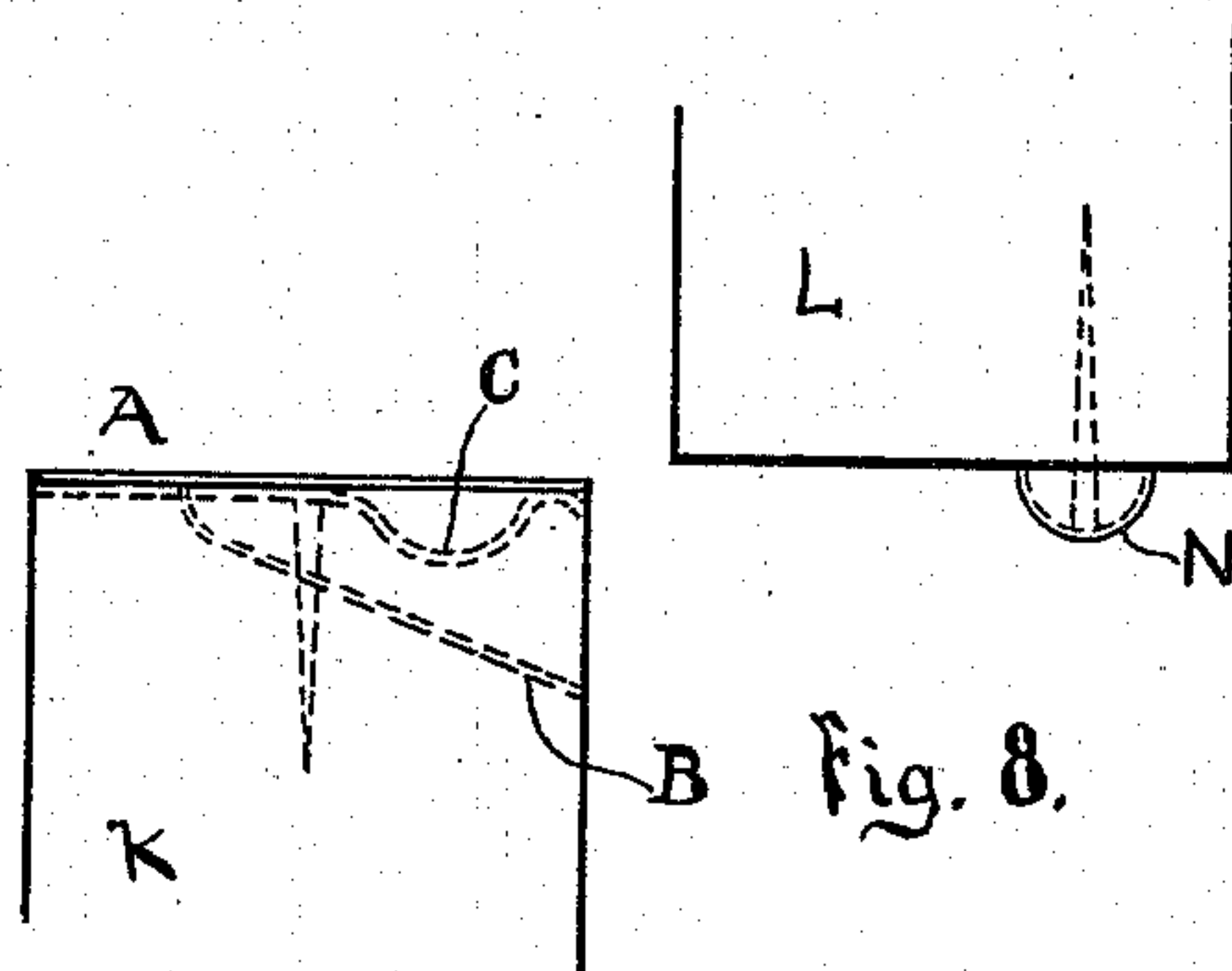
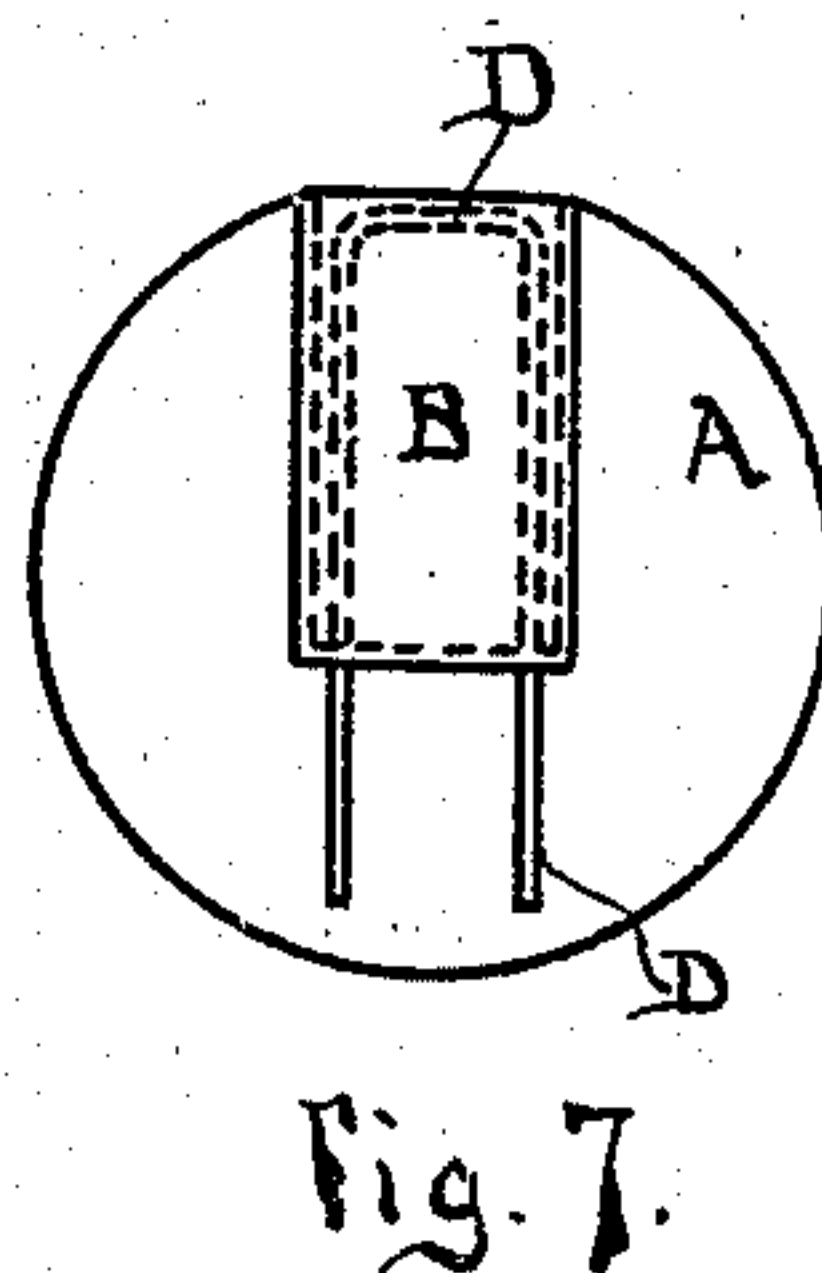
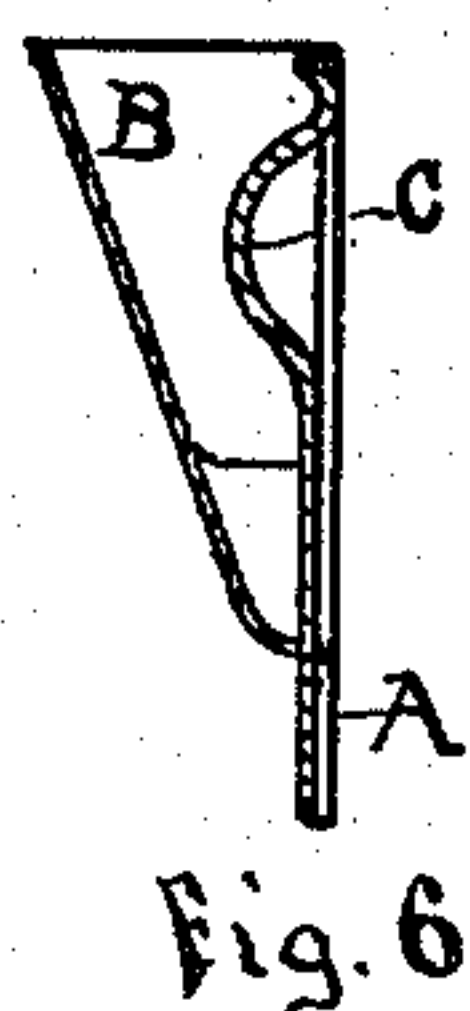
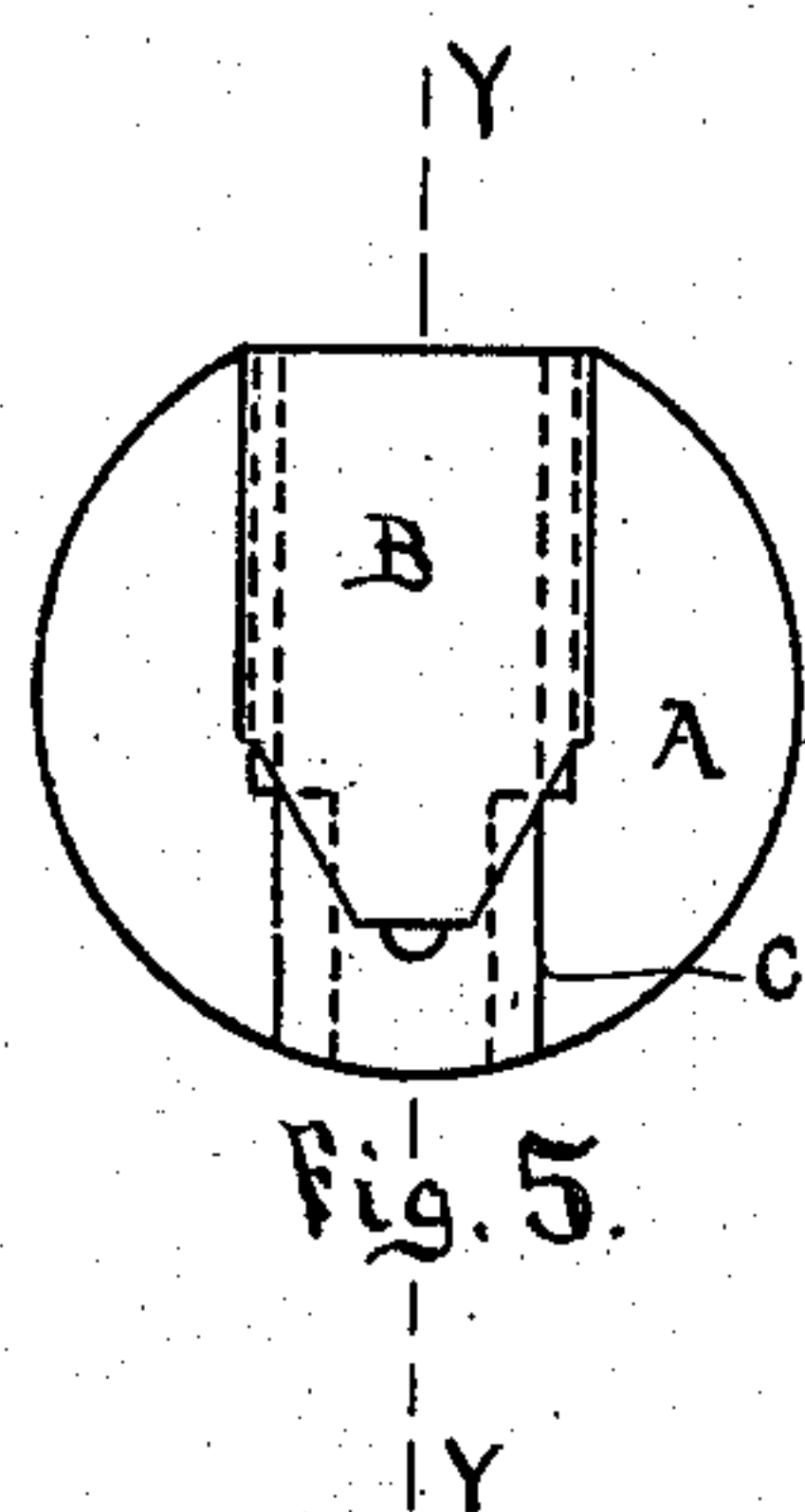
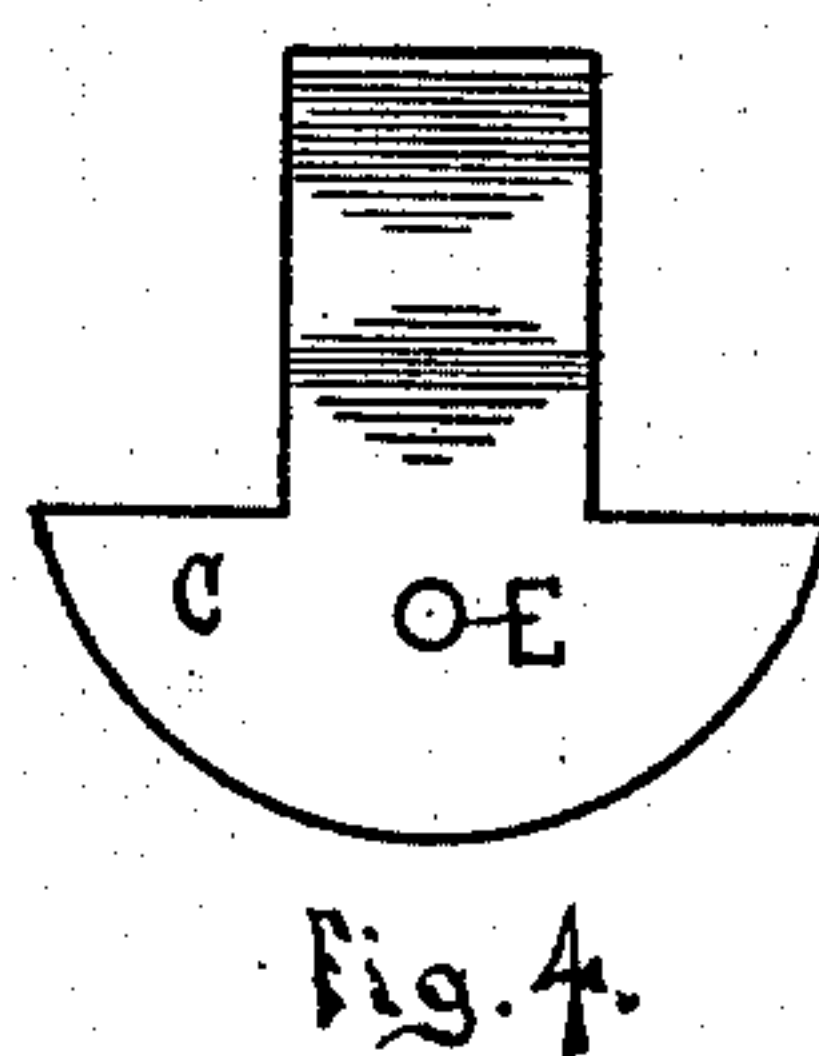
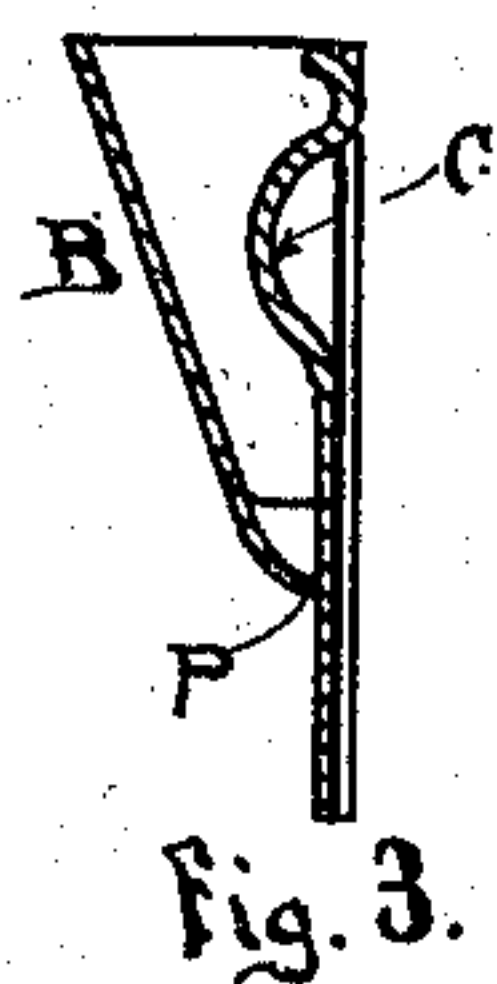
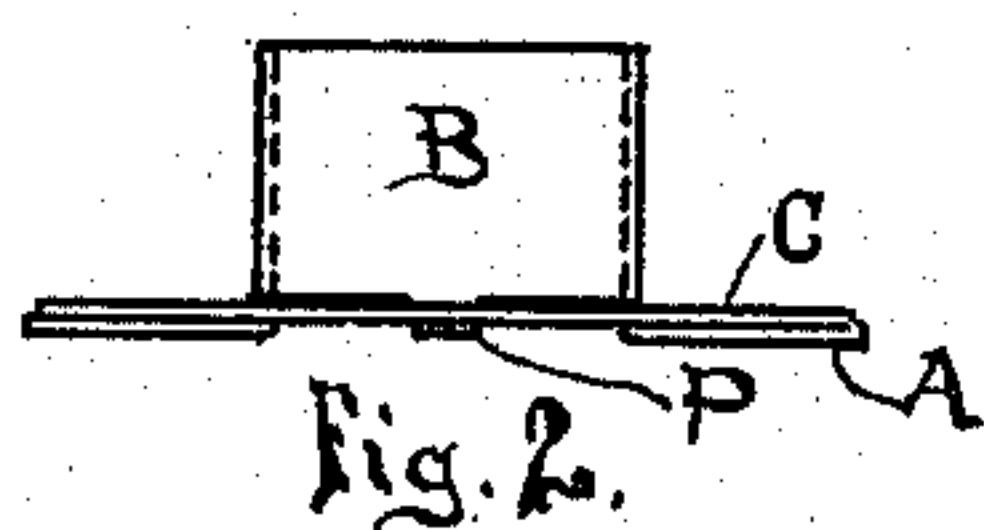
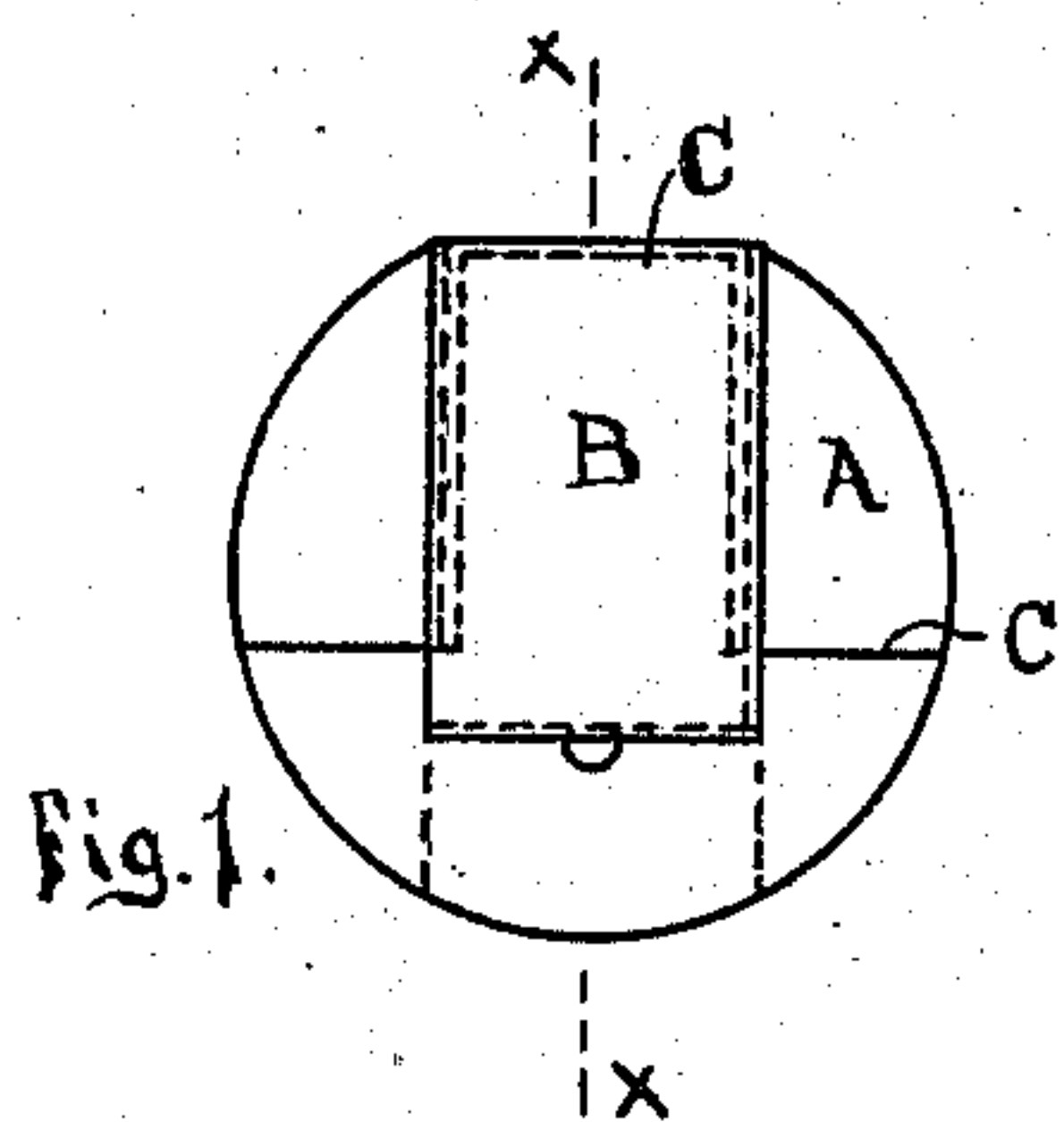


(No Model.)

F. W. TOBEY.
DOOR CATCH.

No. 573,372.

Patented Dec. 15, 1896.



Witnesses:
Christopher Hondelink
Ambrose C. Hindman

Fred W. Tobey
By Edward T. Gay and
His Attorneys

UNITED STATES PATENT OFFICE.

FRED W. TOBEY, OF GRAND RAPIDS, MICHIGAN.

DOOR-CATCH.

SPECIFICATION forming part of Letters Patent No. 573,372, dated December 15, 1896.

Application filed April 2, 1896. Serial No. 585,961. (No model.)

To all whom it may concern:

Be it known that I, FRED W. TOBEY, a citizen of the United States, residing at the city of Grand Rapids, in the county of Kent and State of Michigan, have invented a certain new and useful Door-Catch, of which the following is a specification.

This invention has for its object to provide a novel, simple, and economical spring-catch for the doors of furniture and the like; and it consists, essentially, in a spring door-catch composed of an inelastic soft-metal base-plate having a central chamber and a projection at the inner end of said chamber extending at right angles to the plate, and a spring-plate lying in the chamber and having a widened portion provided with an opening which receives the projection on the base-plate and by which the spring is secured in position, whereby it is possible to make the base-plate of a soft metal and the spring of a hard metal.

The invention is illustrated by the accompanying drawings, in which—

Figure 1 is a plan view from the raised side of the plate, showing the outer surface of the plate and showing in dotted lines the position of the free end of the spring. Fig. 2 is a rear elevation showing the position of the spring at the rear end and also showing my preferred method of attaching the spring to the plate. Fig. 3 is a sectional view on line X X of Fig. 1. Fig. 4 is a plan view of my preferred form of spring detached. Fig. 5 shows a plan view of a modified form of spring. Fig. 6 shows a sectional view on line Y Y of Fig. 5. Fig. 7 shows a plan view of a modified form of plate with a modified form of spring, said spring in said Fig. 7 being a spring-wire, the general position being shown by the dotted lines. Fig. 8 shows a portion of a door-casing with my improved spring and catch in position, one part showing the spring and catch, the other part showing the stationary bolt and case.

Similar letters refer to similar parts throughout the several views.

A represents the base-plate, which is made of a single piece of metal and of a material softer and more flexible than the spring. The plate A has a central projection B, made integral with and from the same plate as A, and

of a form substantially as shown in Figs. 1 and 3, the raised portion B forming a chamber or recess for the reception of the spring C. The spring C is preferably constructed as shown in Fig. 4 and placed in position in the plate, as shown in Figs. 1 and 2.

A very convenient way of retaining the spring in position is by means of the point or projection P of the plate, which in the example of my invention shown in Figs. 1, 2, 3, 5, and 6 passes through the opening E of the spring, and thereby fastening the spring and plates securely together. One end of the spring lying in the chamber B is widened, and in the widened portion the opening E is formed, as seen in Fig. 4. It will be noted that by this construction no other fastening is needed to secure the spring to the plate, and the front part of the spring lying below the raised portion of the plate, while the rear portion lies above the rear portion of the plate, makes the attachment very rigid and secure. The spring should be made of thoroughly-tempered steel, in order that it may retain its elasticity and not become weakened by use. The plate is preferably made of a softer metal, which can be more readily struck up in a die into the required form. The plate is attached, preferably, to the door by means of a saw-kerf of sufficient size and shape to receive the raised portion of the plate. This position is shown in Fig. 8, K representing a portion of the door. The plate may be further attached by means of screws or pins passing through the plate into the door. The spring C should be about flush with the edge of the door, as shown in said Fig. 8.

L represents a case, and is provided with a boss or stationary bolt N, so that when the door is closed N engages with the spring C, thereby retaining the door in position.

Instead of placing the catch upon the door it may be placed upon the stationary part of the case and the boss or stationary bolt N placed upon the door.

In Fig. 7, D represents a tempered-steel wire spring, which may be attached to the plate A in any suitable manner, the operation of the spring when made of wire being precisely the same as when made of a flat piece of steel.

The form shown in Figs. 5 and 6 does not differ materially from the form shown in Figs. 1, 2, 3, and 4, the main difference being in the width of the rear portion of the spring C.

5 A catch constructed in accordance with my invention will contain all the strength and durability of the most highly-tempered steel spring, and can be constructed readily by using a hard metal for the spring and a softer
10 metal for the base-plate, thereby combining the greatest amount of durability and strength with cheap construction, the raised portion forming a chamber protecting the spring and also facilitating the attachment of the spring-
15 catch to the furniture.

The drawings, in order to show more clearly the construction, have been purposely made on an enlarged scale.

Having thus described my invention, what

I claim to have invented, and desire to secure 20 by Letters Patent, is—

A spring door-catch, consisting of an in-elastic soft-metal base-plate having a central chamber and a projection at the inner end of said chamber extending at right angles to the 25 plate, and a spring-plate lying in the chamber and having a widened portion provided with an opening which receives the projection on the base-plate and by which the spring is secured in position, substantially as and for 30 the purposes described.

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

FRED W. TOBEY. [L. S.]

Witnesses:

EDWARD TAGGART,
CHRISTOPHER HONDELINK.