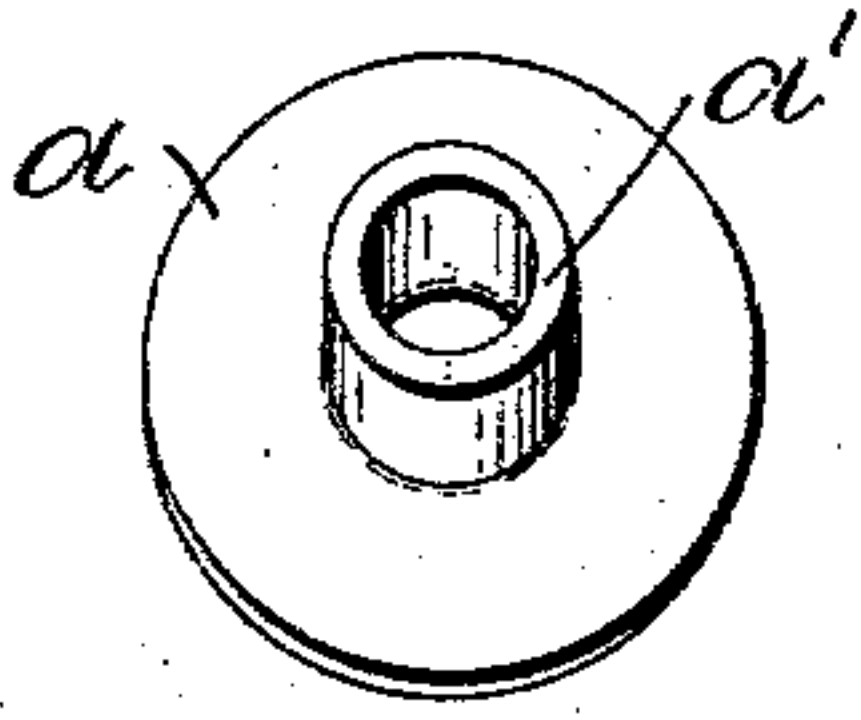
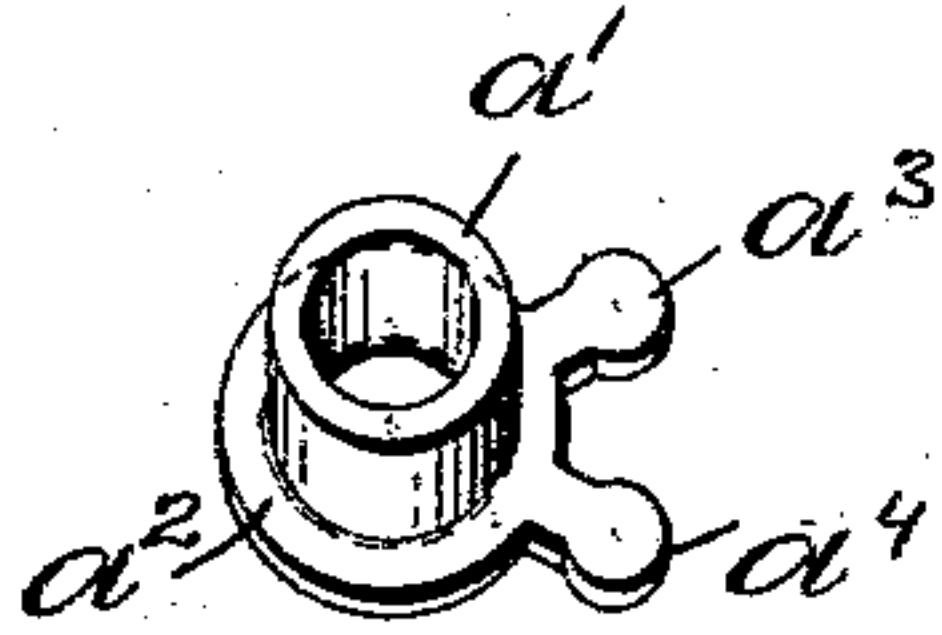
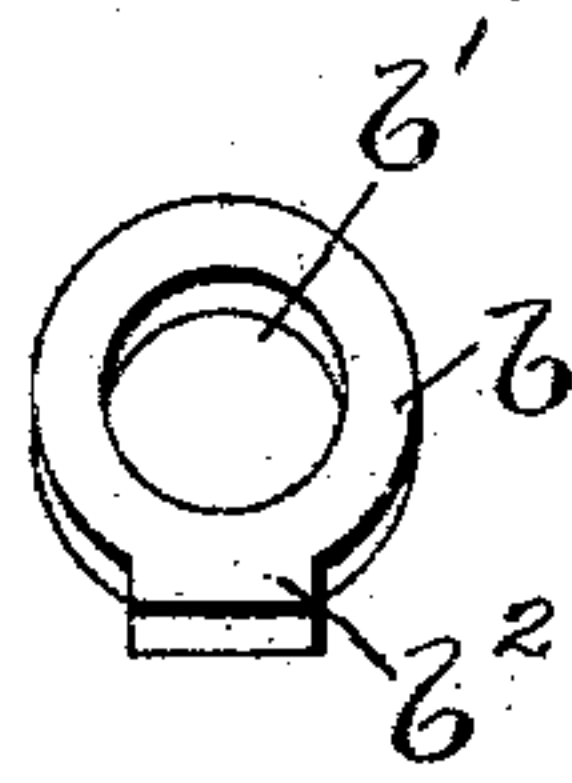
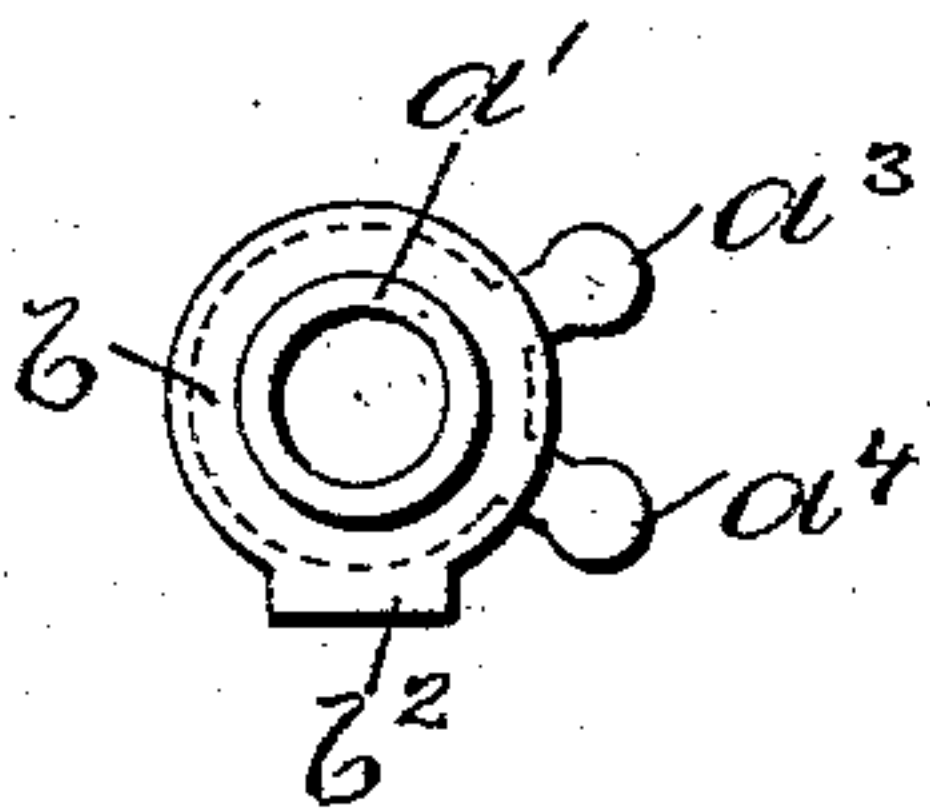
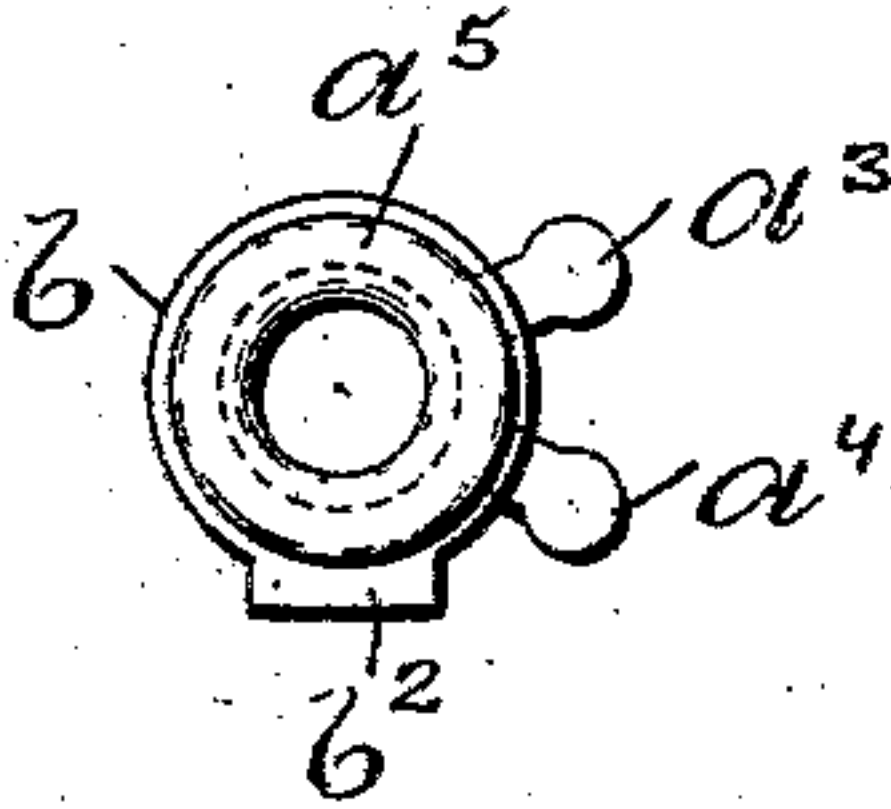
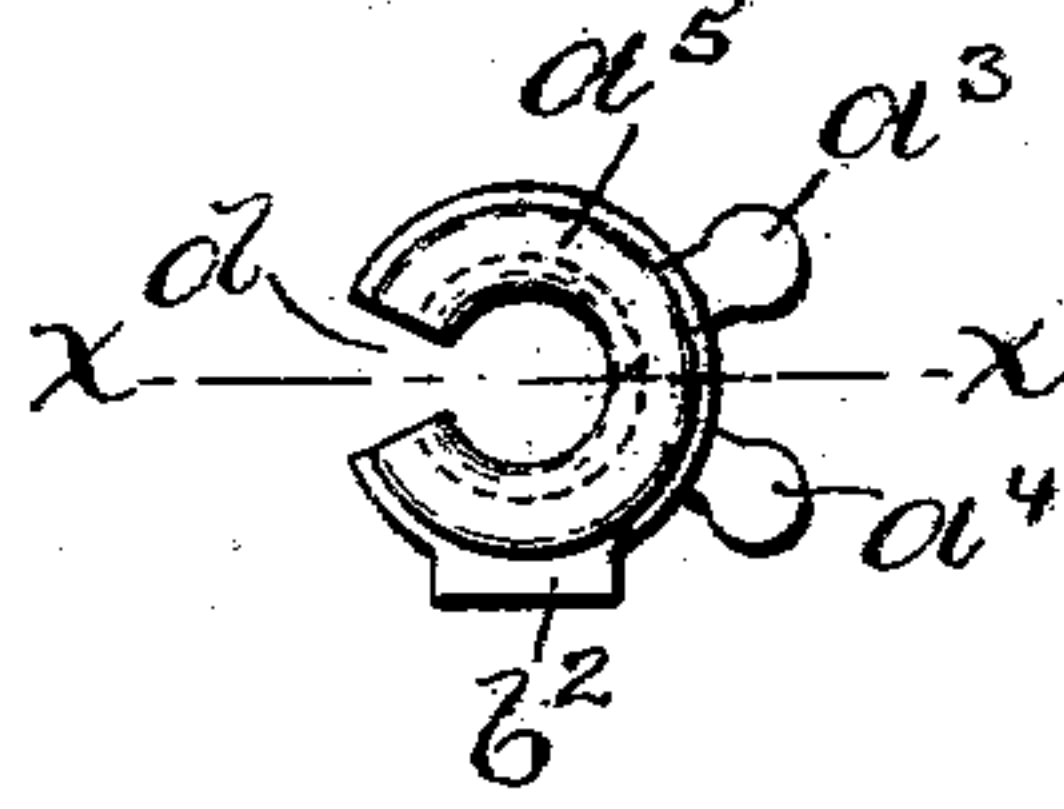
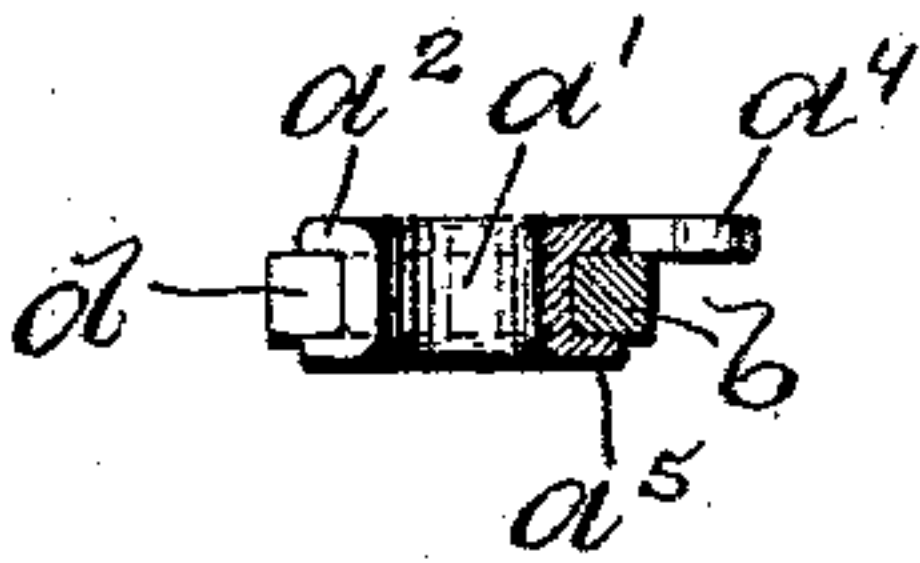
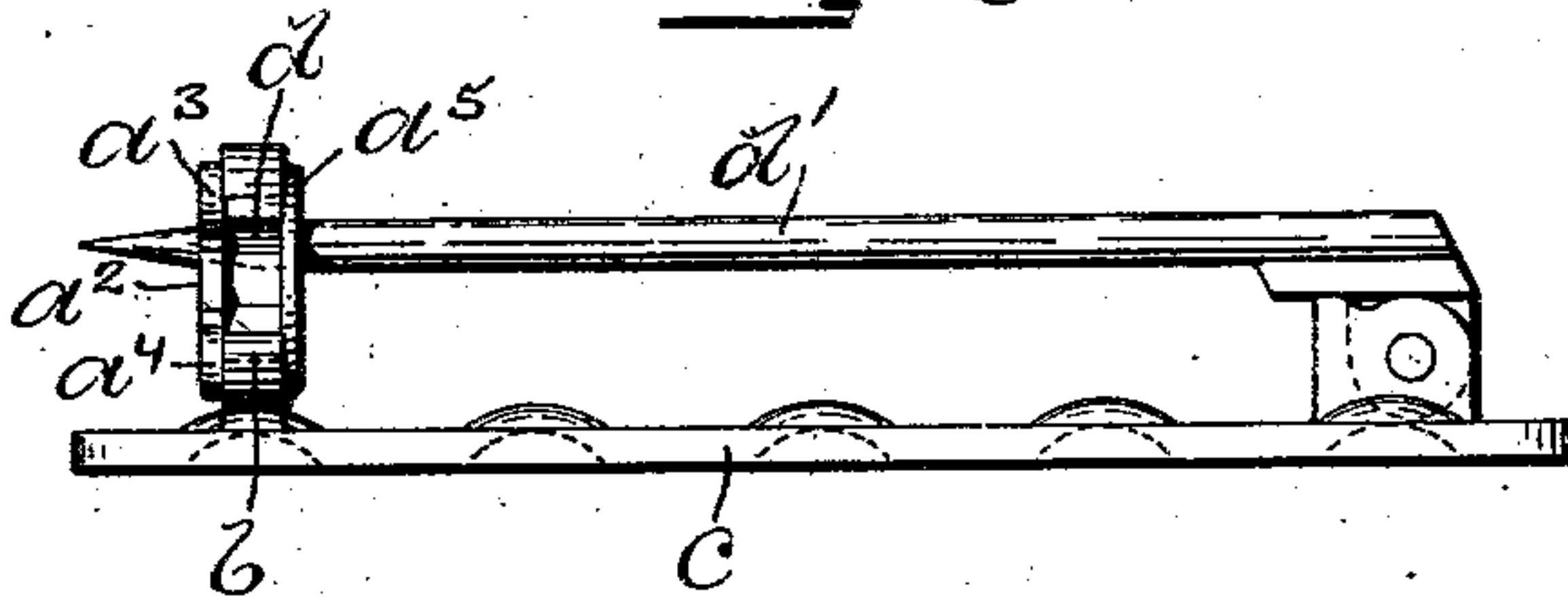
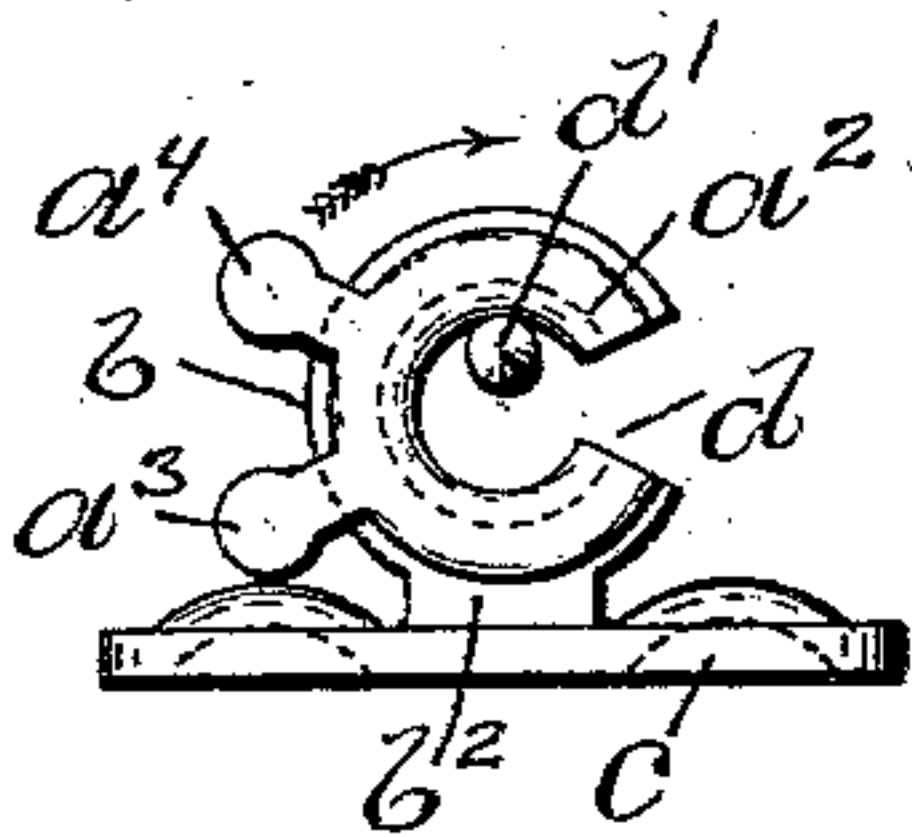
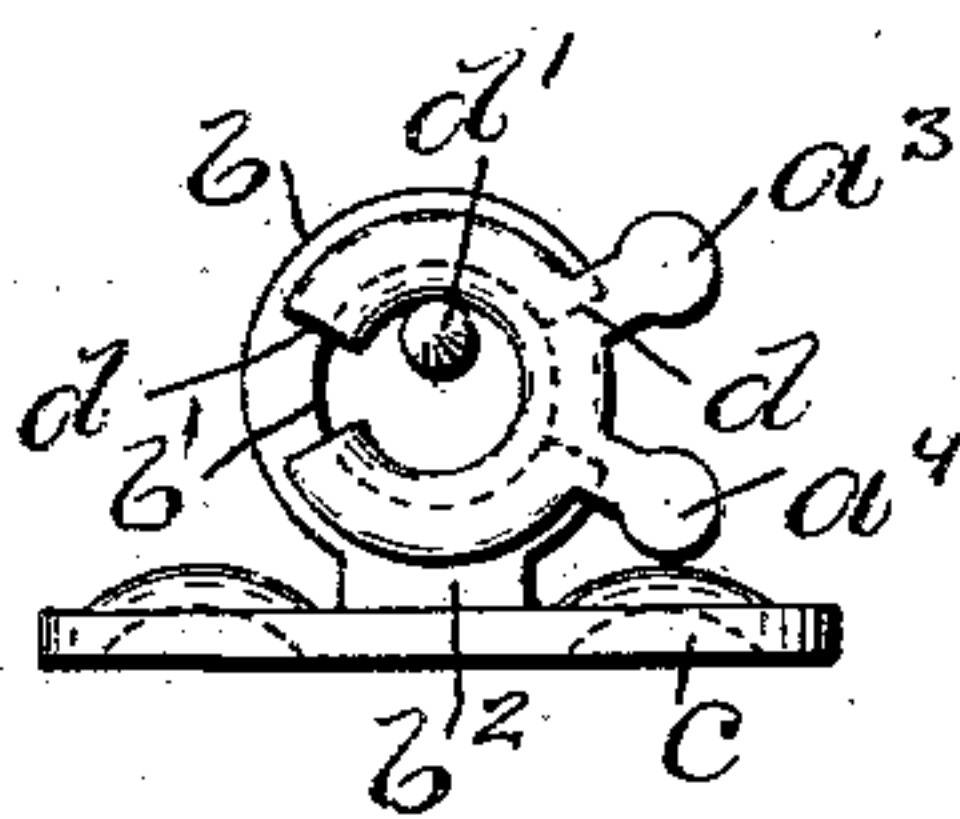


C. D. HEATON.
SAFETY CATCH.

APPLICATION FILED JUNE 30, 1902.

NO MODEL.

Fig. 1.Fig. 2.Fig. 3.Fig. 4.Fig. 5.Fig. 6.Fig. 7.Fig. 8.Fig. 9.Fig. 10.

WITNESSES:

Chas. H. Luther Jr.
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ATTORNEYS:

UNITED STATES PATENT OFFICE.

CHARLES D. HEATON, OF PROVIDENCE, RHODE ISLAND.

SAFETY-CATCH.

SPECIFICATION forming part of Letters Patent No. 740,648, dated October 6, 1903.

Application filed June 30, 1902. Serial No. 113,846. (No model.)

To all whom it may concern:

Be it known that I, CHARLES D. HEATON, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Safety-Catches, of which the following is a specification.

This invention has reference to an improvement in a safety-catch adapted to lock a pin-tongue or similar device.

The invention consists in the peculiar and novel construction of the safety-catch, whereby the same may be formed of two parts, as will be more fully set forth hereinafter.

Figure 1 is a perspective view of a sheet-metal disk having the central portion drawn out into a tube projecting from one face of the disk. Fig. 2 is a perspective view showing the disk of Fig. 1 cut to the preferred form of the rotatable part of the catch provided with two projecting arms. Fig. 3 is a perspective view of the ring-post. Fig. 4 is a side view showing the blank of Fig. 2 inserted into the ring-post of Fig. 3. Fig. 5 is a side view showing the tube end expanded over the side of the ring-post. Fig. 6 is a side view of the completed catch, showing a section cut out of the two parts to form an entrance to the central opening. Fig. 7 is a sectional view of the catch, taken on the line xx of Fig. 6. Fig. 8 is a side view of a pin provided with the safety-catch. Fig. 9 is a side view showing the preferred form of the catch in the open position, one of the two arms acting as a stop. Fig. 10 is a side view of the preferred form of the catch, showing the same in the locked position, one of the two arms forming a stop.

Similar marks of reference indicate corresponding parts in all the figures.

In the drawings, a indicates the disk-blank; a' , a tube projecting from the center of the disk-blank; a^2 , the annular rim surrounding the tube a' , and a^3 and a^4 arms projecting from the annular rim a^2 . The post b consists of an annular rim having the circular central opening b' , into which the tube a' fits with a loose fit, so as to rotate in the same. The stud b^2 projects from one side and serves to

secure the post to the plate c of the pin or other article to which the catch may be secured.

d indicates the entrance-opening for the insertion of the pin-tongue d' .

In constructing my improved safety-catch I cut out of sheet metal the post b , preferably by a suitable die, and I cut a blank and draw up the tube a' and then cut with a die the blank to the shape shown in Fig. 2. I now insert the tube a' into the opening b' of the post and by means of suitable dies expand and turn over the end of the tube a' to form a flange, as is shown in Fig. 7, in which the tube a' is shown provided with the rim a^2 and the flange a^5 , which bear on the opposite sides of the annular rim of the post b . The opening d is now formed by cutting out a portion of the rim a^2 , the flange a^5 , the wall of the tube a' , and the annular rim of the post.

The tumbler formed of the tube a' , the rim a^2 , the flange a^5 , and the arm a^3 may be rotated in the post so as to open or close the opening d . The arms a^3 and a^4 form stops, so that when the tumbler is rotated to the open position the arm a^3 will be in contact with the back or plate c , and when the tumbler is rotated to the closed position the arm a^4 will be in contact with the back or plate c . Such being the case, one arm will at all times be sufficiently above the back or plate c that the tumbler can be readily operated by the finger. In the preferred form, as shown in Figs. 9 and 10, the post of the catch is secured to the plate c , so that the arm a^3 forms a stop when the catch is open, as shown in Fig. 9, and the arm a^4 a stop when the catch is closed, as shown in Fig. 10.

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

1. In a safety-catch, the combination with a tubular post provided with an opening, of a tumbler rotatably supported in the post and provided with an opening to correspond with the opening in the post, and means for rotating the tumbler, comprising arms which form stops to limit the movement of the tumbler, as described.

2. In a safety-catch, the combination with the post b provided with the opening d , of the tumbler having the tube a' , the rim a^2 , the flange a^5 , and the arms a^3 a^4 rotatably
5 supported in the post b and provided with an opening to correspond with the opening d in the post, as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHAS. D. HEATON.

Witnesses:

J. A. MILLER, Jr.,

ADA E. HAGERTY.