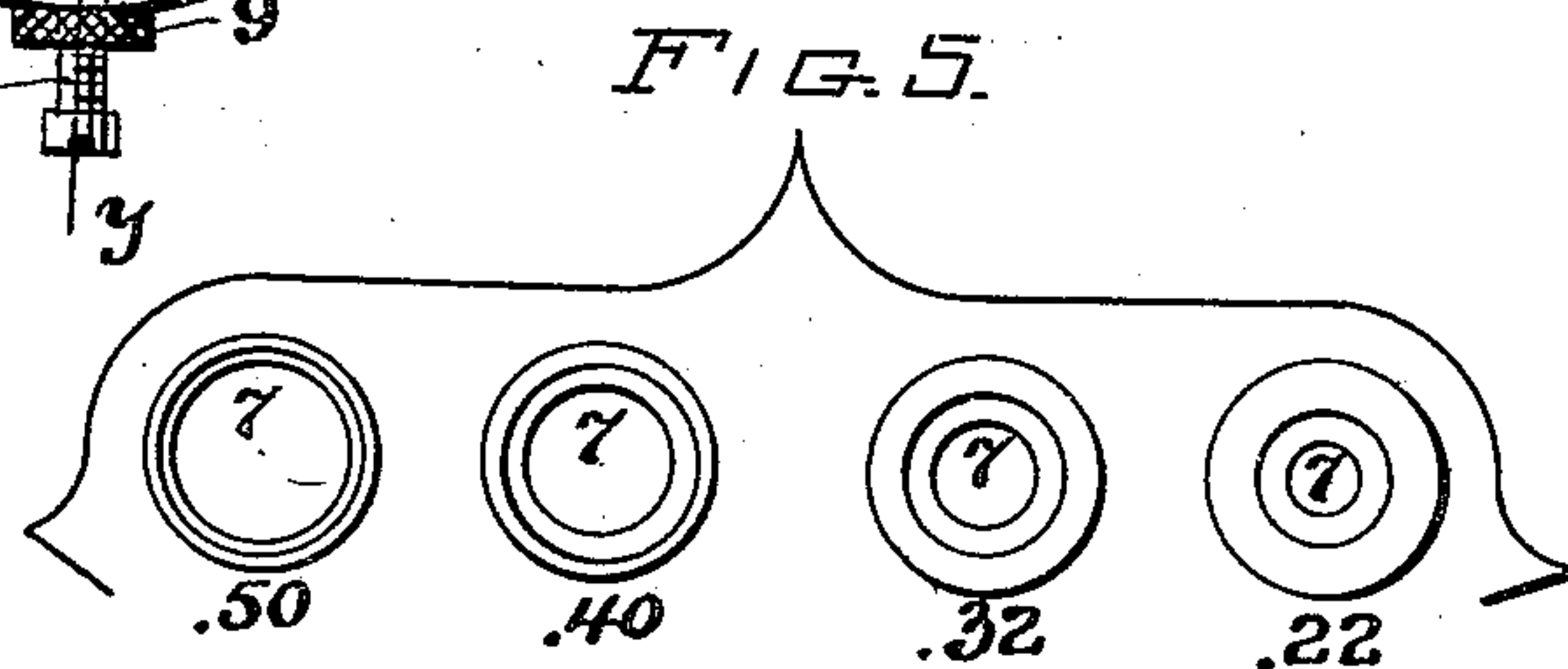
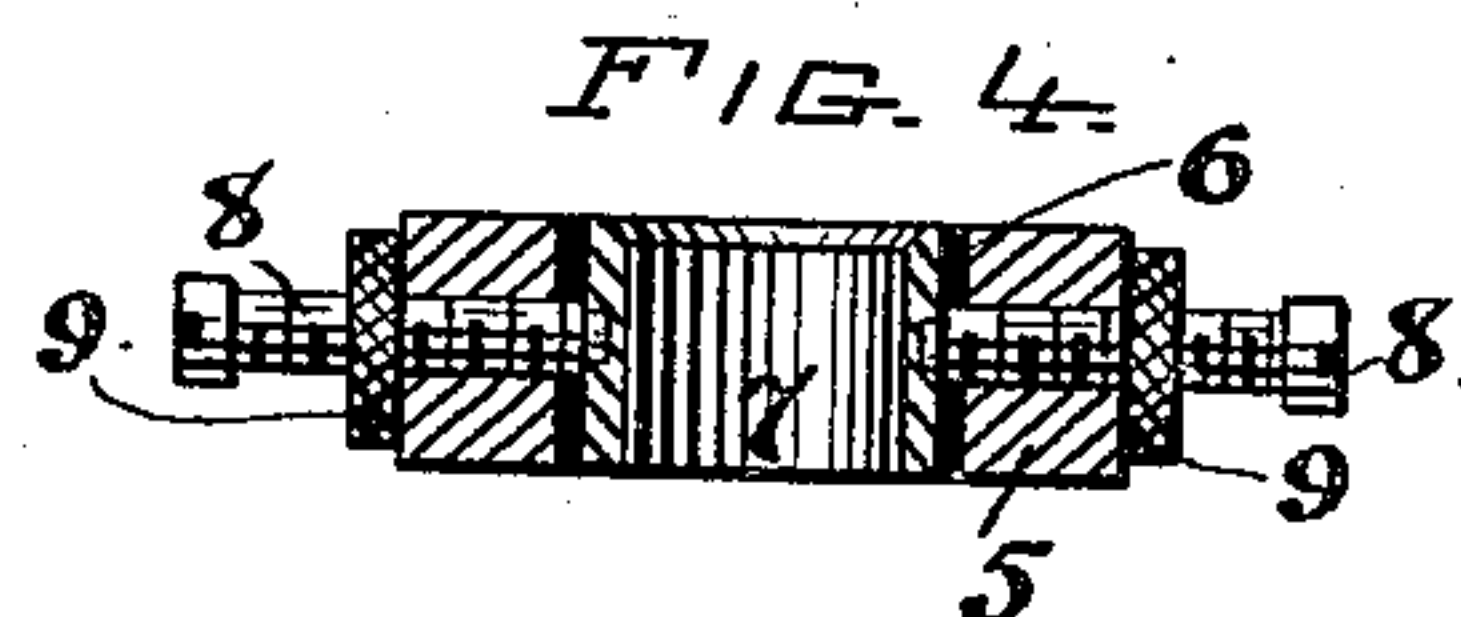
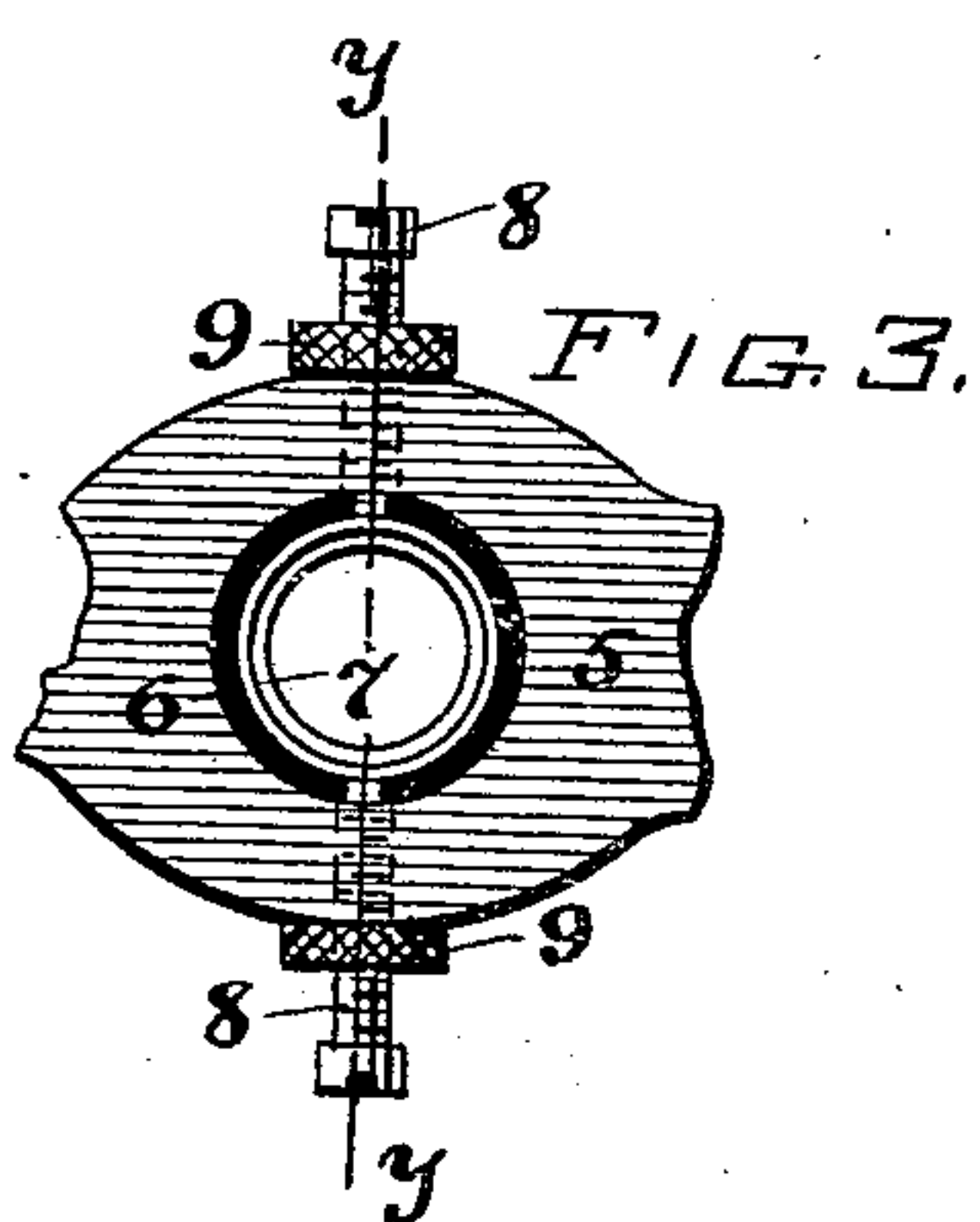
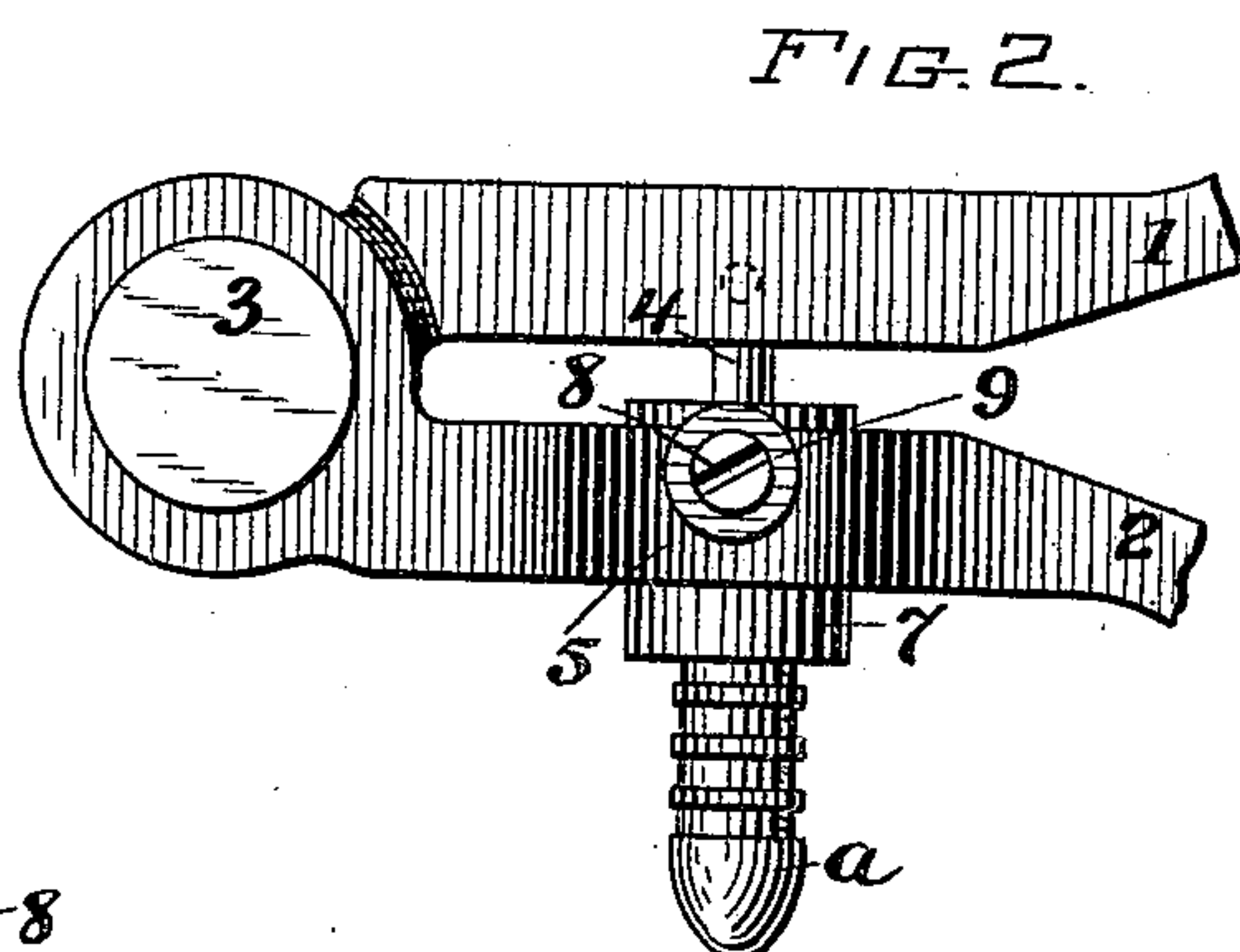
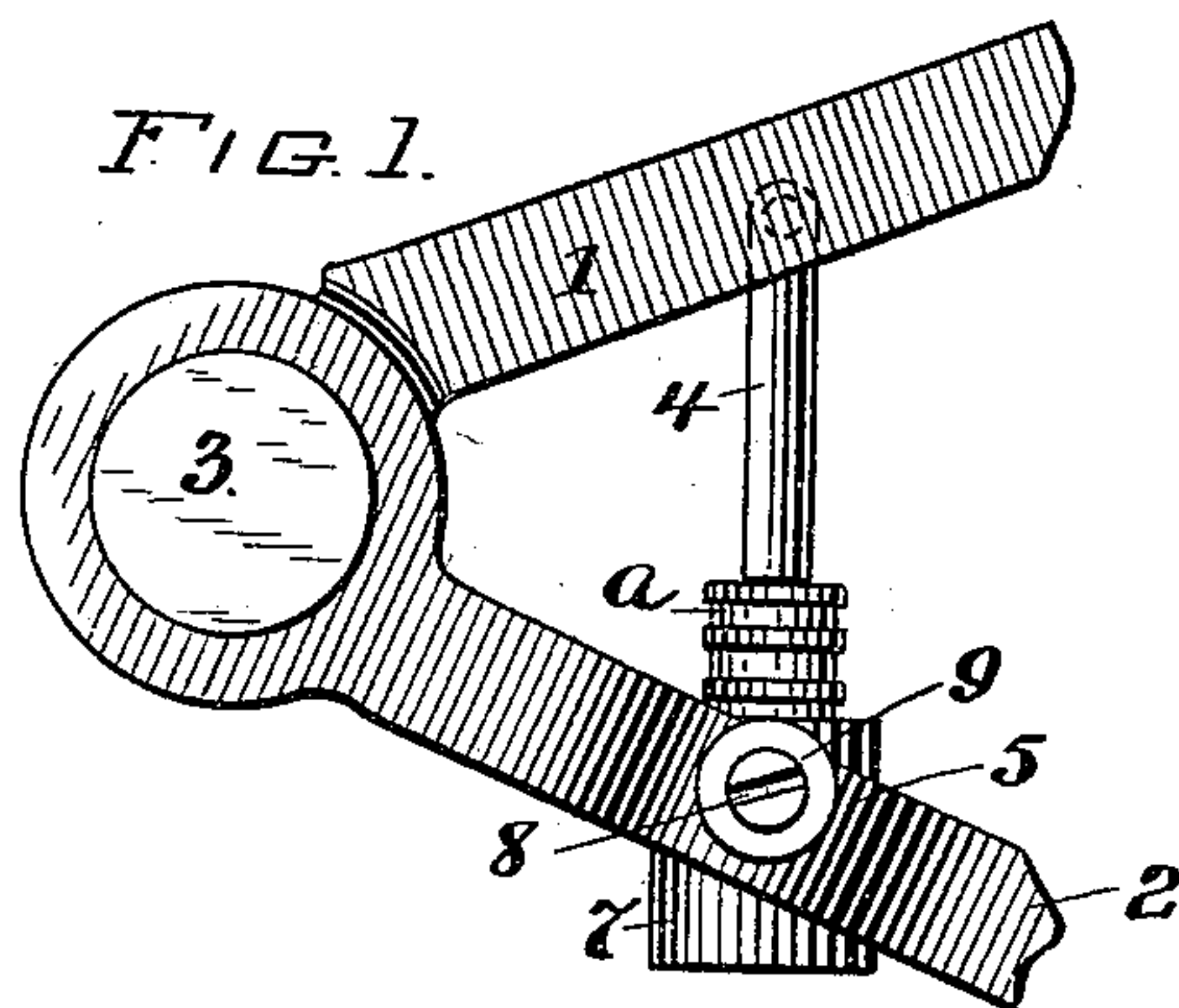


(No Model.)

J. H. BARLOW.
BULLET SIZER.

No. 464,311.

Patented Dec. 1, 1891.



WITNESSES:
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UNITED STATES PATENT OFFICE.

JOHN H. BARLOW, OF NEW HAVEN, CONNECTICUT.

BULLET-SIZER.

SPECIFICATION forming part of Letters Patent No. 464,311, dated December 1, 1891.

Application filed August 3, 1891. Serial No. 401,443. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. BARLOW, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Bullet-Sizers; and I do hereby 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.

This invention relates to certain new and useful improvements in bullet-sizers, and has for its object to provide a tool of this description which shall be readily adaptable to bullets of different calibers, and in which the parts operating upon the bullet are so arranged as to insure the passage of the latter straight through the die and to prevent any sidewise movement which might tend to mutilate or disfigure the ball; and with these ends in view my invention consists in the construction and combination of elements hereinafter fully explained, and then recited in the claims.

In order that those skilled in the art to which my invention appertains may fully understand its construction and method of operation, I will describe the same in detail, reference being had to the accompanying drawings and the numerals marked thereon, which form a part of this specification.

The same numerals denote the same parts in each of the figures.

Figure 1 is a side elevation showing a bullet just entering the sizing-die. Fig. 2 is a similar view showing the bullet as about to pass out of the die. Fig. 3 is a detail plan view of that portion of the lower lever which contains the sizing-die. Fig. 4 is a detail transverse section on the line *y y* of Fig. 3. Fig. 5 shows in plan view sizing-dies adapted for four different calibers.

1 and 2 denote a pair of levers pivoted together, as at 3, the rear ends of said levers being provided with any suitable handles. These are broken away. The lever 1 is slotted to form a seat in which is pivoted a plunger 4. The lever 2 at a little distance from its fulcrum is widened, as seen at 5, and is provided with a central opening, as clearly appears at 6, Figs. 3 and 4. This opening is adapted to contain a tubular sizing-die 7, whose shape appears in the several figures.

This die is provided upon opposite sides with seats adapted to contain the ends of screws 8, which are tapped laterally through the widened portion of the lever 2, and serve as trunnions to support the sizing-die and at the same time to permit to the latter a rocking movement in the direction of the length of the lever. Upon these screws, outside of the broadened portion of the lever, are check-nuts 9, whereby they are held firmly in their adjusted position. The bullet is denoted by *a*.

It will be readily seen that by mounting the die, as shown in the drawings, so that it may swing and providing a pivoted plunger to co-operate therewith any bullet forced through the die in the manner shown must necessarily pass through the bore of the die in an axial line and cannot be driven through obliquely or in such manner as to disfigure or otherwise injure the bullet. Furthermore, the use of the co-operating pivoted parts permits them to be mounted much nearer the fulcrum-point of the levers than would otherwise be possible. This gives increased power to the operator without augmenting the size of the tool.

I propose to furnish, when required, any desired number of sizing-dies adapted to be mounted in the tool by means of screws, but different in caliber. Four of such dies for calibers .50, .40, .32, and .22 are shown at Fig. 5. Any desired die may be inserted at a moment's notice by loosening the check-nuts and removing and then replacing the trunnion-screws.

I have shown my invention in the form of a separate tool; but I contemplate incorporating it in combination-tools—such, for instance, as that shown in Letters Patent of the United States No. 309,681, granted to me the 23d of December, 1884—or in tools of that same general character but provided with a bullet-mold as one element thereof. Furthermore, while the screws shown as forming the trunnions for the die are convenient, I do not limit myself to their use, but contemplate the employment of trunnions of other forms for supporting the die and affording to it the freedom of movement permitted by the screws.

I claim—

1. The combination, with two pivoted members, of a plunger mounted upon one member

and a swiveling or pivoted sizing-die attached to the other member in the line of the plunger, substantially as set forth.

2. The combination, with the two pivoted
5 levers, of the pivoted plunger seated in one of said levers, and the sizing-die swivelly seated in the other lever in the line of movement of the plunger, substantially as described.

10 3. The combination, with the levers 1 and 2, of the plunger 4, the die 7, seated in the open-

ing 6, and the transverse trunnion-screws entering through the sides of the lever 2 and engaging suitably-formed seats in the sizing-die, substantially as specified.

In testimony whereof I affix my signature in
presence of two witnesses.

JOHN H. BARLOW.

Witnesses:

GEO. EDMONDSON,
LOUIS A. BABCOCK.