

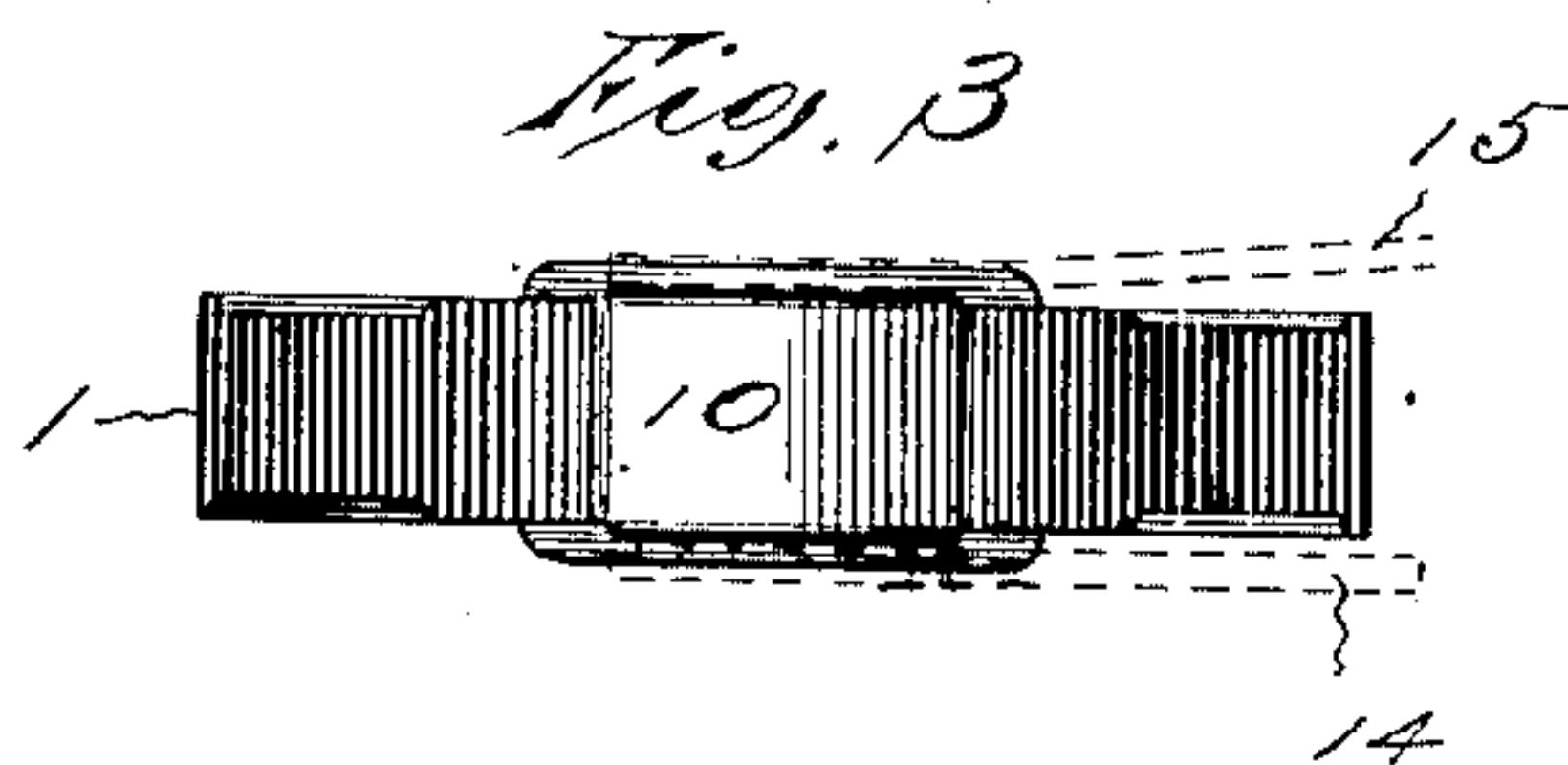
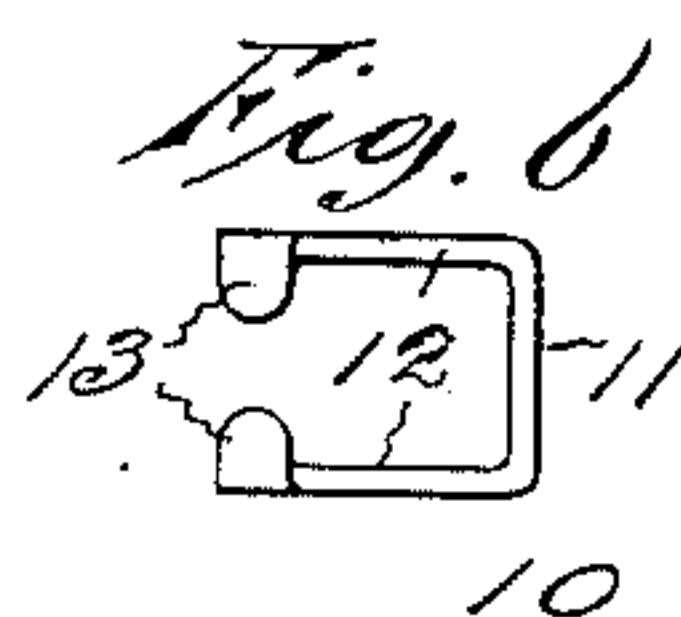
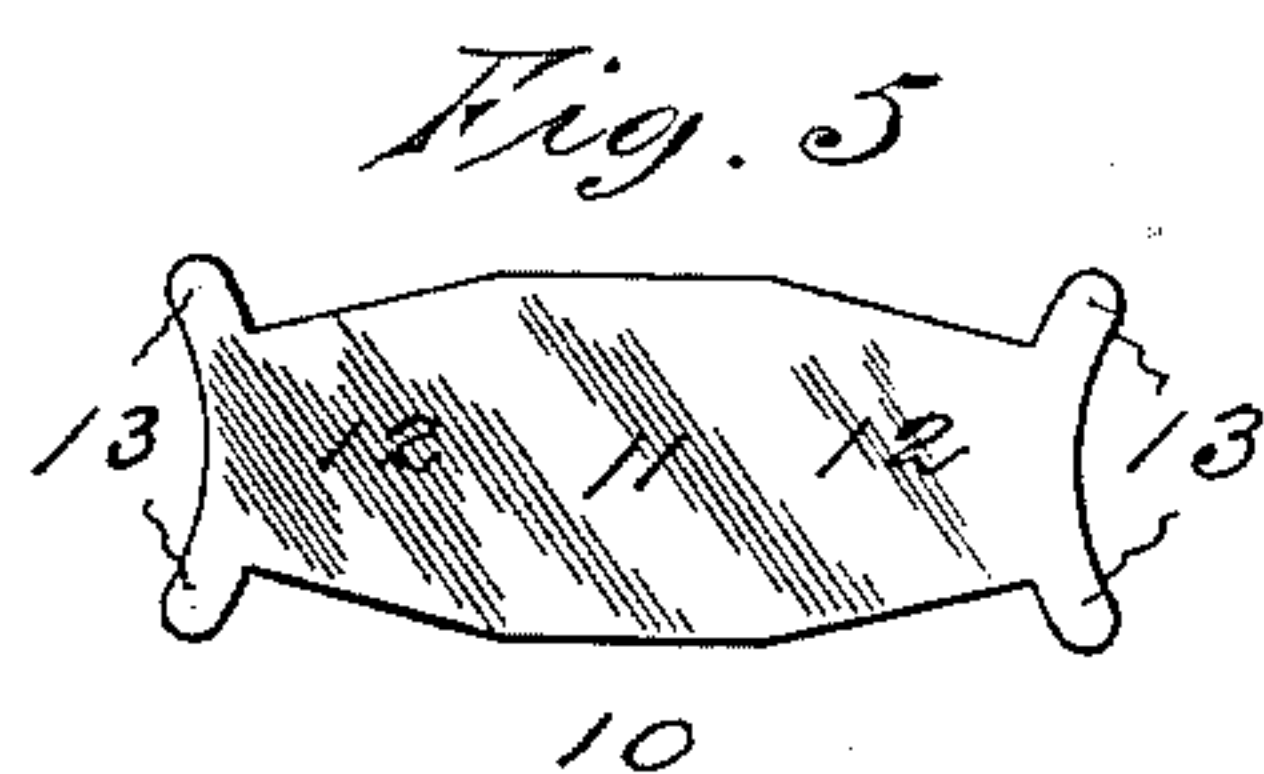
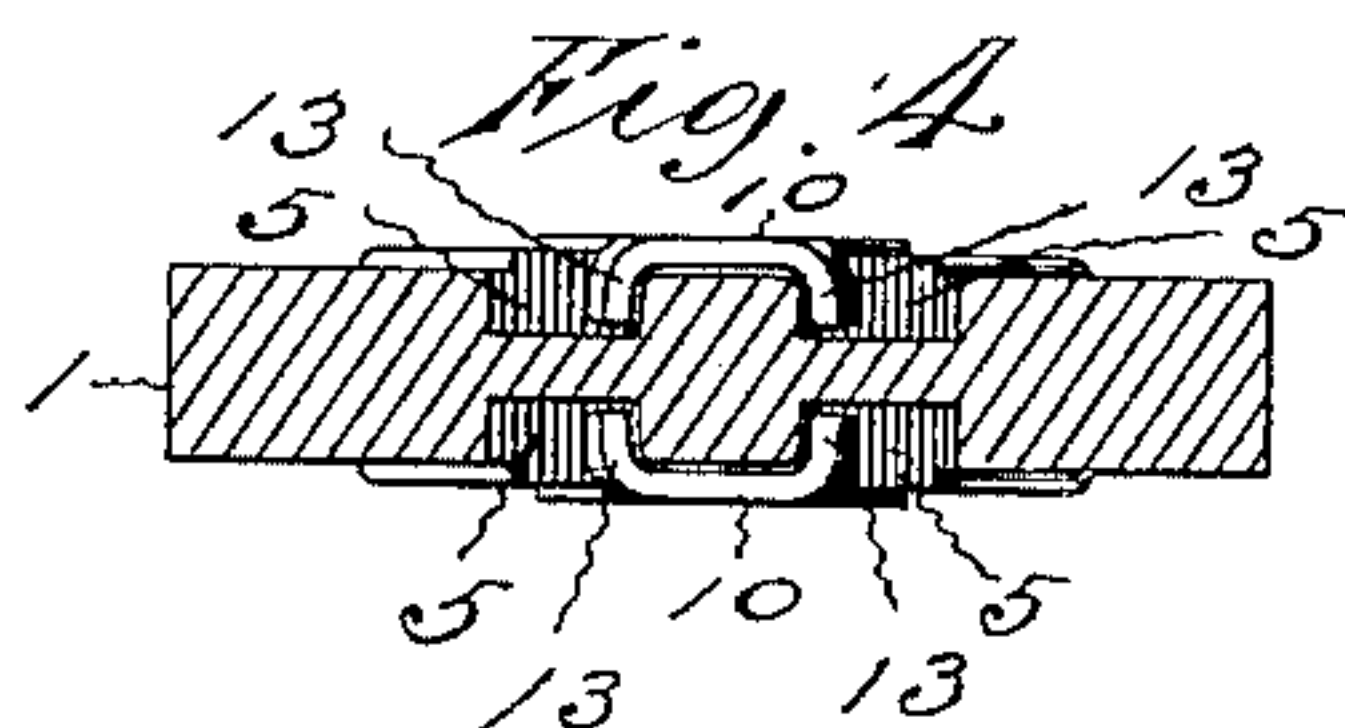
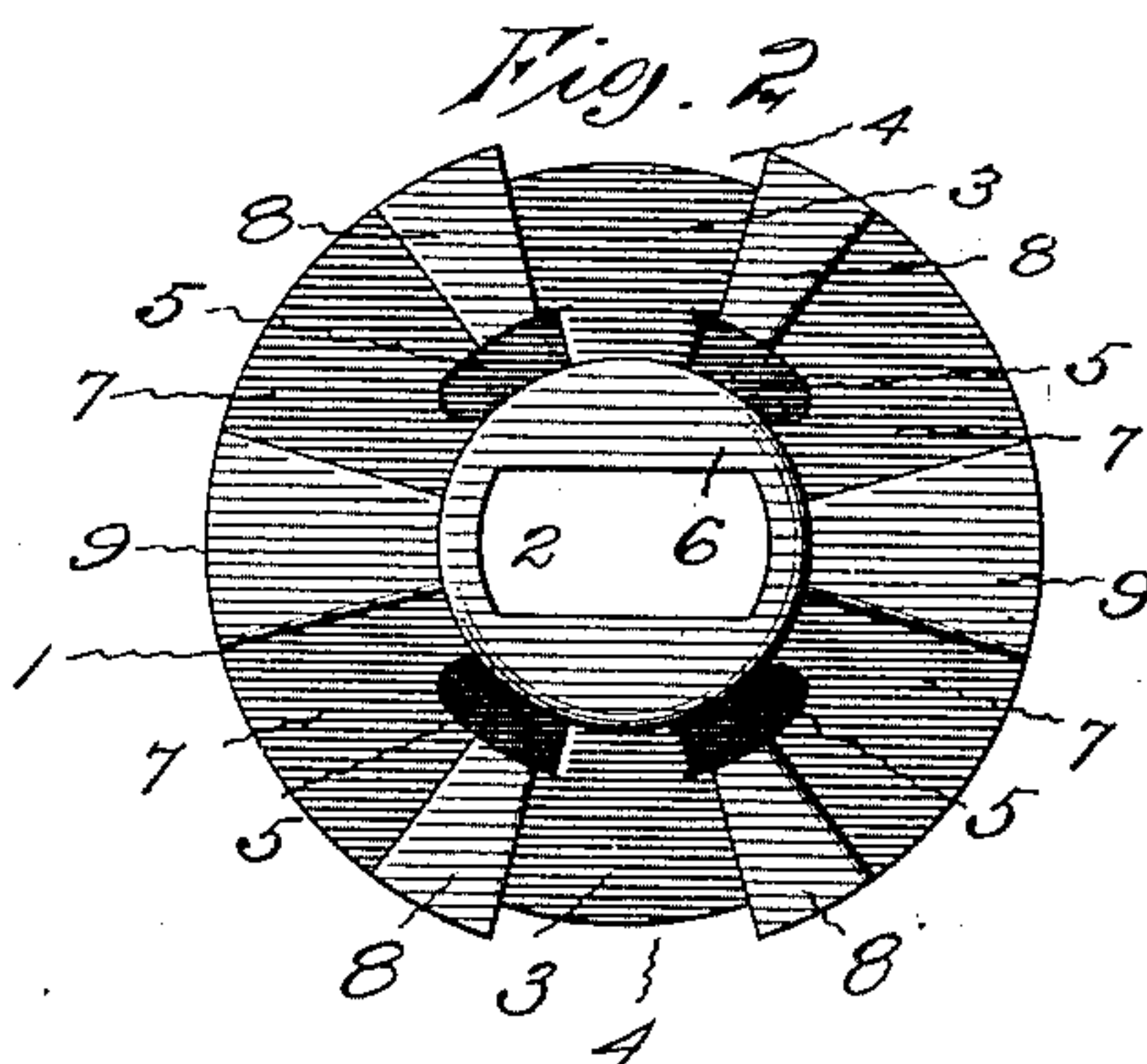
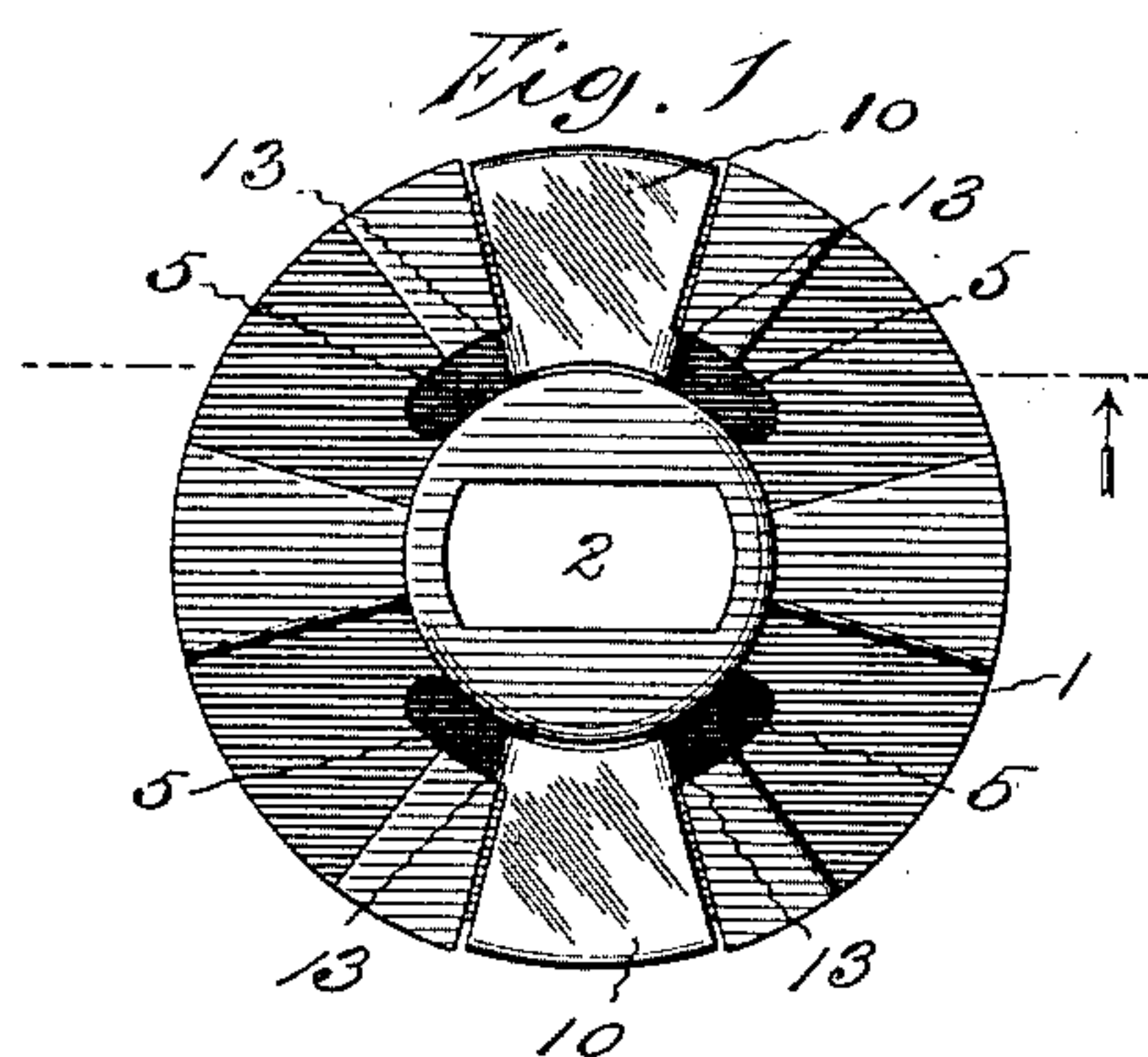
No. 659,873.

Patented Oct. 16, 1900.

C. G. PERKINS.
SNAP SWITCH COMMUTATOR.

(Application filed June 28, 1900.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES G. PERKINS, OF HARTFORD, CONNECTICUT, ASSIGNOR TO THE PERKINS ELECTRIC SWITCH MANUFACTURING COMPANY, OF SAME PLACE.

SNAP-SWITCH COMMUTATOR.

SPECIFICATION forming part of Letters Patent No. 659,873, dated October 16, 1900.

Application filed June 28, 1900. Serial No. 21,962. (No model.)

To all whom it may concern:

Be it known that I, CHARLES G. PERKINS, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Snap-Switch Commutators, of which the following is a specification.

This invention relates to the construction of the commutator-block—that is, the movable conducting-contacts and the insulating-disk that carries the movable contacts of a rotary snap electrical switch.

The object of this invention is to produce a durable and efficient commutator-block for a switch of this nature which can be very easily, quickly, and cheaply made.

The embodiment of the invention that is illustrated in the accompanying drawings has a disk of insulating material with a central perforation adapted to receive the rotating means and conducting-pieces that extend from one face over the edge to the other face and are loosely but securely held in position by ears bent into recesses formed in the faces of the insulating material.

Figure 1 of the views shows a plan of a commutator-block that embodies the invention. Fig. 2 is a plan of the insulating-disk without the conducting-pieces. Fig. 3 is an edge view of the commutator-block. Fig. 4 shows a section through the block on the plane indicated by the broken line of Fig. 1. Fig. 5 is a plan of one of the conducting-pieces before it is bent, and Fig. 6 shows an edge view of one of the conducting-pieces as it is after being bent and fastened in place.

The insulating-disk 1 of this commutator-block may be formed of any suitable material having the requisite strength, such as hard rubber, rubber and asbestos, or similar compounds that may be easily molded to shape and that possess the necessary non-conducting characteristics. In the center of this disk is an oblong opening 2, which is to be occupied by the means for rotating the disk. Depressions 3 are made in both faces of the disk, recesses 4 are made in the periphery opposite the depressions, and sockets

5 are made in both faces of the disk, both sides of the inner ends of both depressions near the hub 6. Depressions 7 are preferably made in both faces of the disk, so as to leave raised surfaces 8 each side of the depressions 3 and raised surfaces 9 midway between the depressions 3.

Each conducting-piece 10, formed of brass, bronze, copper, or other suitable metal, is preferably stamped to shape with a wide middle section 11 of a length equal to the thickness of the disk and tapering end sections 12 of a size substantially equal to the area of the depressions in the faces of the disk which the sections will occupy. Ears 13 project laterally on both sides from each end of the conducting-pieces.

The conducting-pieces are bent so that the tapering sections 12 are parallel with each other and at right angles with the sections 11 then after being slipped over the edge of the disk, so that they will occupy the depressions 3 in the faces and the recesses 4 in the periphery, the ears 13 are bent down into the sockets 5. By this means the conducting-pieces are very securely but loosely retained in place, so that when in use they are free to adjust themselves between the stationary contact-plates, (indicated by the dotted lines 14,) that are fixed close to the switch base, and the spring arms or brushes (indicated by the dotted lines 15) that are fixed to the base of the switch, so as to project above the contact-plates. While these movable commutator-block conducting-pieces are free to adjust themselves between the stationary contacts, they are very securely held in place. This method of securing the conducting-pieces is very simple and permits all of the parts to be cheaply made and easily assembled.

I claim as my invention—

1. A snap-switch commutator-block composed of an insulating-disk having in both faces depressions with a socket adjacent to and each side of each depression, and a conducting-piece with an end lying in each depression, each conducting-piece having an

ear projecting from each side into a socket, substantially as specified.

2. A snap-switch commutator-block composed of an insulating-disk having recesses
5 in its periphery, depressions in its faces adjacent to the recesses and sockets adjacent to the depressions, and conducting-pieces oc-

cupying the recesses, lying in the depressions and having ears projecting into the sockets, substantially as specified.

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Witnesses:

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