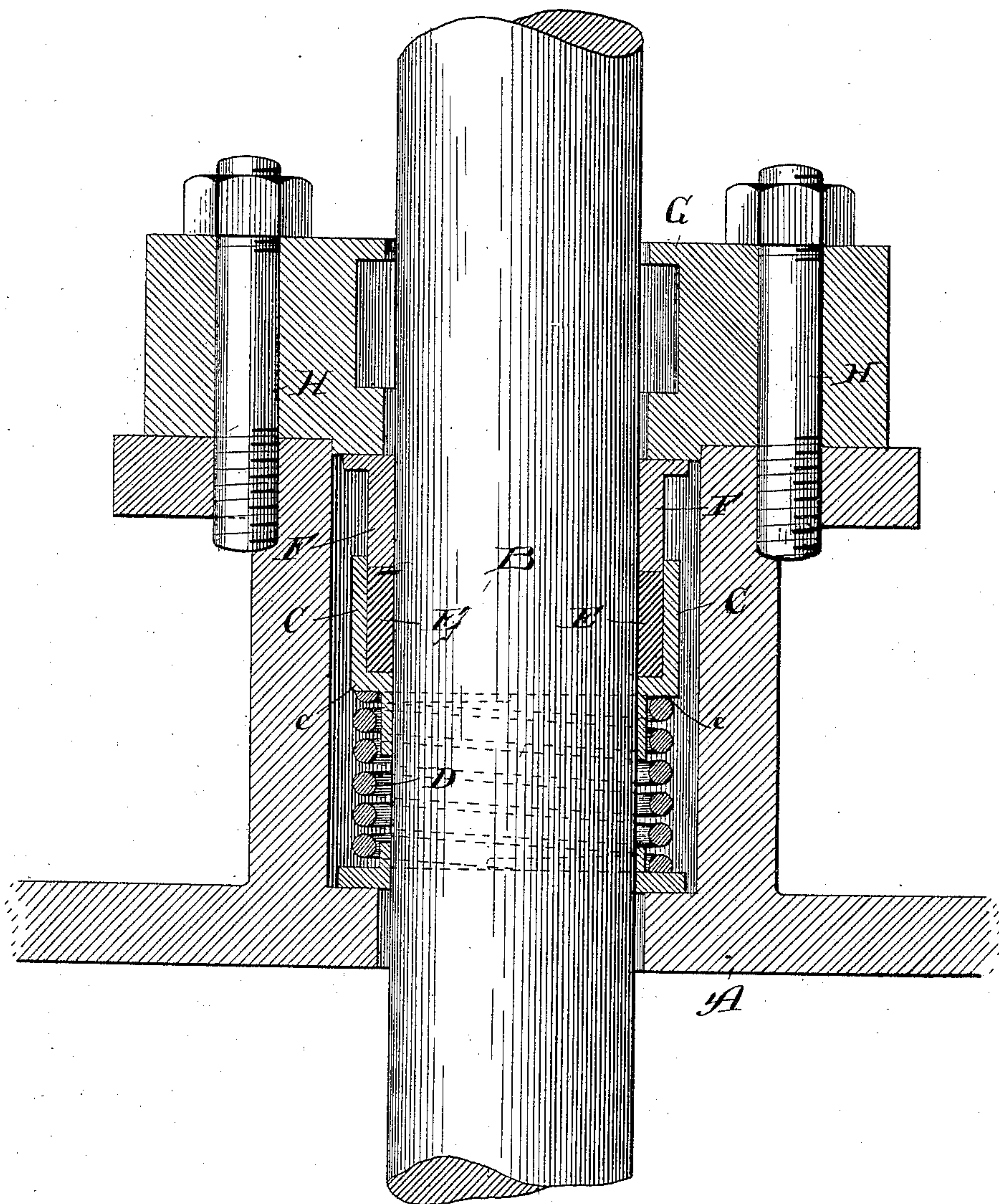


(No Model.)

P. H. ADAMS, Jr. & O. T. X. ADAMS.
METALLIC ROD PACKING.

No. 432,717.

Patented July 22, 1890.



Witnesses:

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UNITED STATES PATENT OFFICE.

PHINEAS H. ADAMS, JR., AND ORSEMAS T. X. ADAMS, OF CHICAGO, ILLINOIS.

METALLIC ROD-PACKING.

SPECIFICATION forming part of Letters Patent No. 432,717, dated July 22, 1890.

Application filed May 24, 1890. Serial No. 352,977. (No model.)

To all whom it may concern:

Be it known that we, PHINEAS H. ADAMS, Jr., and ORSEMAS T. X. ADAMS, citizens of the United States, residing at Chicago, Illinois, have invented certain new and useful Improvements in Metallic Rod-Packing, of which the following is a specification.

In the drawing we have represented a longitudinal section of the packing-box and packing as the same appear in use.

In making our improved packing we arrange a packing-box A on the rod B in the usual manner. Within the packing-box is arranged an annular collar C, with a space between it and the rod for the packing. At one end of this collar there is an inward projection c, which affords a seat or shoulder on which the packing may be placed. The collar then extends along the rod, fitting it snugly a sufficient distance to insure a proper and secure connection between the two. A spring D surrounds the rod and the extending portion of the collar C, so as to constantly tend to move the collar along the rod in the direction of the tension of the spring. A metallic packing E is arranged within the annular recess or chamber formed within the collar C and the rod. This metallic packing is intended to be of soft metal with its ends substantially square, as shown in the drawing. It is preferably made of a single ring, by which we mean that it is not divided horizontally or between its ends. Another collar F is arranged on the rod, fitting it snugly, but at the same time so as to permit the free play of the rod through it. The end of this collar next to the packing is arranged to fit within the annular space in the collar C, so as to bear against the packing at that side. The collar F may be held in place by a plate or box G, which may be

secured to the box A by means of screw-bolts H, so that it may be turned tightly and securely against the same or in any other convenient manner. When the collar C is arranged in place and the soft metallic packing fitted within its annular chamber and the collar F put on and the plate or box G secured in place, the packing E will be pressed, squeezed, or crushed endwise between the collar F and the shoulder c to the extent of the tension or pressure exerted by the spring D. This endwise pressure on the square ends of the metallic packing E will squeeze it or cause it to bulge laterally against the rod, so as to form a tight and secure packing between the two. By this arrangement we dispense with the beveled or coned ends of the packing, dispense with making the packing in several rings, and depend entirely upon the thickening of the soft metallic packing caused by endwise pressure upon the same.

What we regard as new, and desire to secure by Letters Patent, is—

In metallic packing, the combination of a collar adapted to surround a rod in use and to form an annular square-ended chamber around the same, another square-ended collar adapted to surround the rod and to have its square end forced into the annular chamber formed by the first-mentioned collar, and a square-ended metallic packing-ring adapted to be inserted in the annular chamber and to surround the rod and to be thickened or upset by the endwise pressure of the collars upon its square ends, substantially as described.

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Witnesses:

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