

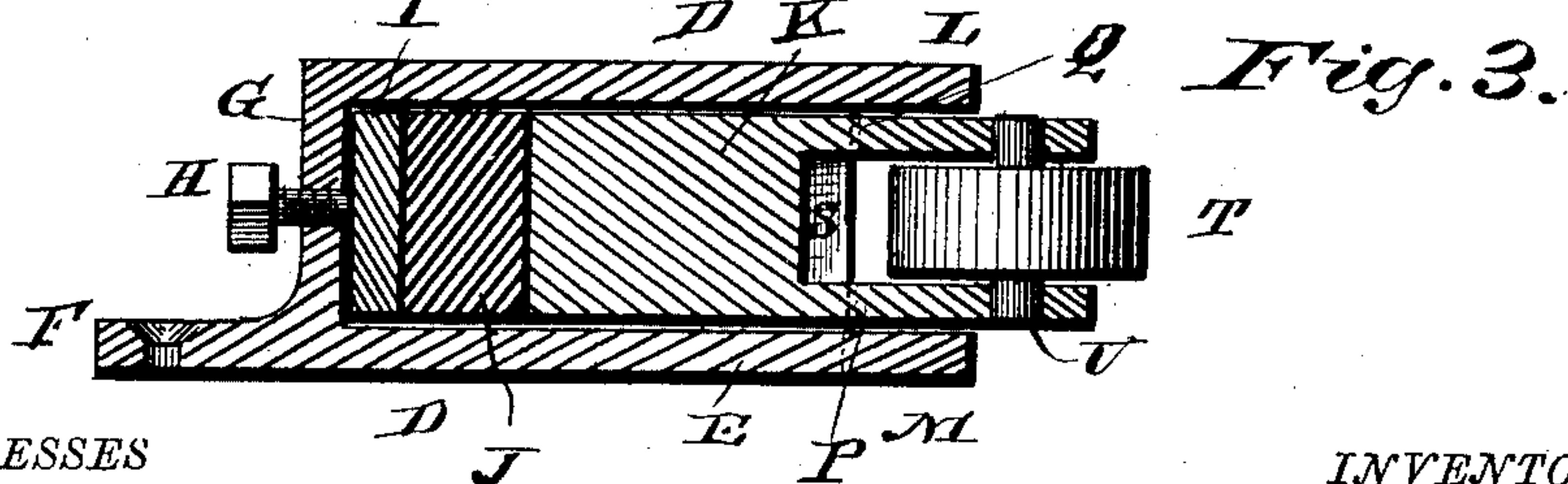
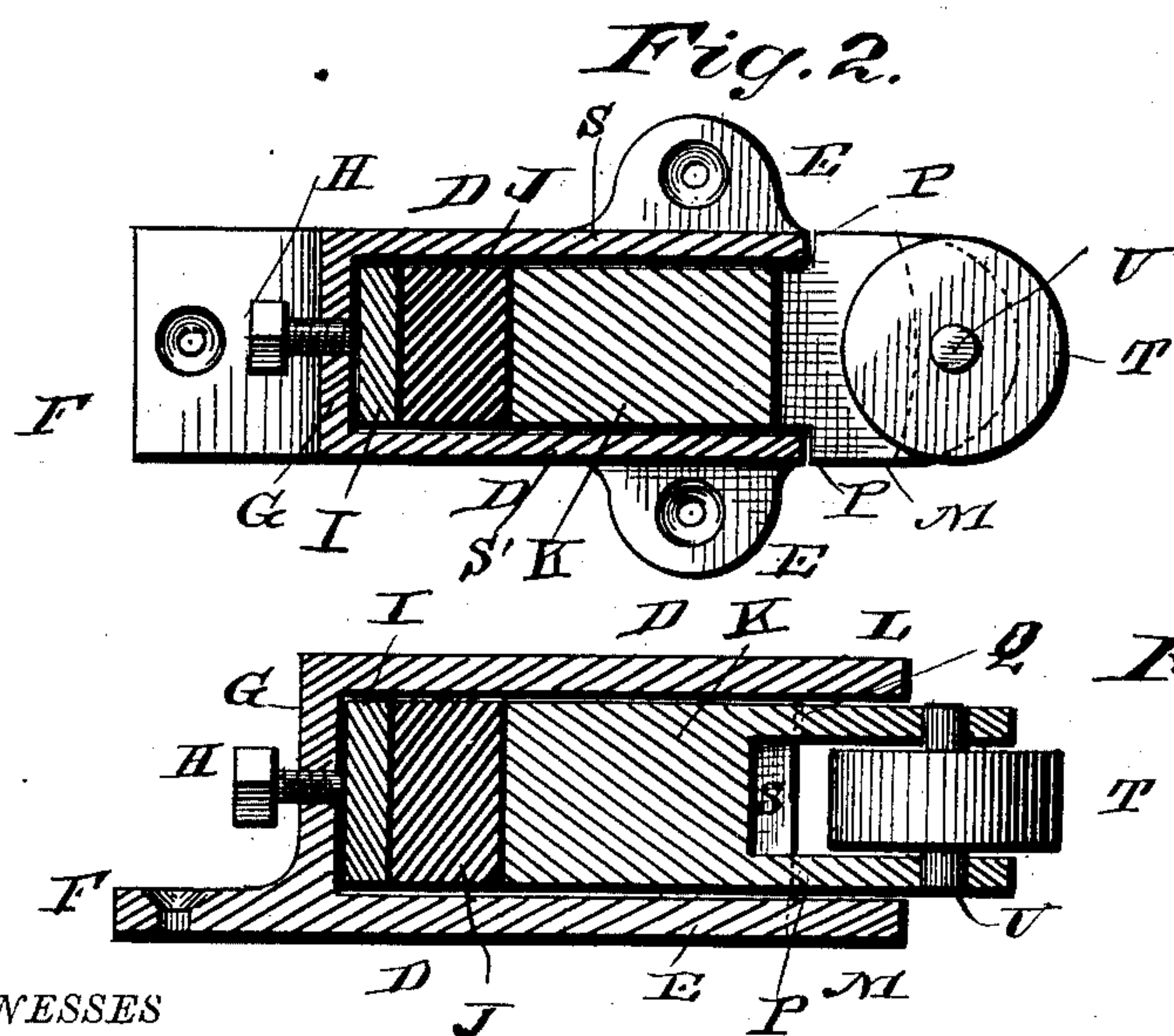
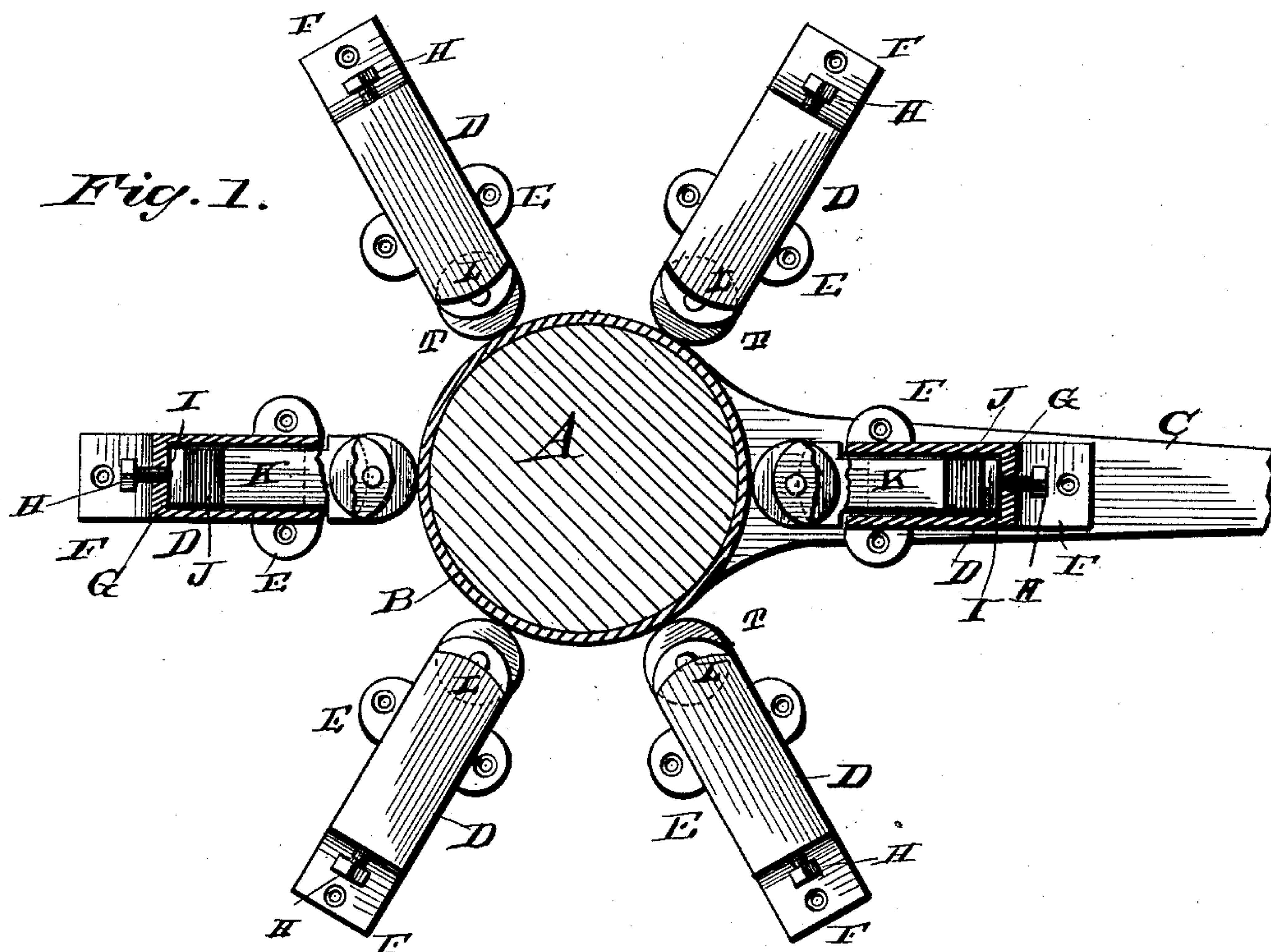
(No Model.)

H. RAMSAY.

DEVICE FOR STEADYING THE HEADS OF RUDDERS.

No. 359,177.

Patented Mar. 8, 1887.



WITNESSES

Phil. Masi.
Benj. Fugitt.

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UNITED STATES PATENT OFFICE.

HUGH RAMSAY, OF PERTH AMBOY, NEW JERSEY.

DEVICE FOR STEADYING THE HEADS OF RUDDERS.

SPECIFICATION forming part of Letters Patent No. 359,177, dated March 8, 1887.

Application filed April 27, 1886. Serial No. 200,330. (No model.)

To all whom it may concern:

Be it known that I, HUGH RAMSAY, a citizen of the Dominion of Canada, residing at Perth Amboy, in the county of Middlesex and State of New Jersey, have invented certain new and useful Improvements in Devices for Steadying the Heads of Rudders; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of a plan view, partly in section. Fig. 2 is a vertical section, and Fig. 3 is a horizontal section.

My invention relates to devices for steady- ing the heads of rudders on ships and boats of all sizes that use rudders; and the invention consists in the construction and novel combination of parts, as hereinafter described, and pointed out in the claims.

The object of the invention is to prevent any knocking sound and friction on the back of the rudder-head, and also to cause the rudder to turn easily.

Rudders are all inclined to hang back in the head; but by my improvement I can always keep them in place by simply setting up the set-screws employed in my improved construction.

Referring by letter to the accompanying drawings, A designates the rudder-head, and B an iron band encircling the same under the tiller C.

D D, &c., designate the sheave-bar boxes, which are secured in place around the rudder-head by bolts passed through their side flanges, E E, and the rear or base flanges, F. The vertical rear walls, G, of the sheave-boxes D D, &c., are provided each with a set-screw, H, which passes from the outside through into the interior of the sheave-bar box. The points of

the screws each bears against a loose metal plate, I, at the rear or outer end of the sheave-bar box, and in front of each of the metal plates I is a rubber cushion, J, which bears against the rear end of the sheave-bar K.

The sheave-bar boxes D D, &c., are each provided at their inner or forward ends with forwardly-projecting lower and upper flanges L and M. The sheave-bars K are inserted into the sheave-bar boxes, the shoulders P P' and Q Q' of the bearings R R' coming nearly in contact with the edges of the vertical side walls, S S', of the sheave-bar boxes. The sheaves T T', &c., turn on vertical axles U, having bearings in the flanges L and M, and bear against the rudder-head and prevent any knocking sound and friction on the back of the rudder-head.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with the rudder-head provided with the encircling band of iron below the tiller, of the flanged sheave-bar boxes provided with set-screws in their rear ends and the upper and lower projecting flanges at their forward ends, and the shouldered sheave-bars carrying the sheave between their upper and lower projecting flanges, the internal cushions and metal plates, and the sheaves arranged radially around the rudder-head, substantially as specified.

2. The combination, with the rudder-head provided with the encircling band of iron below the tiller, of the sheave-bar boxes and the shouldered sheave-bars, the internal cushions and metal plates, and the sheaves arranged radially around the rudder-head, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

HUGH RAMSAY.

Witnesses:

W. H. PETERSON,
W. B. WATSON.