

(No Model.)

L. A. GEISINGER.
SET SCREW.

No. 465,175.

Patented Dec. 15, 1891.

Fig: 1.

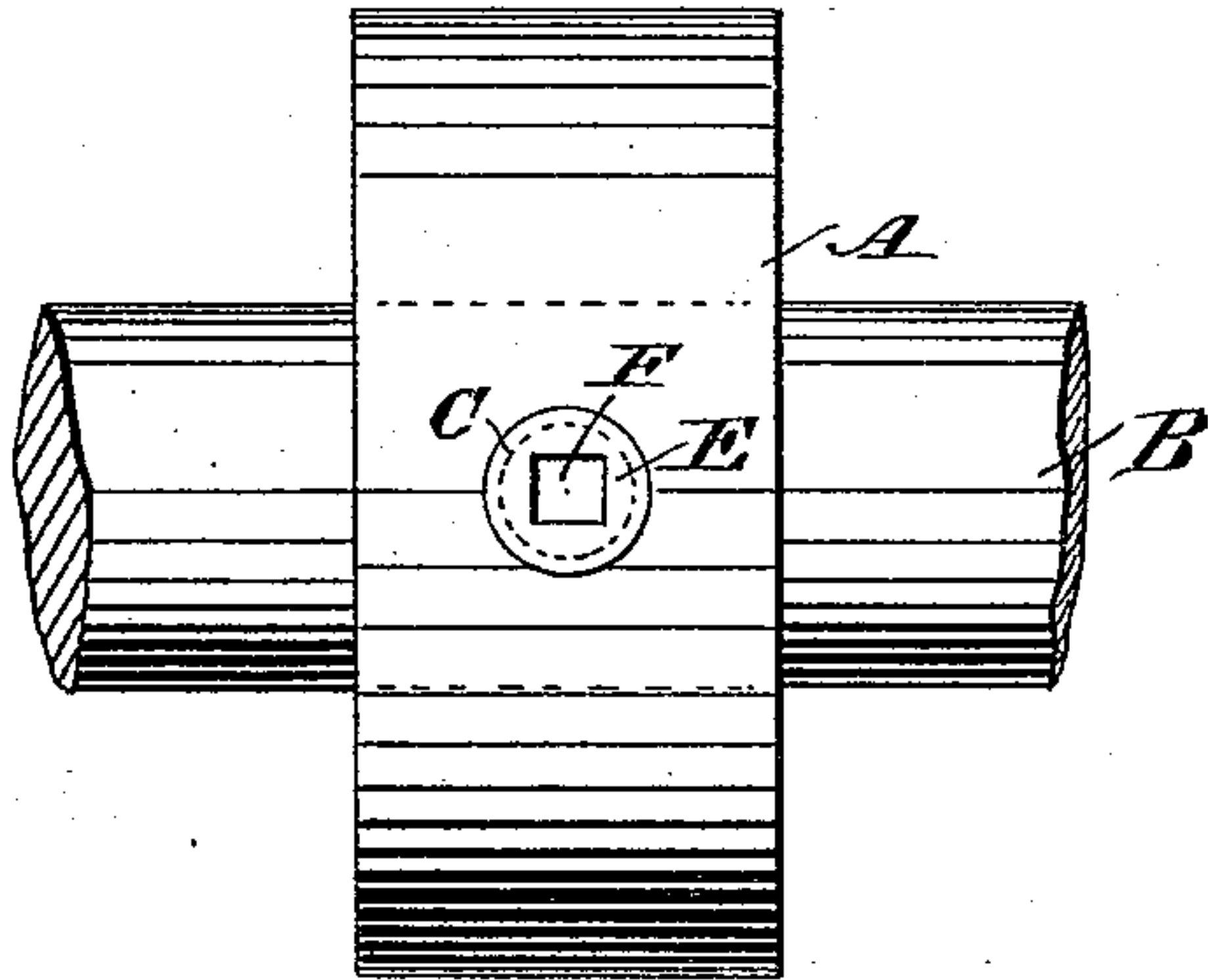


Fig: 2.

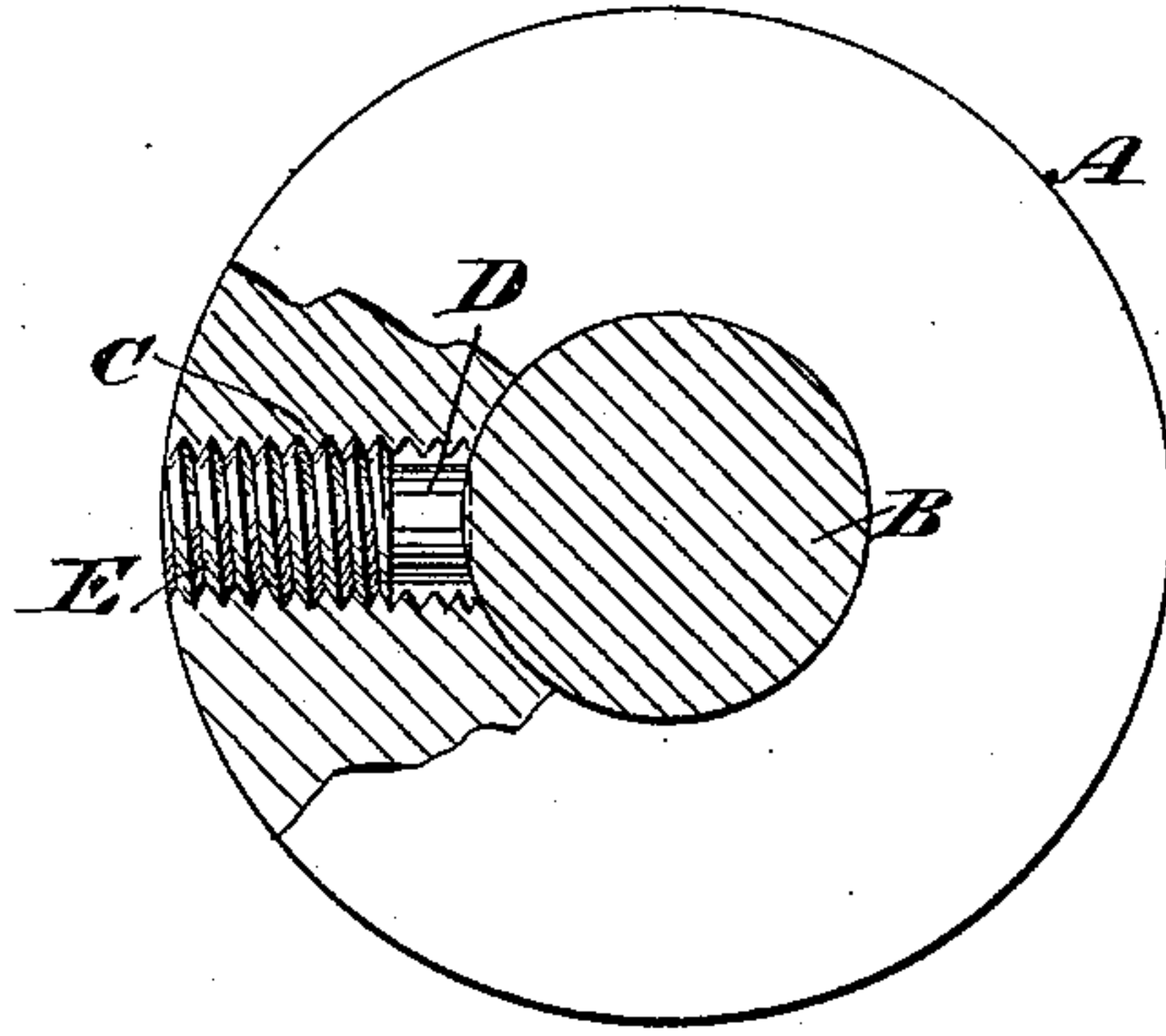


Fig: 4.



Fig: 6.

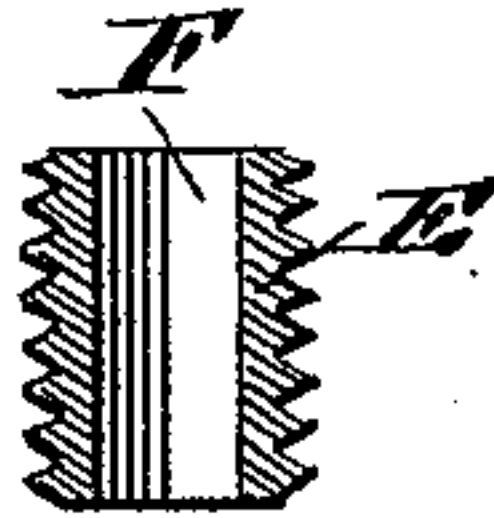


Fig: 7.

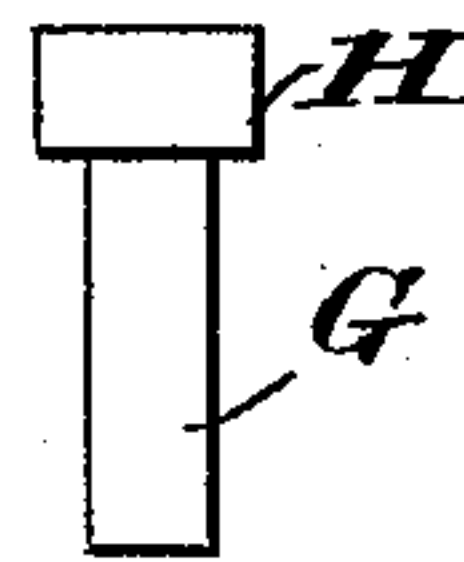


Fig: 5.



Fig: 3.

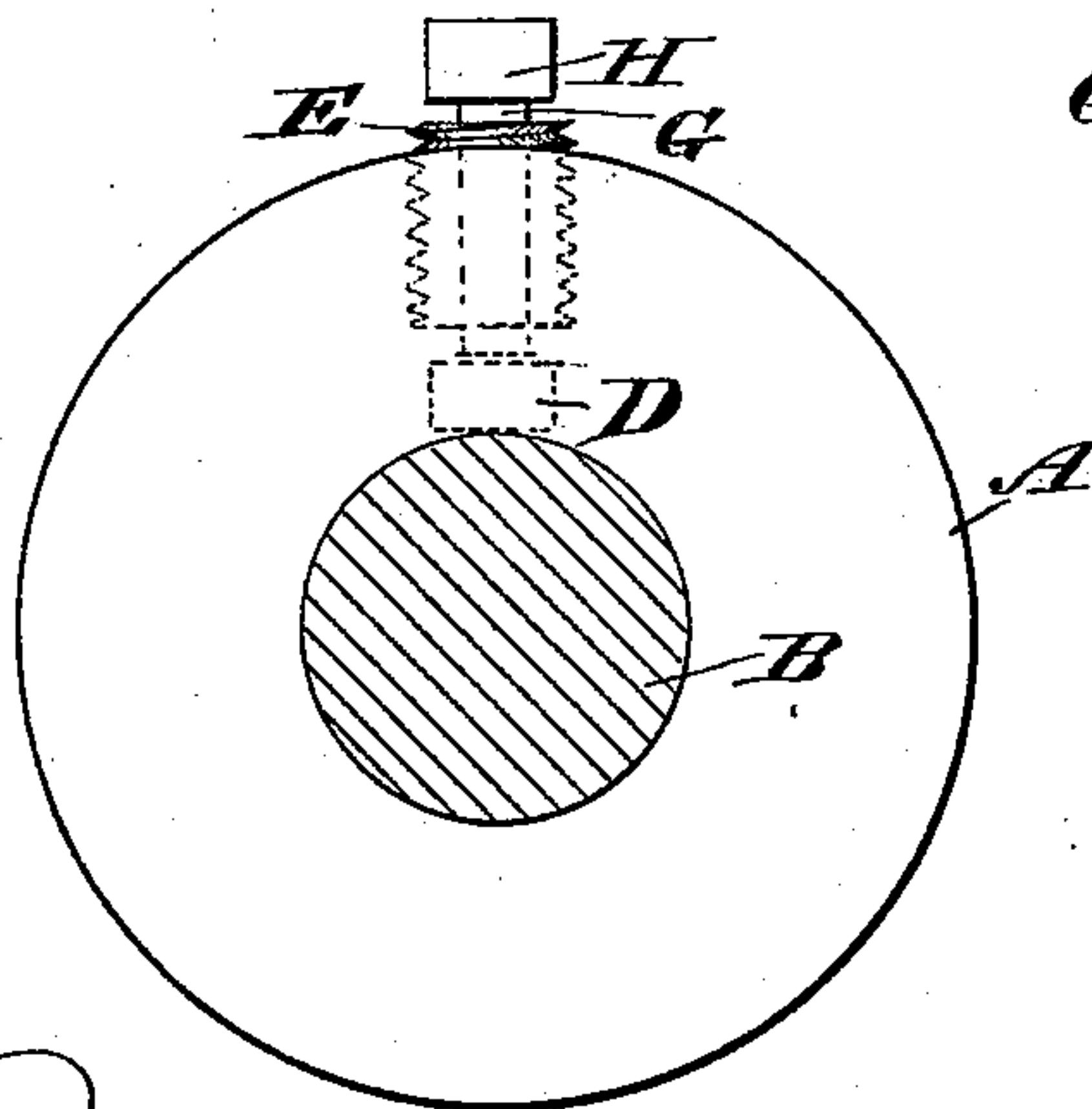


Fig: 8.



WITNESSES:

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UNITED STATES PATENT OFFICE.

LYCURGUS A. GEISINGER, OF CENTRE VALLEY, PENNSYLVANIA, ASSIGNOR
TO HIMSELF AND EDWIN J. GEISINGER, OF SAME PLACE.

SET-SCREW.

SPECIFICATION forming part of Letters Patent No. 465,175, dated December 15, 1891.

Application filed October 7, 1891. Serial No. 408,063. (No model.)

To all whom it may concern:

Be it known that I, LYCURGUS A. GEISINGER, of Centre Valley, in the county of Lehigh and State of Pennsylvania, have invented a new and Improved Set-Screw, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved set-screw designed to very securely fasten parts together and arranged to present no outside projections when in place.

The invention consists of a plug and a hollow screw adapted to screw on the said plug and permitting insertion of a punch or other tool to drive the said plug.

The invention also consists of certain parts and details and combinations of the same, which will be fully described hereinafter, and then pointed out in the claims.

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 an end view of the improvement as applied. Fig. 2 is a side elevation of the same as applied, with parts in section. Fig. 3 is a side elevation of the same as applied and showing the driving-tool inserted in the screw. Fig. 4 is a side elevation of the plug. Fig. 5 is a plan view of the same. Fig. 6 is a sectional side elevation of the screw. Fig. 7 is a side elevation of the punch, and Fig. 8 is a plan view of the same.

As shown in the drawings, the improved set-screw is applied for fastening a collar or wheel A to a shaft B. In the collar or wheel A is formed a threaded aperture C, into which is inserted a plug D, preferably made of steel and having its under or inner face countersunk, as is plainly illustrated in Fig. 4, so that this face of the plug readily engages the shaft B to take a firm hold on the latter. Into the threaded aperture C passes a screw E on top of the plug D, the said screw being formed longitudinally with a central aperture F, preferably polygonal in shape, so that a punch

or other tool can be inserted in the aperture to reach the plug D. The punch shown in Figs. 7 and 8 consists of a shank G, fitting into the aperture F and provided with a head H, adapted to be engaged by a wrench or other tool for turning the said punch when inserted in the screw, so as to screw the latter in or out of the threaded aperture C.

In order to fasten the two parts together, the plug D is first inserted in the threaded aperture C, and then the screw E is screwed into the aperture by means of a wrench applied to the head H of the punch G, inserted in the opening F of the screw E. When the screw E touches the plug D, the operator strikes a blow on the head H of the punch, so that the plug D is firmly engaged on the shaft B, after which the punch is again turned to farther screw the screw E onto the plug D. This operation can be repeated until the plug D securely grips the shaft B, the screw E following the plug, as described, to hold it in place. When the two parts are firmly fastened together, the punch is removed from the screw E. The latter is usually of such a length as to extend to the outside of the collar A, but to form no projection thereon.

The punch can be used for driving a large number of set-screws used in a mill or factory. It will be seen that the most strain is on the plug D, so that the threads of the screw E are not liable to wear out by undue or excessive strain. It will further be seen that the set-screw can be readily applied in any set-screw aperture, thus requiring no change in the parts to be fastened together.

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

1. A set-screw comprising a plug and an apertured screw adapted to screw down in the plug and arranged to receive a punch or other tool for turning the said screw, substantially as shown and described.

2. A set-screw comprising a plug and a headless screw formed with a central aperture adapted to receive a punch or other tool

for driving the said plug and for turning the said screw, substantially as shown and described.

3. In a set-screw, the combination, with a
5 punch, of a headless screw formed with a central aperture adapted to be engaged by the said punch, and a plug adapted to be driven by the said punch passing through the screw

and adapted to be engaged by the latter to hold the plug in place, substantially as shown 10 and described.

LYCURGUS A. GEISINGER.

Witnesses:

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WILLIAM FETZER.