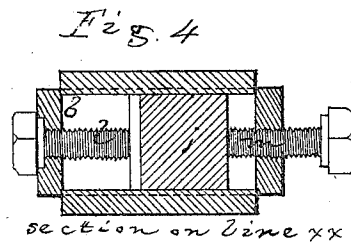
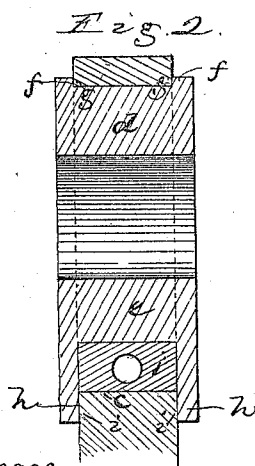
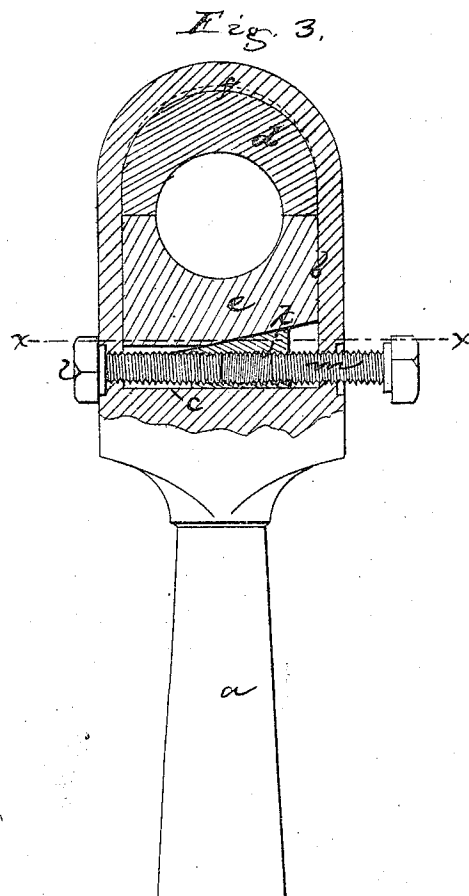
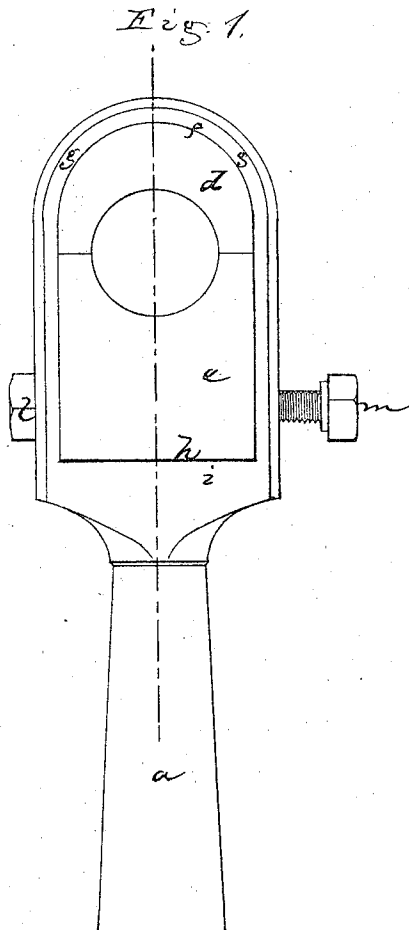


J. F. HASKINS.
Connecting Rods.

No. 134,276.

Patented Dec. 24, 1872.



Witnesses.
M. W. Frothingham.
L. H. Atkinson.

Inventor
John F. Haskins
by his att'ys.
Crosby & Gould

UNITED STATES PATENT OFFICE.

JOHN F. HASKINS, OF FITCHBURG, MASSACHUSETTS.

IMPROVEMENT IN CONNECTING-RODS.

Specification forming part of Letters Patent No. 124,276, dated December 24, 1872.

To all whom it may concern:

Be it known that I, JOHN F. HASKINS, of Fitchburg, in the county of Worcester and State of Massachusetts, have invented an Improved Key-Box for Connecting-Rods; 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 the "stub end" of the connecting-rods of engines, or to the method of making the key-box through which the crank-pin extends.

In my invention I make the end of the rod with a slot or opening rectangular in form, except at the outer end, which is semicircular, and I insert in this slot two half boxes, the upper one semicircular and having upwardly-extending flanges that lap upon the faces of the rod, and the lower one having downwardly-extending flanges that embrace the opposite faces of the rod below the box, the bottom face of the box, between these flanges, being inclined and having a key sliding between it and the square end face of the box-receiving slot of the rod, this key being concealed and protected by the flanges and being moved to and fro, to fasten or loosen the box, by opposite screws passing through opposite sides of the rod into the opposite ends of the key.

My invention consists in a connecting-rod having a key-box the respective halves of which are flanged to hold the box in position and conceal and protect the key.

The drawing represents the end of a connecting-rod and its key-box, embodying my improvement.

Figure 1 shows a side elevation of the box. Fig. 2 is a cross-sectional elevation. Fig. 3 is a longitudinal central section of the box. Fig. 4 is a transverse central section.

a denotes the rod; *b*, the box-receiving slot or opening through the rod; *c*, the square bot-

tom of the slot; *d*, the upper half of the box; *e*, the lower half. The box is thicker than the rod, and the upper half has lips or flanges *f* that extend upward and lap the faces *g* of the rod over the slot *b*, and the lower half has flanges *h* that extend over the faces *i* of the rod below the slot. Between the flanges *h* is a key, *j*, which slides between the face *c*, at the end of the slot, and an inclined bottom face, *k*, of the box, above the flanges, the bottom face of the key being square and the top face inclined, and the inclined seat being flanked and protected by the flanges *h*, which also flank, conceal, and protect the key. Through one side of the rod a screw, *l*, passes, said screw entering one end of the key *j*, and through the opposite side of the rod passes a similar screw, *m*, entering the other end of the key, the key being slid in either direction by turning back one screw and turning up the other, and the box being made fast in position by pressing it up by the key and loosened so that it may be withdrawn by sliding the key back and letting the box slip down, the flanges *f* slipping below the faces *g* so that the upper half box *d* can be drawn out of the slot *b*, and the half box *e* being withdrawn by raising it and slipping it out through the slot *b* after the half *d* has been removed.

The box may be divided in the other direction, leaving two independent flanges *f* and *h* at each side, the two parts being connected by bolts. I prefer, however, the specific construction shown in the drawing.

** Claim.*

I claim—

The combination of the flanged boxes *d e*, the slot *b*, the key *j*, and the screws *l m*, the whole constructed and arranged substantially as shown and described.

Witnesses:

JOHN F. HASKINS.

FRANCIS GOULD,
M. W. FROTHINGHAM.