J. R. Sees,

Securing Journal Boxes.

No. 14,473. Patented Mar. 18, 1856.

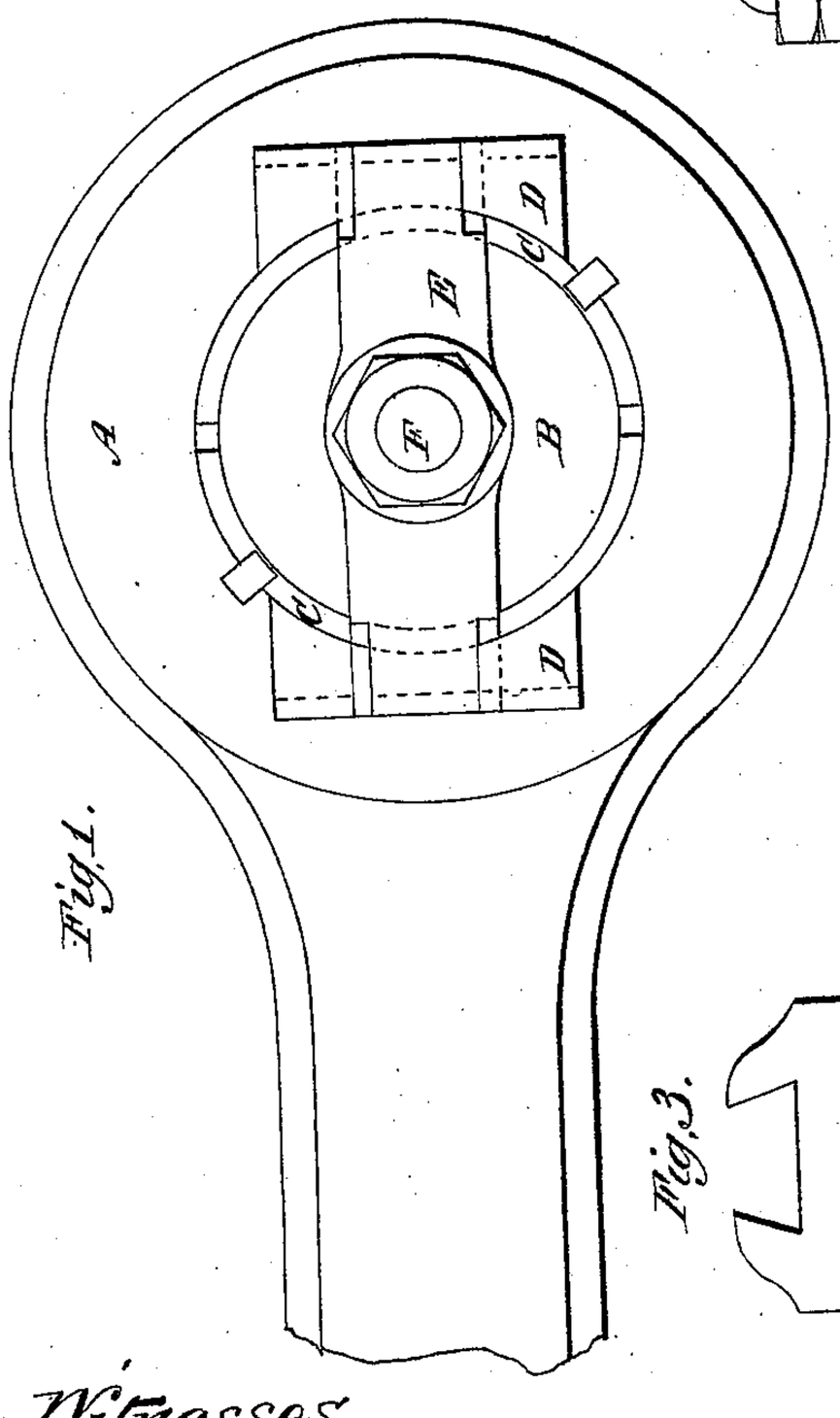

Fig. 1.

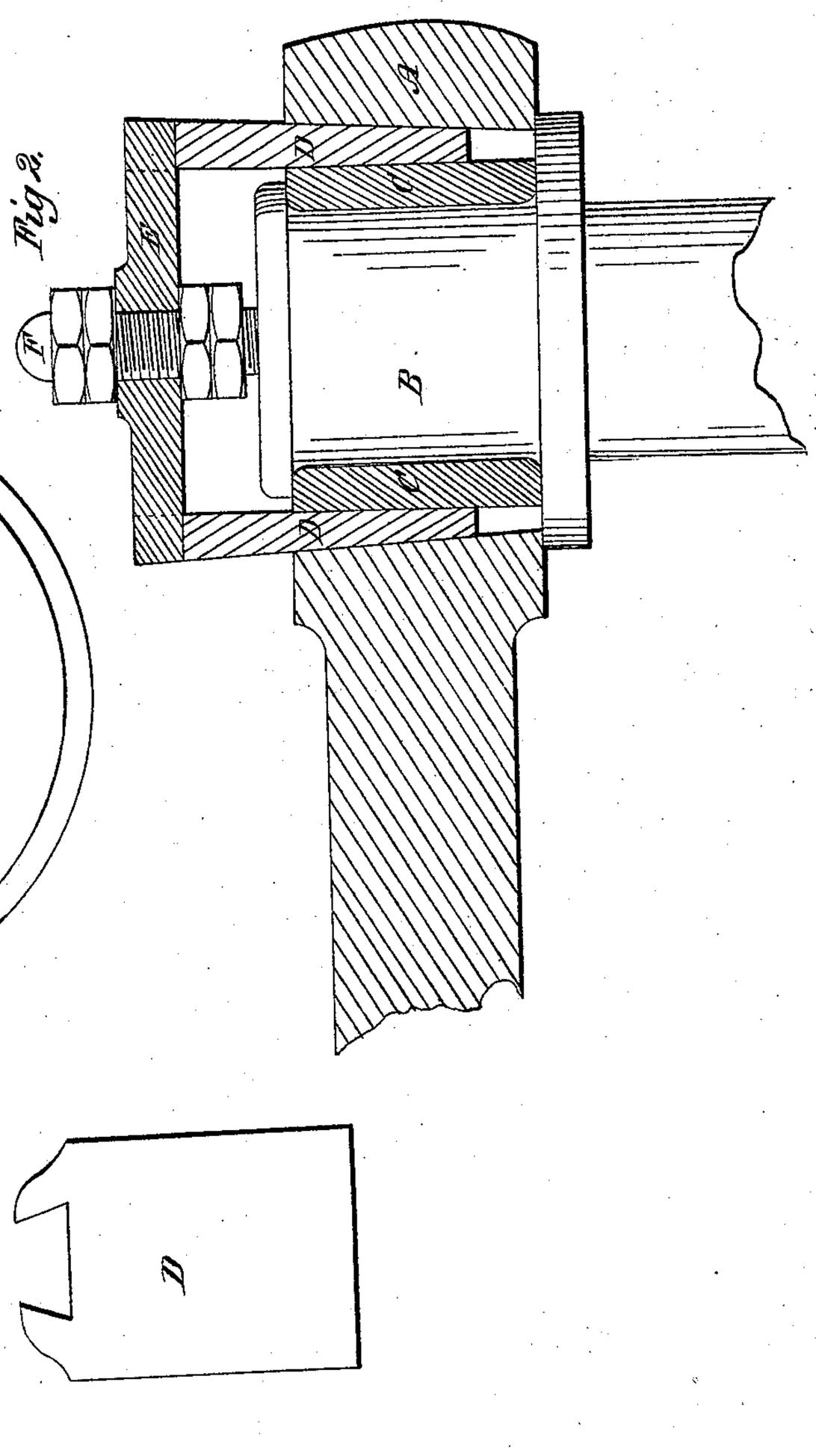

Fig. 2.

Fig. 3.

Witnesses.

Isaac G. Hubbs.

Francis. S. Lowe

Inventor.

John R Sees

UNITED STATES PATENT OFFICE.

JOHN R. SEES, OF NEW YORK, N. Y.

ADJUSTING THE BRASSES OF CONNECTING-RODS.

Specification of Letters Patent No. 14,473, dated March 18, 1856.

To all whom it may concern:

Be it known that I, JOHN R. SEES, of the city and county and State of New York, have invented an Improved Mode of Securing Journal-Boxes in Connecting-Rods and Following up Their Wear; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which—

Figure 1, shows a perspective view of the end of a connecting-rod with my improvement attached. Fig. 2, is a plan of the same and Fig. 3 is a view of one of the wedges detached, similar letters in each of the figures showing similar parts.

The nature of my invention consists in a mode of securing the boxes in connecting rods and following up their wear, by two plans—cylindrical wedges working in cavities made in the rod at opposite sides of, and partly inclosing, the boxes, and adjusted in position by a set screw attached to a bridge piece which connects them; dispensing thereby with the strap, gibs and key ordinarily used, and lessening considerably the expense of fitting up the connecting rod.

A in the accompanying drawings represents the head or box end of a connecting rod, which is bored out to fit, and receive, the boxes C, C.

B is the pin to which the rod is connected, and which it works or is worked by it.

C, C, are the boxes, turned cylindrical on the outside, and bored out on the inside to fit the pin. They are, or can be, made in one piece, and then cut asunder.

D, D, are the two plans—cylindrical wedges, bored or fitted on the front to fit the outside of the boxes, and made square and flat on the back and sides. They are slightly tapering on the back (about $\frac{1}{8}$ of an inch in $2\frac{1}{2}$ inches length) and are fitted into tapering cavities in opposite sides of the hole in the rod that contains the boxes. They have dovetailed recesses on the top to receive the bridge piece E.

E is a bridge piece, connected by dovetails at the ends to the wedges D, D, and in the center to the pin B by the set screw F. This set screw has jam or check nuts on it above and below the bridge, which are so adjusted that it can revolve freely within the bridge. The collar on the back side of the pin B is made of sufficient size to cover the ends of the boxes and lap over on the head of the rod, so that the rod is retained in position sidewise by the collar on one side and the wedges on the other. The boxes are kept from turning in the rod by feathers inserted in them and the rod as represented in the drawings. To tighten the boxes to make up for their wear, the jam nuts below the bridge are first loosened—the jam nuts above the bridge are then turned down until the wedges D, D, have tightened the boxes sufficiently, when the jam nuts below the bridge are again adjusted in place.

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

The combination of the bridge piece E and the wedges D, D, as herein described, for the purposes set forth.

JOHN R. SEES.

Witnesses:

ISAAC G. HUBBS,

FRANCIS S. LOW.