

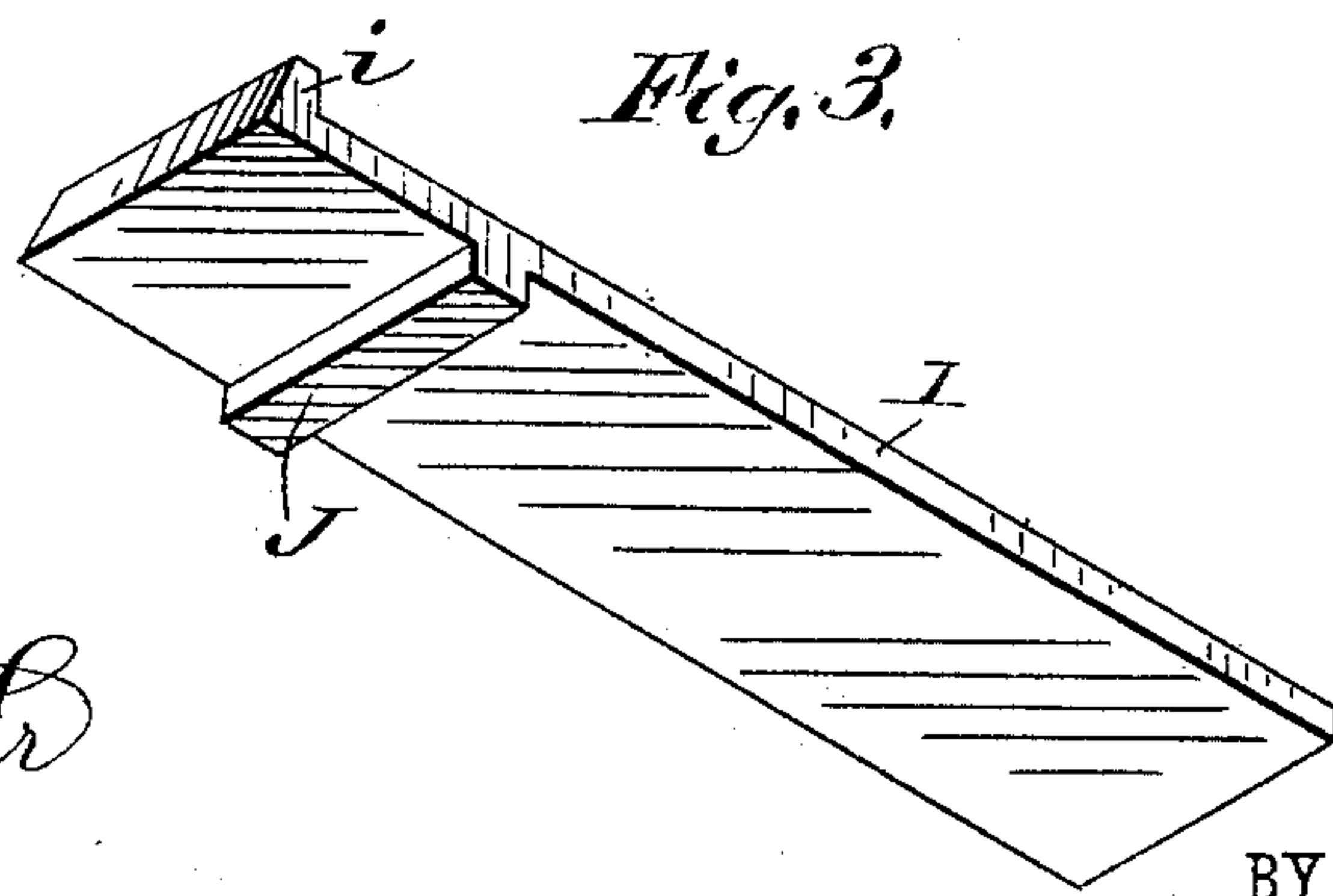
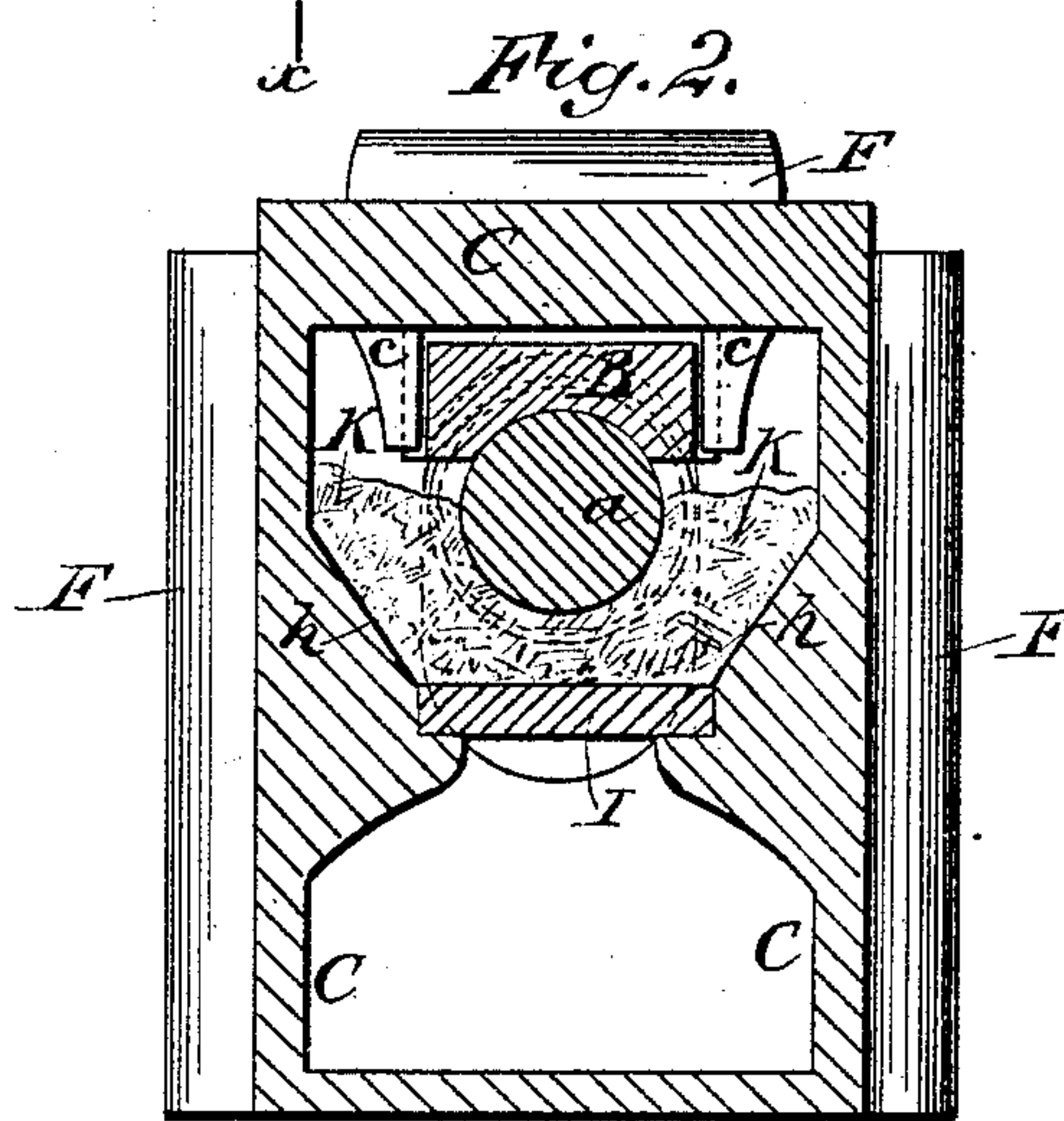
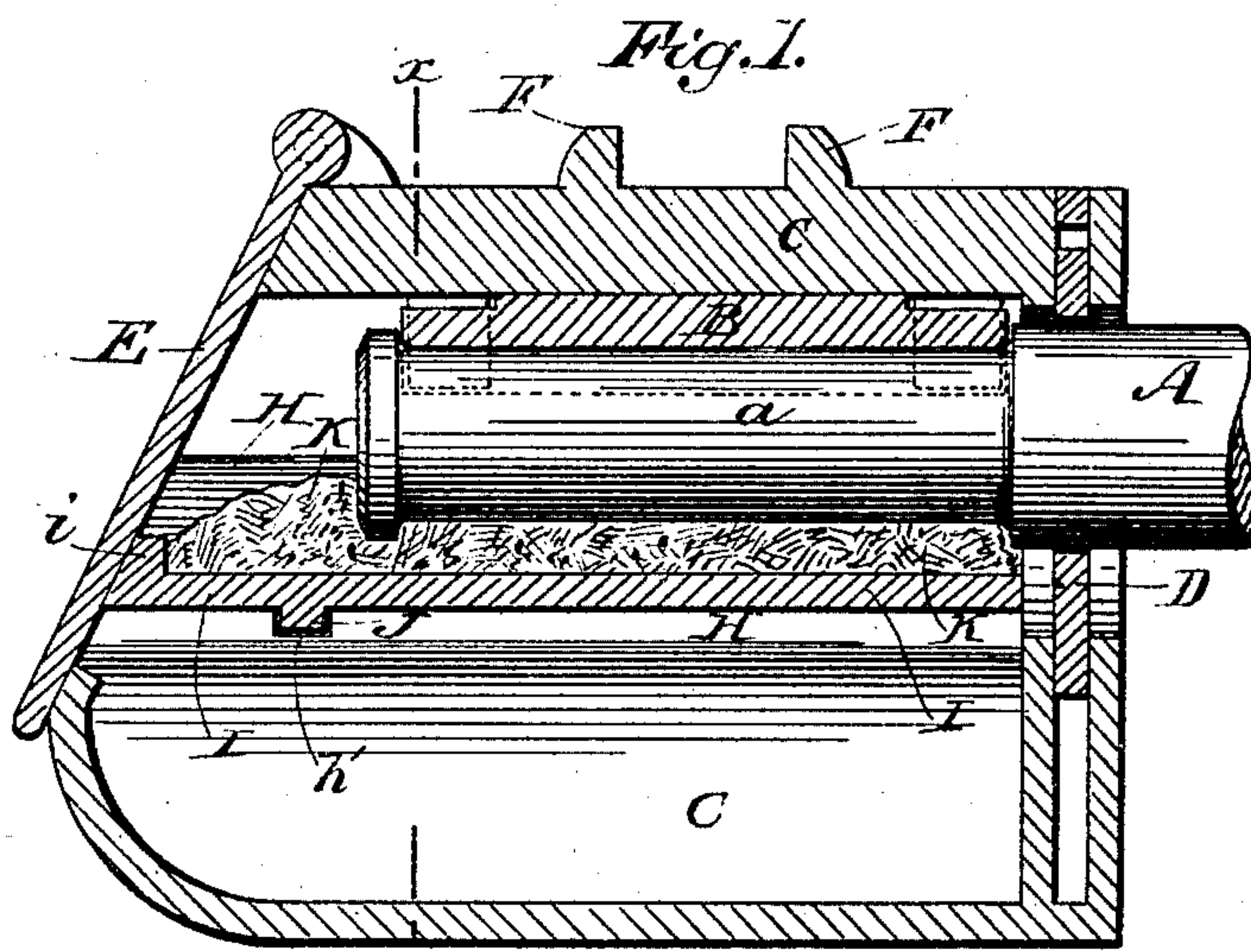
(No Model.)

S. R. STINARD.

CAR AXLE BOX.

No. 354,448.

Patented Dec. 14, 1886.



WITNESSES:

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UNITED STATES PATENT OFFICE.

STEPHEN R. STINARD, OF POMPTON, NEW JERSEY.

CAR-AXLE BOX.

SPECIFICATION forming part of Letters Patent No. 354,448, dated December 14, 1886.

Application filed August 17, 1886. Serial No. 211,146. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN R. STINARD, of Pompton, in the county of Passaic and State of New Jersey, have invented a new and Improved Car-Axle Box, of which the following is a full, clear, and exact description.

My invention relates to axle-boxes, more especially to the axle-boxes of railway-cars, and has for its object to provide a simple, inexpensive, and effective arrangement of the box, and an oiled waste or packing placed therein, whereby constant lubrication of the axle-journal will be insured without waste of the lubricant, and the axle-box and axle will be kept cool or in good condition.

The invention consists in certain novel features of construction and combinations of parts of the axle-box and its arrangement with the axle and its bearings, all as hereinafter fully described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a central longitudinal sectional elevation of my improved car-axle box, with the end of the axle shown in side elevation. Fig. 2 is a transverse sectional elevation taken on the line *x x*, Fig. 1, and Fig. 3 is a bottom perspective view of the removable bottom plate or slide of the axle-chamber of the box.

The journal or arm *a* of the car-axle *A* has a bearing, in the usual manner, on a brass, *B*, which is fitted at the top of the axle-box *C* between lugs *c*, pendent from the top of the box. The box shown is provided with a dust-slide, *D*, at its inner end, and a drop-lid, *E*, at its outer end, and has top and side lugs, *F*, forming exterior recesses or grooves to receive saddle-bars of the car-truck frame.

All the above-named parts may be made and arranged relatively to each other in any usual or approved way.

At opposite sides of the inner chamber or cavity of the axle-box *C* there are formed opposite ribs or lugs *H H*, which range lengthwise of the box, and have top faces, *h h*, inclining or sloping toward the center of the box. The opposing edges of the ribs *H H* are rabbeted to receive the opposite edges of a plate, *I*, which preferably has an upwardly-projecting lip, *i*, at and across its outer end,

and a downwardly-projecting lip or rib, *J*, at and across its under side near its outer end, as shown in Figs. 1 and 3 of the drawings. The lip *i* prevents the oiled waste or fabric *K*, placed on the plate *I* below the axle-journal *a*, from slipping off the front of the plate and out of the box-opening closed by the lid *D*, and the rib *J* enters notches *h'*, made in the opposite ribs *H H*, to hold the plate *I* against bodily endwise movement after it is slid into place in the axle-box.

It is obvious that after the oiled waste *K*, or other suitable absorbent of a lubricant, is packed into the space above the plate *I*, and against or upon the sloping ribs *H H* of the box, any packing or settling down of the lubricating substance *K* cannot cause it to leave the under surface or side of the axle-journal *a*, as the sloping side walls, *h h*, within the box will cause the waste to pack closely to the journal above the plate *I*, which forms the bottom to the upper or axle chamber of the box; hence the axle-journal will always receive a proper lubrication, and the box and axle will not become overheated, and the lubricant will not be wasted.

It will be understood that the gist of my invention is giving a support to oiled waste or other lubricant-absorbing material quite closely to the axle-journal, and in such manner that any settling or packing of the waste will not cause it to leave the journal, but rather to bear or crowd all the more closely to it, and which I accomplish most effectively by providing a bottom plate, *I*, and opposite sloping sides or walls, as at *h h*, in the axle-box. The plate *I* need not be removable. I make it so only to allow more convenient access to the brass or bearing *B*, for inserting or removing the brass, and at the same time provide a bottom support for the waste or lubricating substance as closely as may be to the axle. To remove the plate *I*, its outer end will be raised sufficiently to lift its rib *J* from the notches in the ribs *H H*, and the plate may then be withdrawn or slid endwise from the axle-box, as will readily be understood.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A car-axle box having an axle-receiving chamber arranged with its bottom quite close

to the axle-journal and provided with sloping side walls, in combination with oiled waste or other lubricating material placed in said chamber next the journal, substantially as shown 5 and described, whereby as the oiled waste or lubricant packs or settles it will crowd toward and against the axle-journal, to insure its constant lubrication, as set forth.

2. The combination, with the axle-box C, 10 axle A, and brass B, of a removable plate, O, in the box quite close to the axle-journal a, and oiled waste or lubricating material, as at K, placed between the plate I and the axle-journal, substantially as described, for the pur- 15 poses set forth.

3. The combination, with the axle-box C, provided with side ribs, as at H, having sloping faces, as at h, and the brass B, of a remov-

able plate, I, fitted to the ribs H, and an oiled waste or packing, as at K, placed between the 20 plate I, ribs H, and the axle-journal, substantially as described, for the purposes set forth.

4. The combination, with the axle-box C, provided with ribs H H, having sloping faces h h and notches h', and the brass B, of a re- 25 movable plate, I, fitted to the ribs and having a bottom lug, J, adapted to lock into the notches h', and oiled waste or packing K, placed between the plate I, ribs H, and the axle-journal, substantially as described, for the pur- 30 poses set forth.

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Witnesses:

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