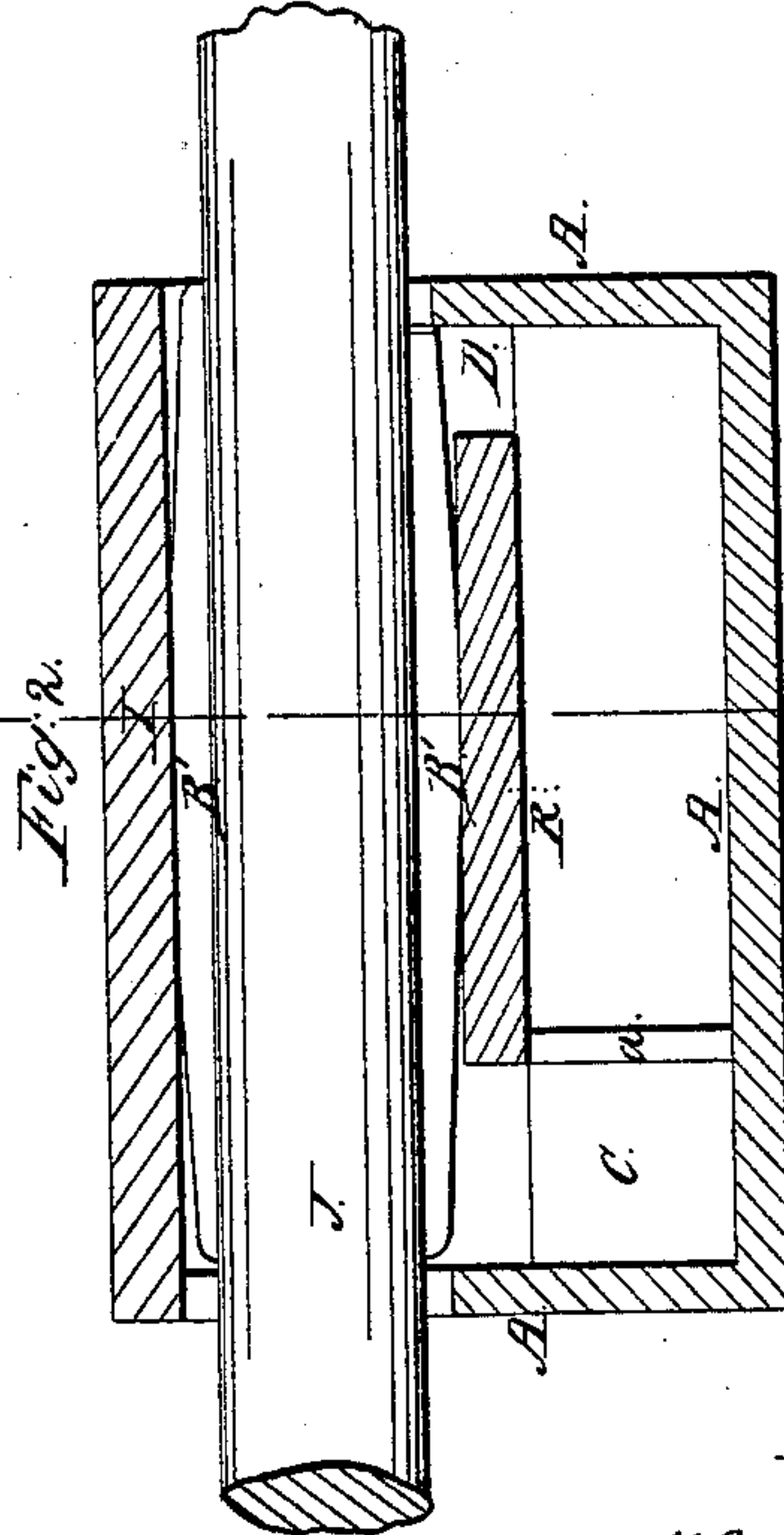
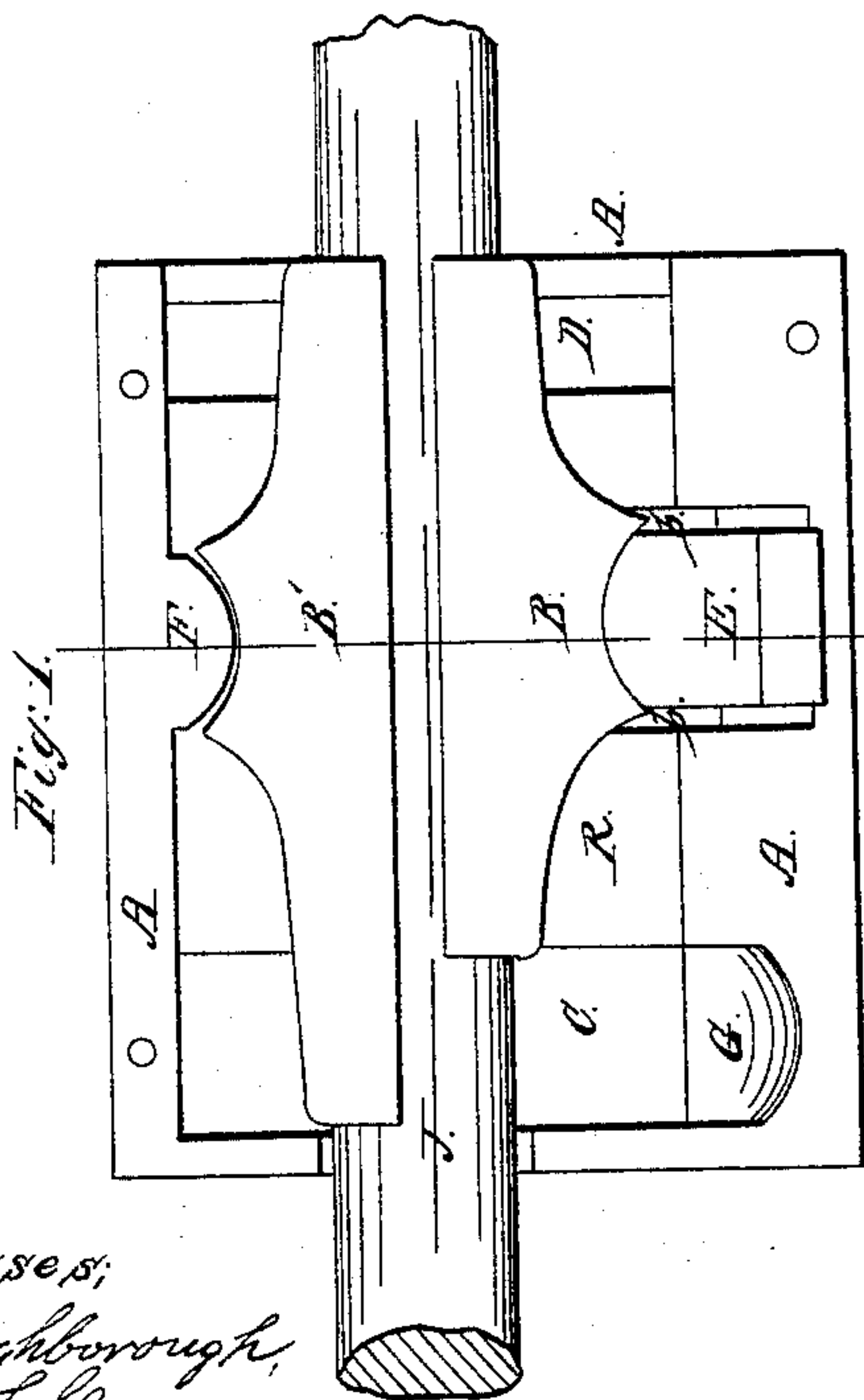
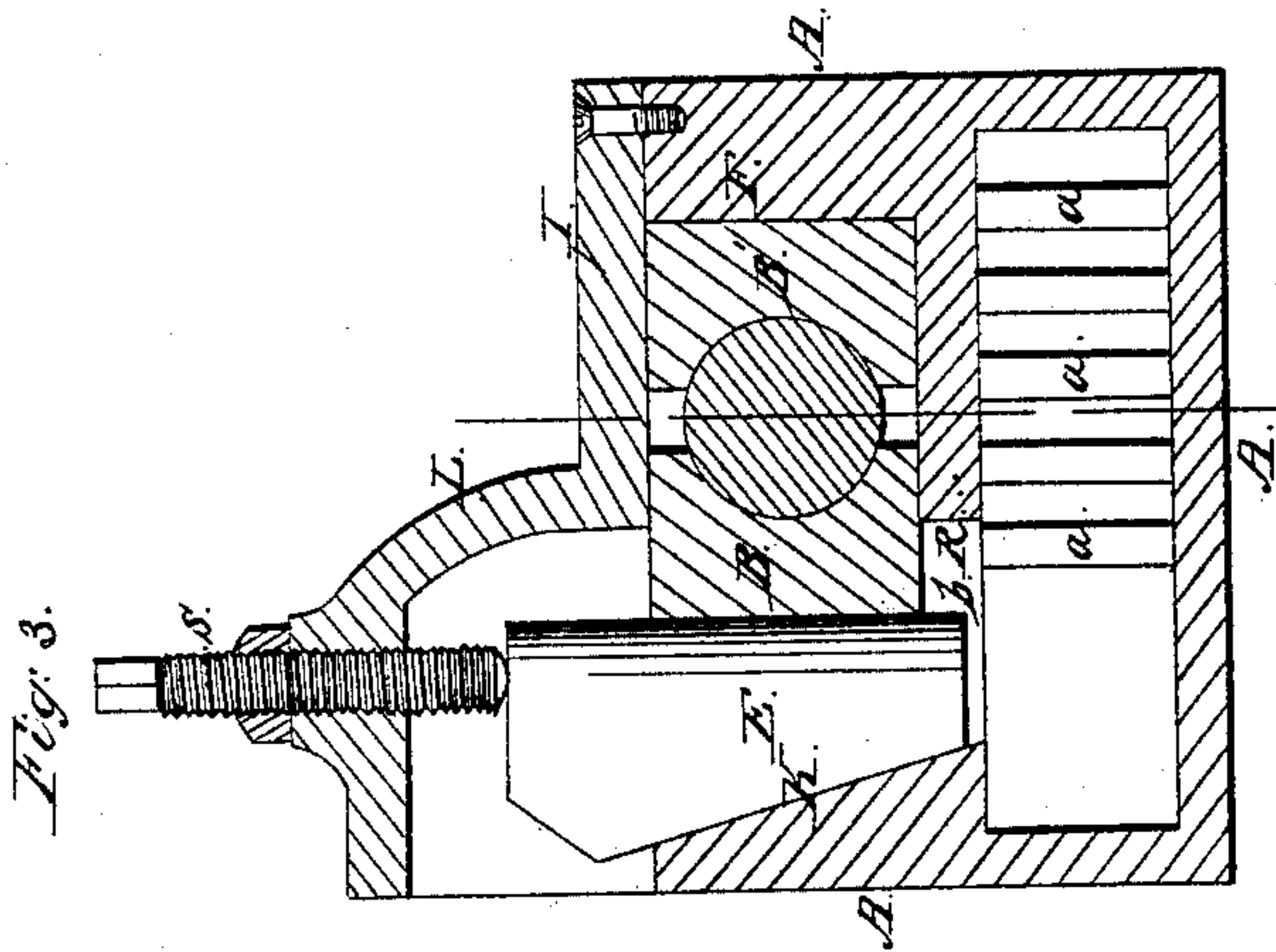


T. Welch,

Shaft Hanger.

N^o 61,370.

Patented Jan. 22, 1867.



Witnesses;
Wm. S. Laughborough,
Edwin S. Coyle.

Inventor;
Thomas Welch.

United States Patent Office.

THOMAS WELCH, OF CHURCHVILLE, NEW YORK.

Letters Patent No. 61,370, dated January 22, 1867.

IMPROVEMENT IN HANGER-BOX FOR CRANK-SHAFTS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, THOMAS WELCH, of Churchville, in the county of Monroe, and State of New York, have invented a new and useful "Hanger-Box for the Crank-Shaft and other Journals of Harvesters;" and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a top view of my invention, the top plate or cap of the case A being removed.

Figure 2 is a vertical section of the same, taken in the plane indicated by the red line *o*, fig. 1.

Figure 3 is a transverse vertical section, taken in the plane indicated by the red line *n*, in figs. 1, 2, and 3.

Like letters indicate corresponding parts in all the figures.

This invention consists, mainly, in providing the crank-shaft of harvesters with self-adjusting, or self-"lining" boxes; and in providing the said boxes and journals with an oil-chamber or reservoir, and a wick or stuffing, whereby the oil is conveyed to the end of the journal, whence it is distributed over the whole bearing.

To enable others to make and use my invention, I will describe its construction and operation.

I provide the case A with a division plate or rest R, upon which the boxes B and B' are supported. This plate extends from side to side of the case, laterally, but an open space, C and D, is left at the ends. The space C is divided from the balance of the chamber by bars *a*, figs. 2 and 3, and constitutes a sort of packing cage for cotton waste or other suitable material. There is an opening *b* through the plate R, through which the end of the adjusting wedge E may pass. This wedge has a cylindrical face next to the box B, and fits in the corresponding-shaped recess in the back of the box. The set-screw S is designed to secure the proper adjustment of the wedge against the box, by preventing it from working up the inclined plane and thereby loosening the boxes. The box B' is similarly fitted to a projecting rib F on the case A. The box B is made somewhat shorter than the other, as shown in fig. 1, so as to permit the stuffing or waste to come in contact with the journal J. There is an opening provided in the cap, I, over the point G, (fig. 1,) through which opening the waste or stuffing is applied. The cap, I, is made with an arch or elevation L, fig. 3, to make room for the wedge. The set-screw, S, is tapped through this arch and acts against the top of the wedge, and by this means the parts may be tightened up at any time to compensate for any wear that may occur between the parts. The top and bottom of the boxes, B and B', are made convex, longitudinally, as shown in fig. 2. They may be made of chilled iron, and by means of the provisions made for their rocking horizontally and vertically, they will "line" themselves to a perfect fit to the journal or shaft J without babbling, and thereby accomplish the object by a much simpler and cheaper method, and at the same time provide a much more substantial and durable box. The boxes may rest upon ribs, top and bottom, similar to rib F if desired, or the ribs in either case may be upon the boxes and the case recessed. If an iron frame is used for the machine, the case may be cast with the frame, and the cap, I, cast on or made separate and attached with bolts. If the cap is cast to the case, the wedge, E, should be inserted and held with the upper end against the arch, until the boxes and shaft J are inserted and properly adjusted, when the wedge may drop to a bearing between the box B, and inclined plane K, and the set-screw S turned down against the top of it. These boxes, B and B', may be taken from the sand and rattled, or otherwise cleaned, and adjusted in the machine as above described, without any other fitting. Brass or any other suitable material may be used for the boxes. The wedge may be dispensed with, by placing the set-screw S in the side of the case, so as to screw against the back of the box. A wedge or a set-screw might be used against the back of both boxes if desired. A set-screw may be used on the top of the boxes, by having an intervening plate for the point of the screw to rest against.

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

1. Providing the hanger-journal of the crank-shaft, or other journals of harvesters, with self-adjusting or self-"lining" bearings or boxes, substantially as and for the purposes shown and described.
2. The application of the wedge E, with or without a set-screw, when used in combination with the box, in which the journal revolves, for the purpose of compensating for the slack that might otherwise occur by the wearing away of the parts.
3. The set-screw S, in combination with the self-adjusting or self-"lining" boxes of harvesters, substantially as and for the purposes set forth.
4. In combination with the self-"lining" or adjusting boxes and journals, the oil reservoir, substantially as shown, and for the purposes described.
5. In combination with a set-screw and self-"lining" or self-adjusting boxes, in harvesters, the cap I, or its equivalent, for the purposes described.

THOMAS WELCH.

Witnesses:

WM. S. LOUGHBOROUGH,
EDWIN S. COYE.