

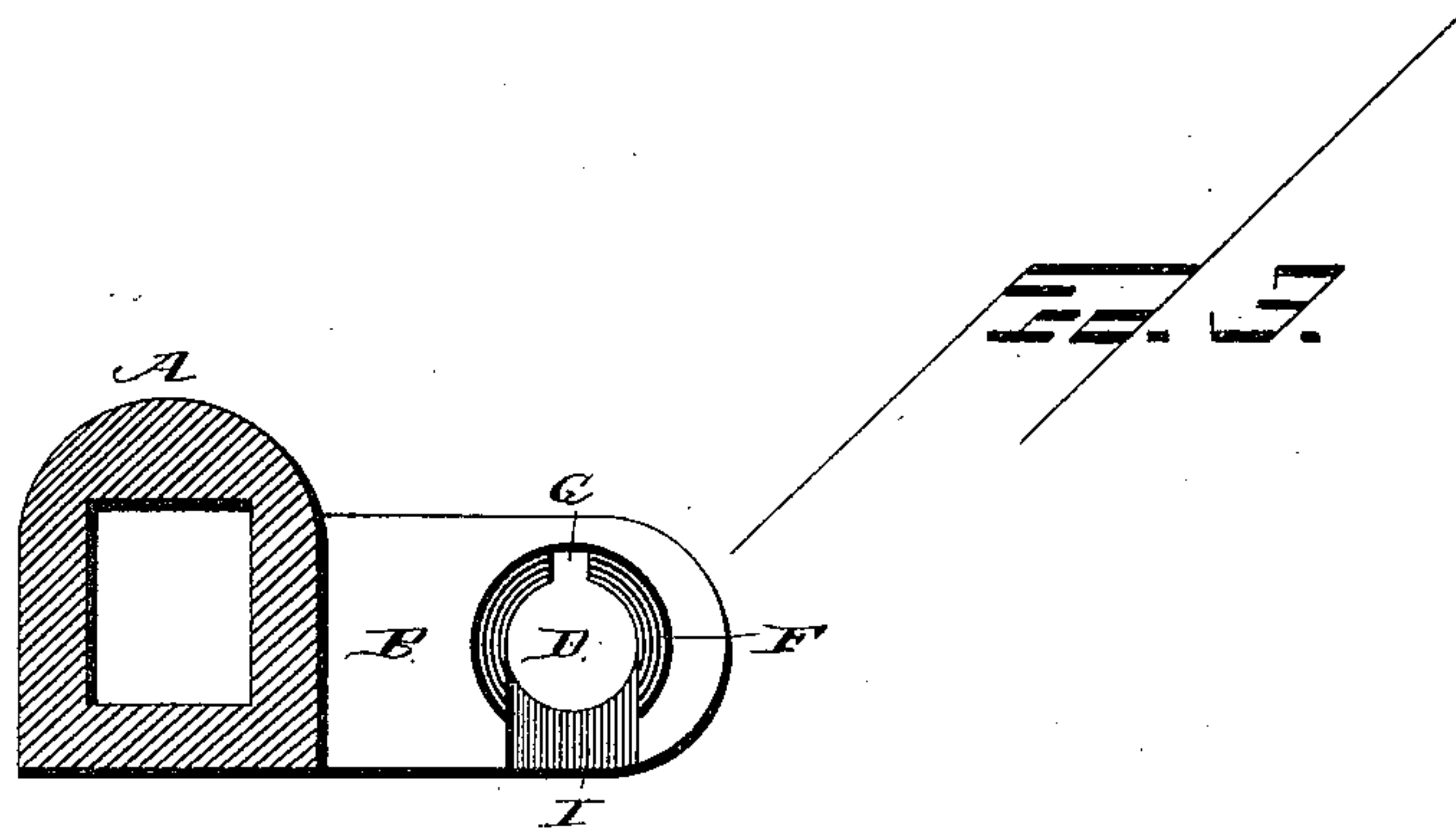
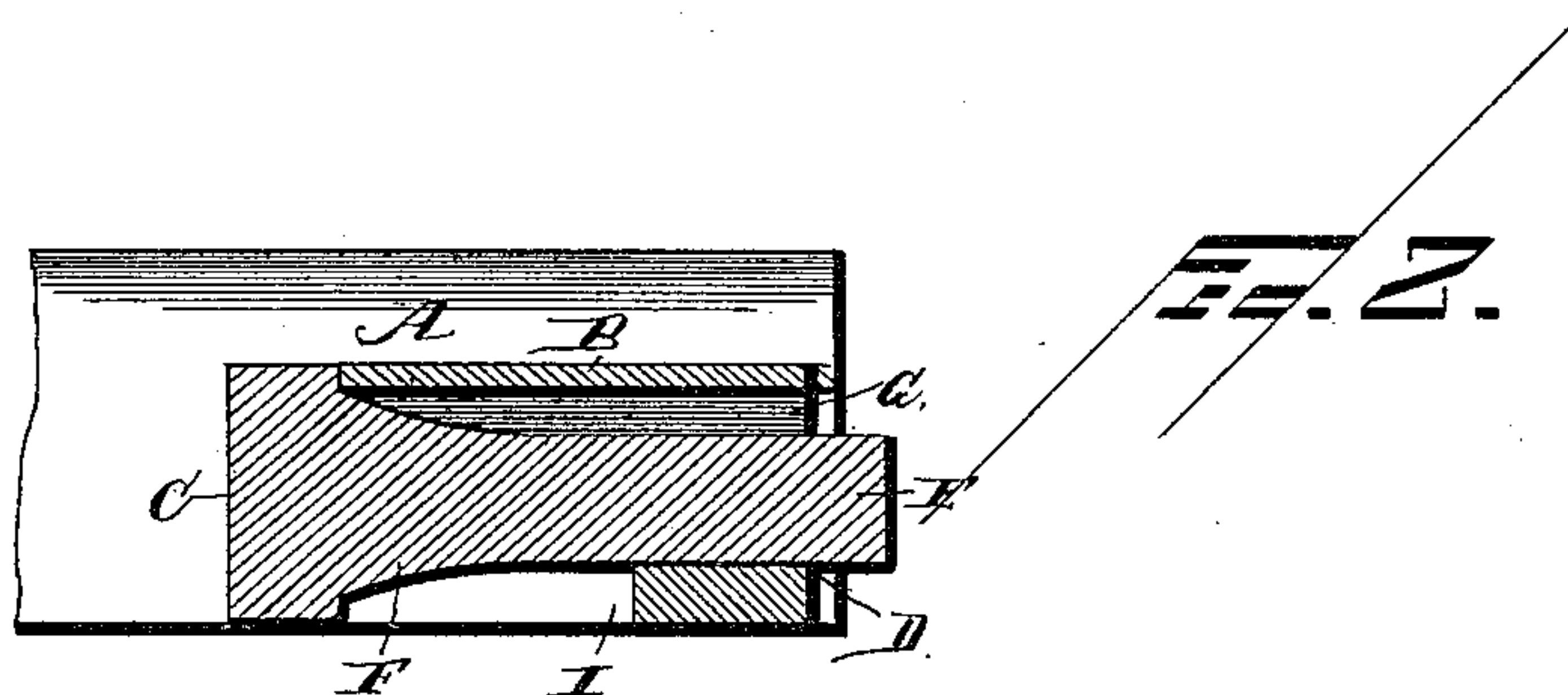
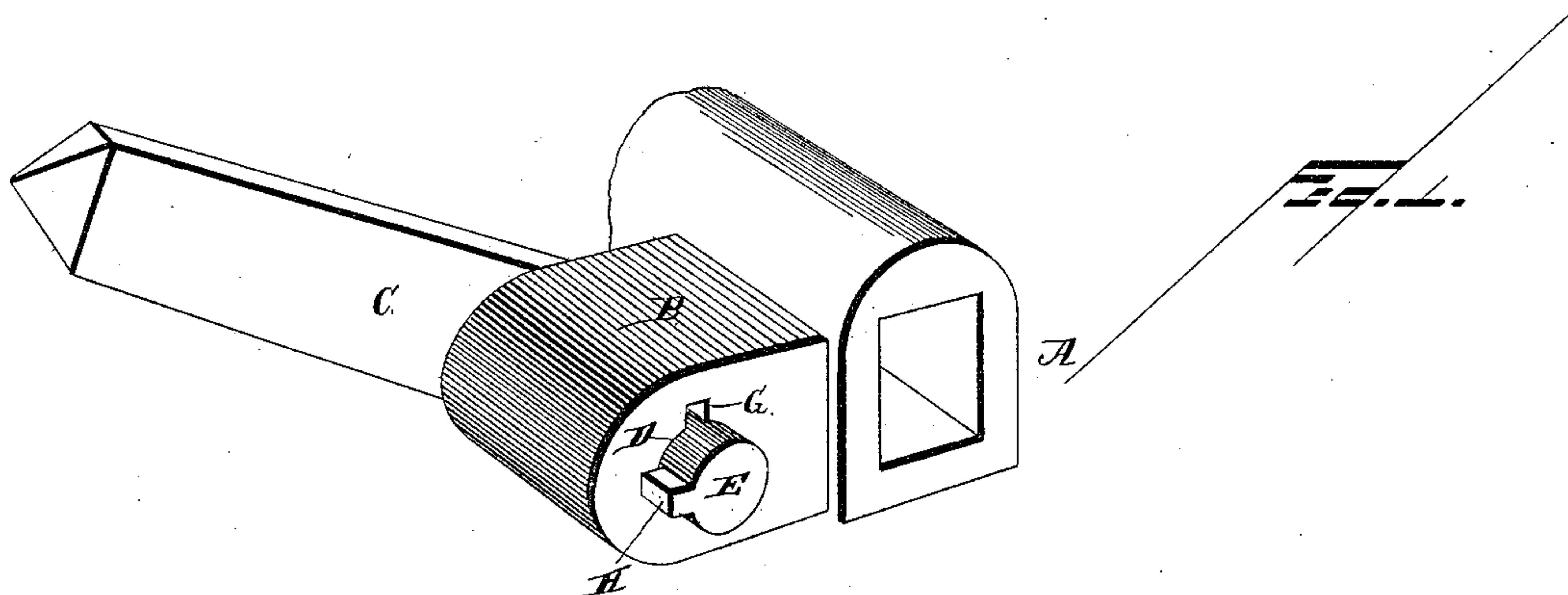
(No Model.)

T. H. B. MILLSAP.

THILL COUPLING.

No. 379,591.

Patented Mar. 20, 1888.



Witnesses,  
*Geo. H. Hoff*  
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# UNITED STATES PATENT OFFICE.

THOMAS HART BENTON MILLSAP, OF HARPER, KANSAS.

## THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 379,591, dated March 20, 1888.

Application filed December 9, 1887. Serial No. 257,371. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS HART BENTON MILLSAP, a citizen of the United States, residing at Harper, in the county of Harper and State of Kansas, have invented a new and useful Improvement in Thill-Couplings, of which the following is a specification.

My invention relates to improvements in thill-couplings; and it consists in certain novel features, hereinafter described and claimed.

In the accompanying drawings, which fully illustrate my invention, Figure 1 is a perspective view of my improved coupling. Fig. 2 is a vertical longitudinal section of the same, and Fig. 3 is a side view of the coupling-box.

Referring to the drawings by letter, A designates the axle; B, the coupling-box projecting from the front side of the same, and C the thill-iron.

The coupling-box is provided with an opening or passage, D, extending entirely there-through parallel to the axle, and the thill-iron is provided with an integral laterally-projecting coupling-pin, E, which is adapted to be inserted through the passage D in the operation of the device. The passage D is flared at its inner end, F, and in the top of the passage I provide a longitudinal groove, G, which extends to the outer end of said passage. The inner end of the coupling-pin is enlarged and substantially conical in outline to fit snugly in the flared inner end of the opening or passage D, and on the outer end of the coupling-pin I form a lug, H, which is adapted to pass through the groove G and engage against the outer side of the coupling-box, as will presently appear.

In the bottom of the coupling-box I form a slot or other opening, I, for the escape of grit

and dirt and to prevent the same collecting in the coupling-box.

In operation the thill is turned to a vertical position and the coupling-pin inserted through the opening in the coupling-box. When the pin has been inserted through the passage, the thill is turned to a horizontal position, as shown in Fig. 1, when the lug H will engage against the side of the coupling-box, as clearly shown, and prevent the accidental withdrawal of the coupling-pin. The flared and conical construction at the inner ends of the opening and the pin prevent the pin being inserted too far into or through the opening, and it will be seen that the parts will fit snugly together and rattling be thereby prevented. To uncouple the thills, of course the reverse operation to that above described is performed.

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

In a thill-coupling, the combination of the axle, the coupling-box projected therefrom and having a passage, D, the said passage having a flared inner end and a longitudinal groove, G, in its top, and the thill-iron having an integral laterally-projecting coupling pin adapted to pass through the passage D, the said pin being of a conical formation at its inner end and provided with a lug, H, at its outer end, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

THOMAS HART BENTON MILLSAP.

Witnesses:

VICTOR YOUNGBURG,  
R. G. HAZLETT.