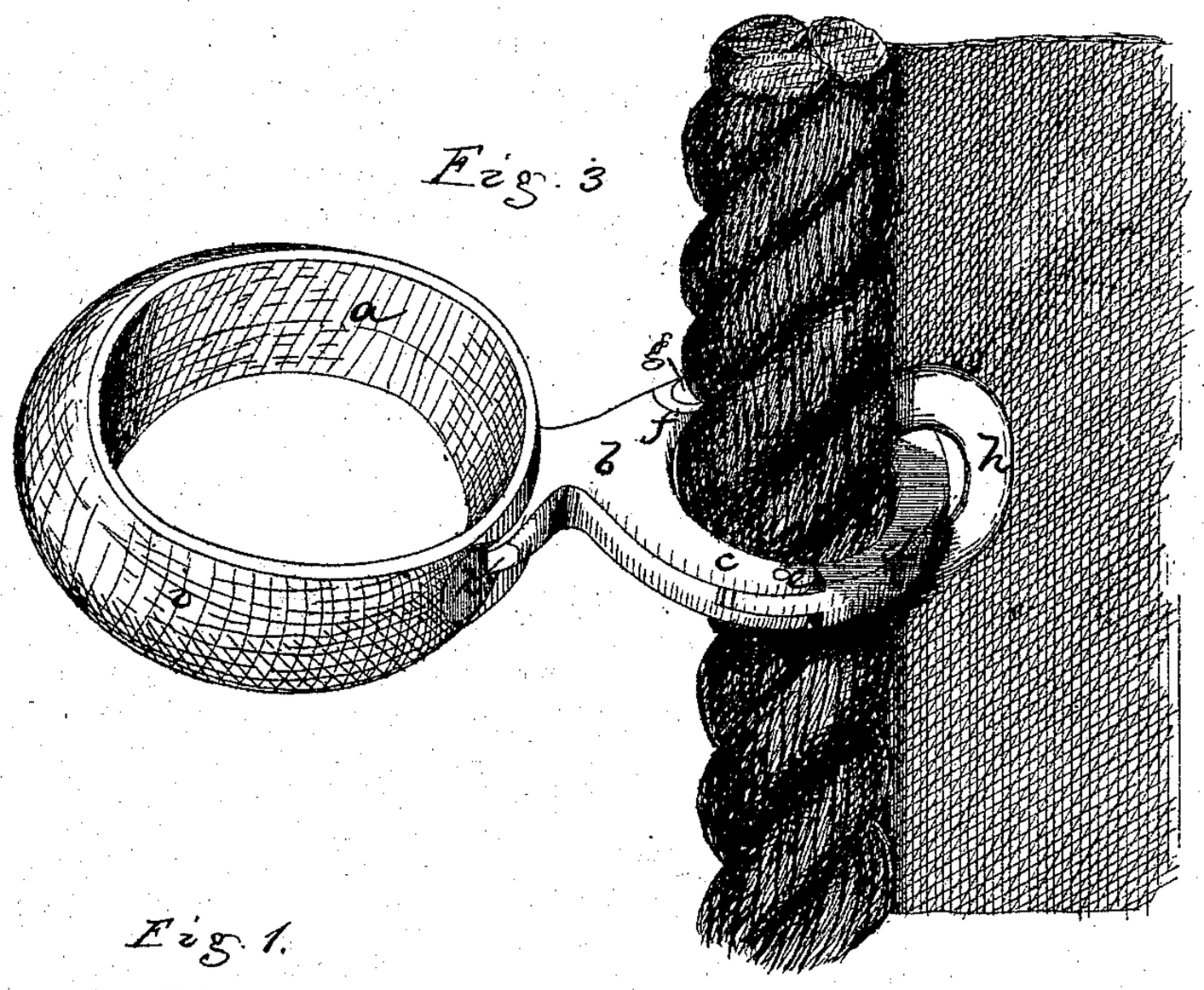


Fig. 1.

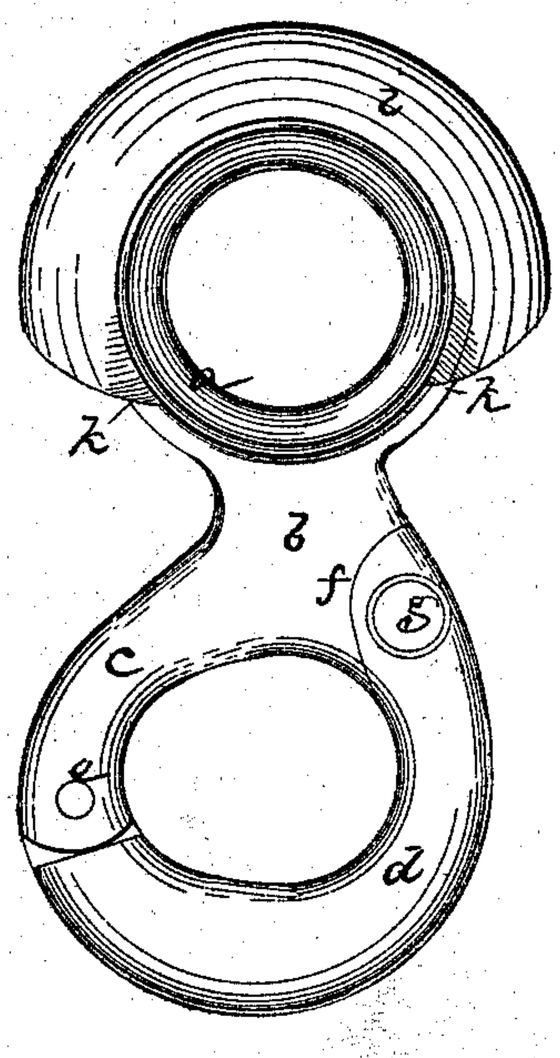
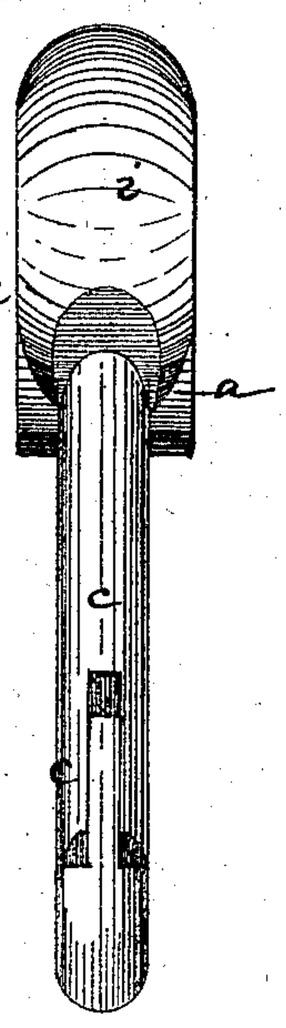


Fig 2



Witnesses.
M. W. Frothingham.
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Inventor.
Charles H. Gallagher.
By his Attys.
Crosby & Gould

AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

CHARLES H. GALLAGHER, OF GLOUCESTER, MASSACHUSETTS.

IMPROVEMENT IN LIZARDS FOR SAILS.

Specification forming part of Letters Patent No. **136,988,** dated March 18, 1873.

To all whom it may concern:

Be it known that I, CHARLES H. GALLAGHER, of Gloucester, in the county of Essex and State of Massachusetts, have invented an Improved Lizard or Jack for Sails; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

The invention relates to the construction of a lizard or jack for sails, said jack being usually made of rope formed into a large eye around a thimble, and then into a double eye by bringing the two opposite sides together and making a seizing at the center. The rope lizard thus made is not very enduring, and is soon worn through, and, moreover, can only be applied in the act of making it, and cannot be removed without cutting it or taking it to pieces. In my invention I form the jack or lizard of metal, making it in the form of a ring, having extending from it an arm, to which a hook is pivoted, this hook, when the jack is applied, extending through the eyelet in the sail, back of the sail-rope or mast of the sail, or over the foot of the sail, and connecting at its end with the arm, making, in effect, a second eye or ring that clasps the mast or the foot of the sail; the arm and hook having such an irregular curvature as to properly clasp not only the rope, but also the eyelet. My invention consists, primarily, in the jack or lizard so formed.

The drawing represents one of my improved jacks.

Figure 1 shows a plan of it. Fig. 2 is an edge view of it. Fig. 3 shows its connection with a sail.

a denotes the ring through which the halyard or jack-rope runs, this ring being cast into form and with a web, *b*, from which extends the arm *c*, the arm *c*, ring *a*, and web *b* being cast in one piece. To the end of the arm *c* the hook *d* is pivoted by a pin, *e*, and the outer end or point of the hook is so made as to connect with a shoulder, *f*, on one side of the web *b*, this connection being effected by a pin, *g*, with a split shank, or by a screw or other suitable fastening device. The hook passes through the eyelet *h* of the sail, the arm *c* and hook *d* forming an eye or ring that embraces the rope at the edge of the sail, as seen at Fig. 3, they being made of irregular shape, so that their inner surfaces shall have curvatures of different characters or diameters, to conform to the round surface of the rope, to the side of the eyelet, and to the part of the sail embraced by the hook and arm.

It will be obvious that the lizard thus made will have no appreciable wear; that it is fixed to and disconnected from a sail with equal readiness; and that no skill is required to make its connection with the sail.

To keep the metal from direct contact with the mast or boom, it may be provided with a cushion, *i*, preferably made of rubber or rubber compound, the rubber being stretched upon the outer surface of the ring *a*, and its opposite ends being fastened by spurs *k* driven down upon the ends.

I claim—

The jack or lizard formed of metal and having the eye or ring *a*, the web *b*, and the arm *c* cast in one piece, and the hook *d* pivoted to the arm *c* and fastened to the shoulder *f* by a screw or pin, *g*, the hook and arm being so constructed that when closed they form a clasp having the irregular curvature described, for the purpose set forth.

CHAS. H. GALLAGHER.

Witnesses:

FRANCIS GOULD,

M. W. FROTHINGHAM.