

No. 641,944.

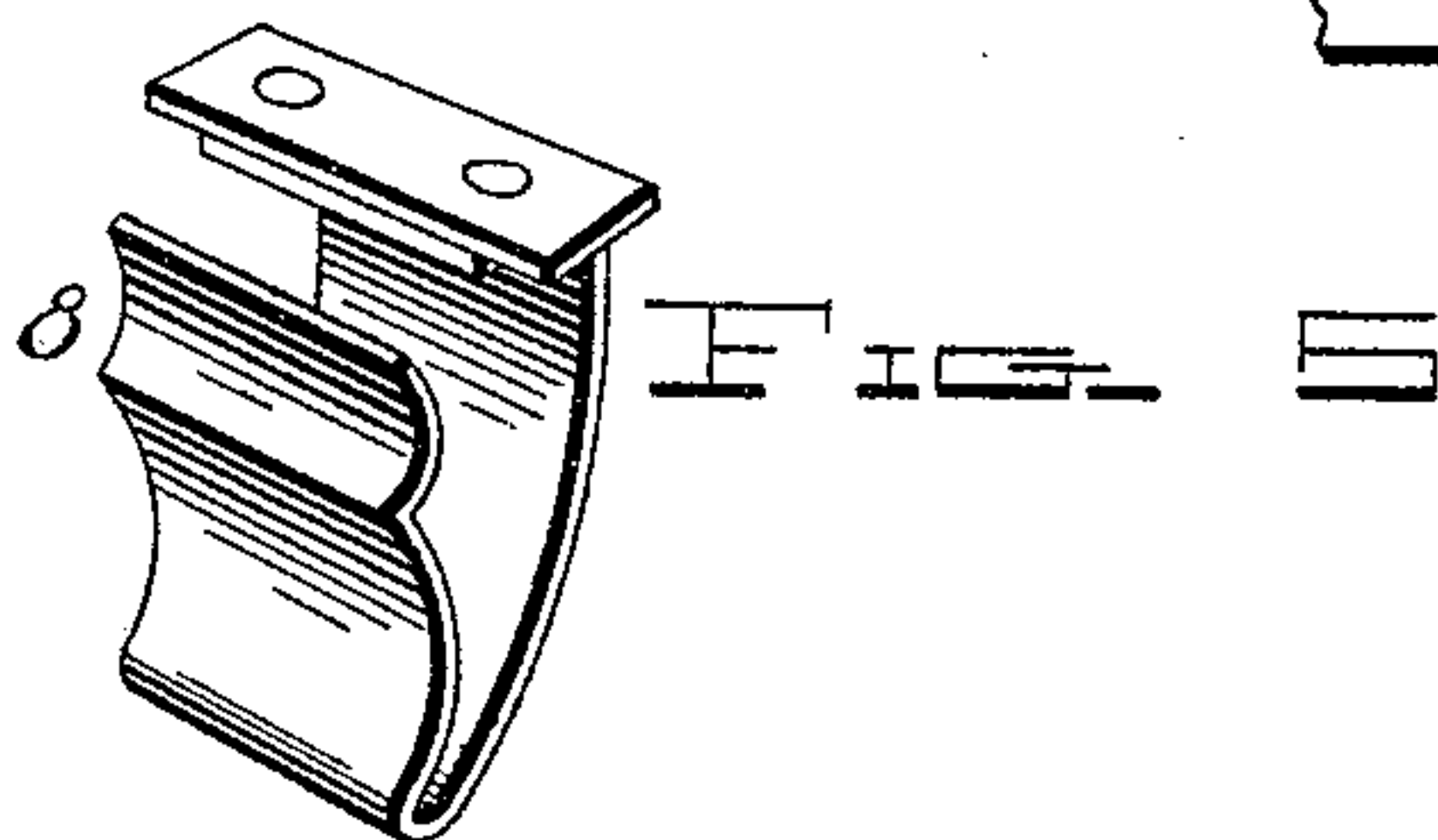
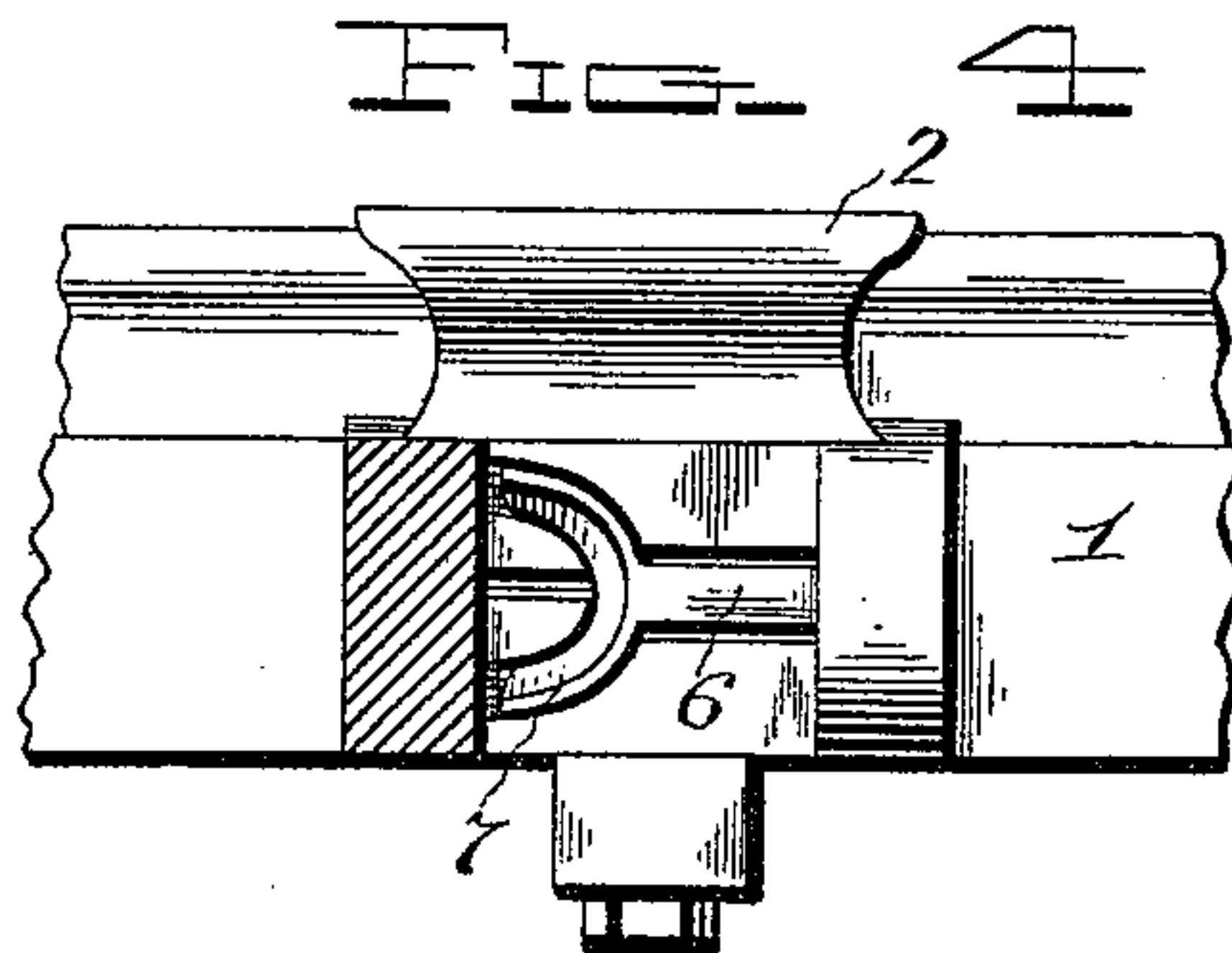
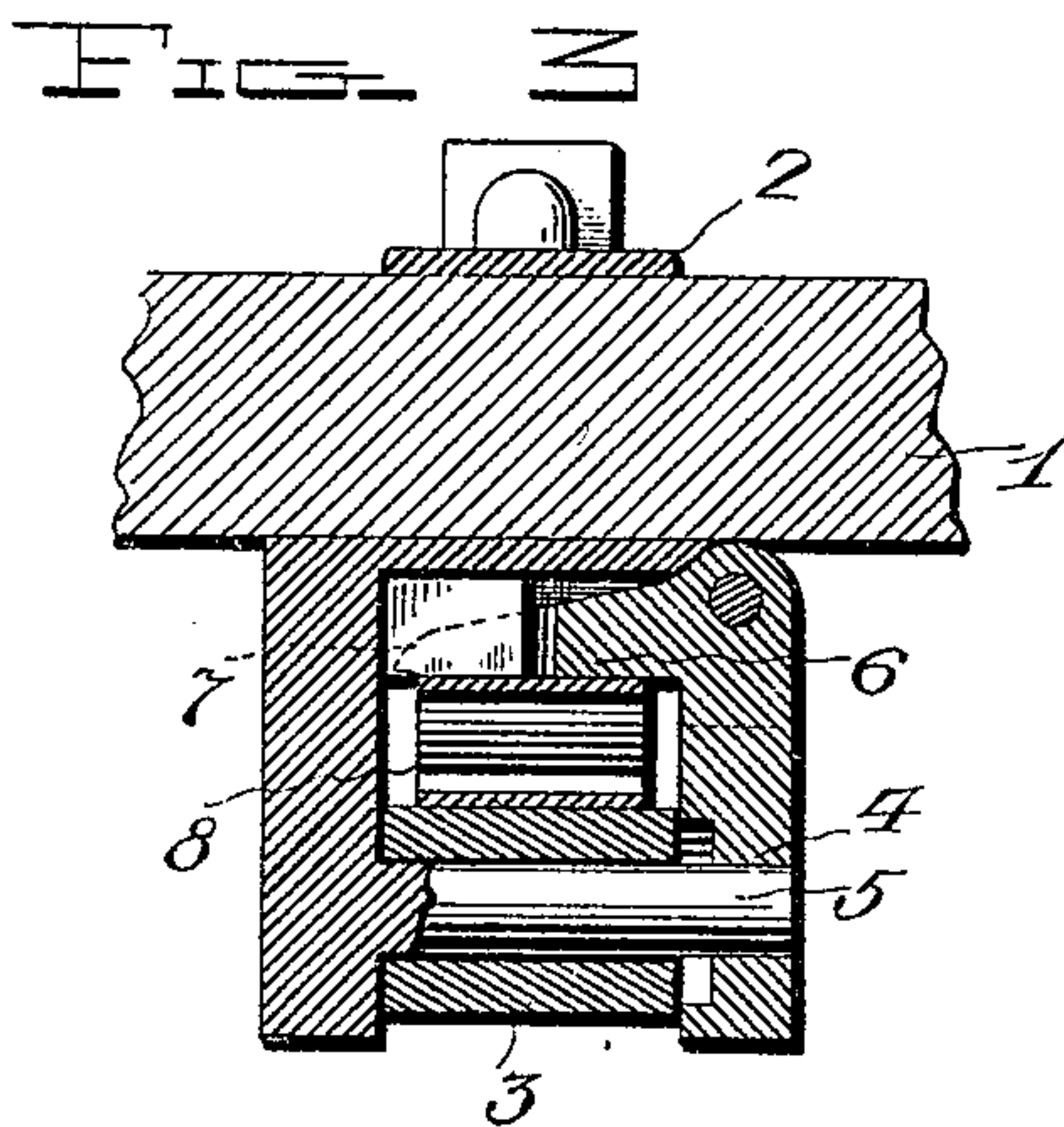
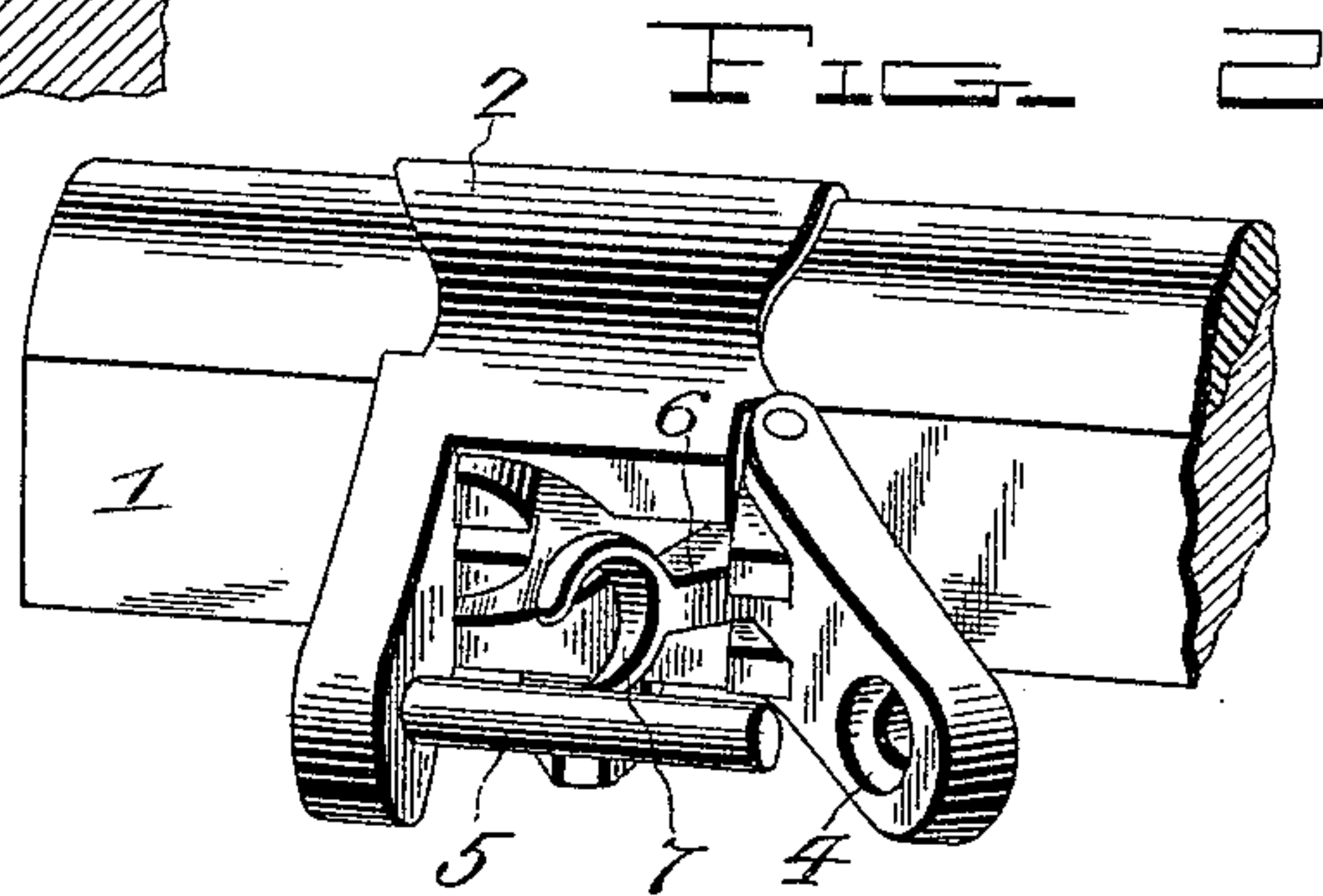
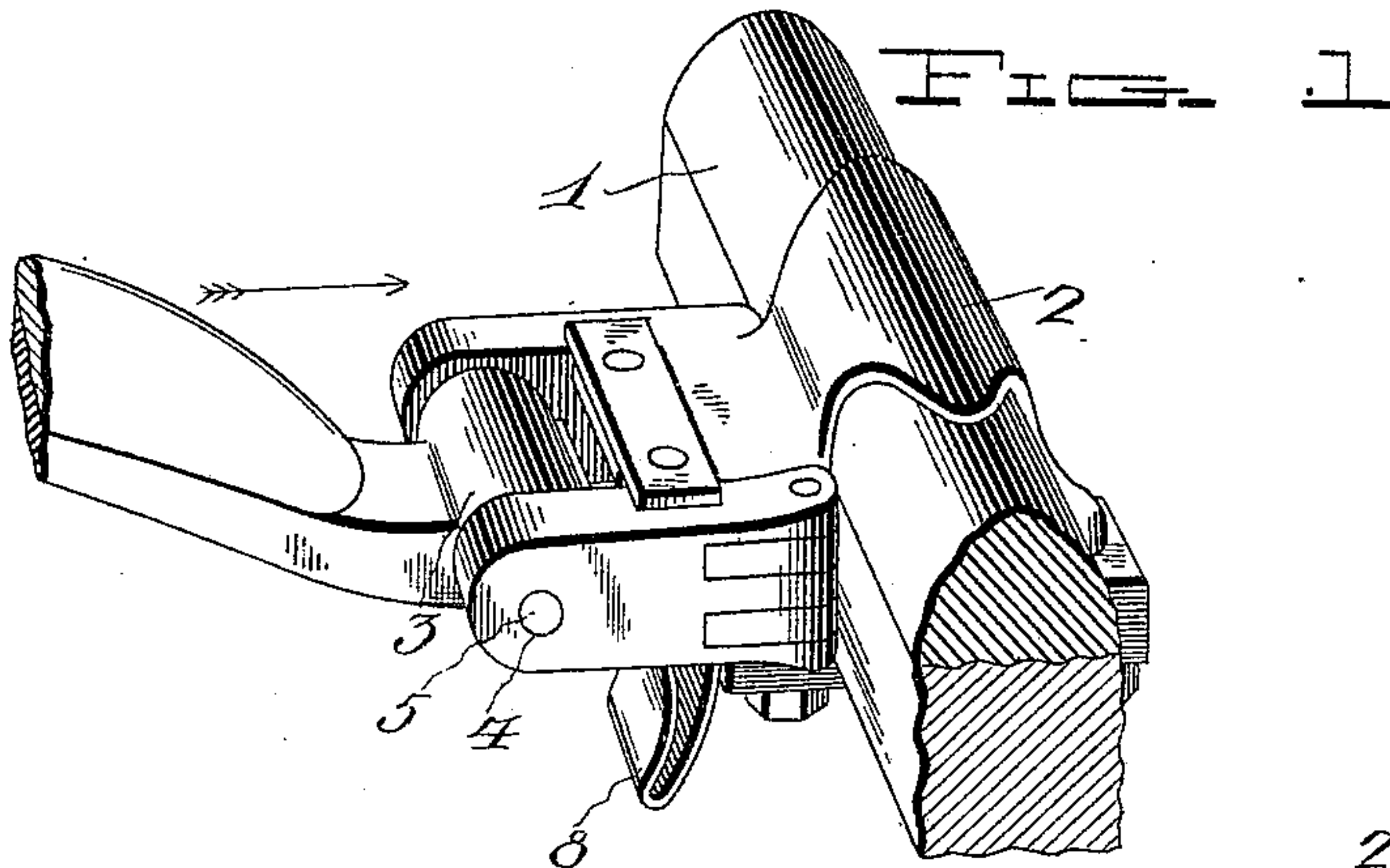
Patented Jan. 23, 1900.

W. H. EDWARDS.

THILL COUPLING.

(Application filed July 5, 1899.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM HENRY EDWARDS, OF HILLSBOROUGH, INDIANA.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 641,944, dated January 23, 1900.

Application filed July 5, 1899. Serial No. 722,829. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HENRY EDWARDS, a citizen of the United States, residing at Hillsborough, in the county of Fountain and State of Indiana, have invented certain new and useful Improvements in Thill-Couplings; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to thill-couplings, and more particularly to that class known as the "antirattler-coupling."

The object of the invention is to simplify the construction and provide a thill-coupling which may be made at a small cost and which will securely hold the thill to the axle without danger of the same becoming disengaged therefrom by the loosening of the bolt or nut, as is frequently the case with the couplings now in general use.

With this object in view the invention consists in certain features of construction and combination of parts, which will be hereinafter set forth.

In the accompanying drawings, Figure 1 is a perspective view of my improved thill-coupling, the thill being shown in place. Fig. 2 is a similar view, the thill being removed and one of the parallel ears being swung to one side to permit of the engagement of the thill-iron with the pin of the other ear. Fig. 3 is a transverse horizontal sectional view, the parts being assembled and ready for use. Fig. 4 is a sectional view of the clip looking in the direction of the arrow shown in Fig. 1, and Fig. 5 is a detail perspective view of the antirattler-spring.

In the drawings, 1 denotes the axle, 2 the clip, and 3 the thill-iron. The clip is secured to the axle in a well-known manner and is provided with two parallel ears, one of which is fixed and the other of which is hinged. The hinged ear is provided with a transverse aperture 4 to receive the fixed pin 5, projecting from the opposite ear, and is provided with an angular arm 6, which is formed with a bifurcated outer end 7. The arm and its bifurcated end, when the thill-iron is in place, lie in a recess formed in the plate of the clip and out of the way.

After the thill-iron has been engaged with the pin and the hinged ear closed, an antirattler-spring 8 is inserted between the eye of the thill-iron and the angular arm, and while in this position it will be impossible for the hinged ear to be swung outward, thereby preventing beyond all possibility the accidental disengagement of the thill-iron from the clip. When it is desired to remove the thill-iron, the antirattler-spring is withdrawn and the hinged ear is swung outward, the bifurcated end of the angular arm partially spanning the thill-eye, so as to permit of the ear being swung out a sufficient distance to allow of the removal of the eye from the fixed pin. In this position the thill-eye may be engaged with the pin, and the hinged ear is swung inward until its aperture receives the pin of the opposite ear. The antirattler-plate is now inserted, as above described, and when in place will prevent the accidental detachment of the iron from the clip, for the reason that the iron cannot be removed from the pin unless the hinged ear is swung backward, and this cannot be done until the spring has been removed to permit of the angular arm being swung outward.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of the invention will be readily understood without requiring an extended explanation. The device is exceedingly simple. It may be made at a small cost and is well adapted for the purpose for which it is designed.

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

1. In a thill-coupling the combination with a clip provided with parallel ears, one of which is hinged and is provided with an aperture, and the other of which is provided with a fixed pin to project through said aperture, the hinged ear being provided with an angular arm which is located between said ears and is arranged back of the fixed pin, substantially as set forth.

2. In a thill-coupling the combination with a clip provided with parallel ears, one of which is hinged and is provided with a transverse aperture, and the other of which is fixed and is provided with a pin to project into

said aperture, a thill-iron having its eye engaged with said pin, an angular arm carried by the hinged ear and provided with a bifurcated end, and a spring inserted between the
5 angular arm and the eye of the thill-iron whereby the hinged ear is locked against outward movement, substantially as set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILLIAM HENRY EDWARDS.

Witnesses:

JAMES H. LAIRD,

DAVID P. HEFFNER.