

No. 826,974.

PATENTED JULY 24, 1906.

H. E. TRUMBO.
ELECTRIC CUT-OUT.

APPLICATION FILED NOV. 20, 1905.

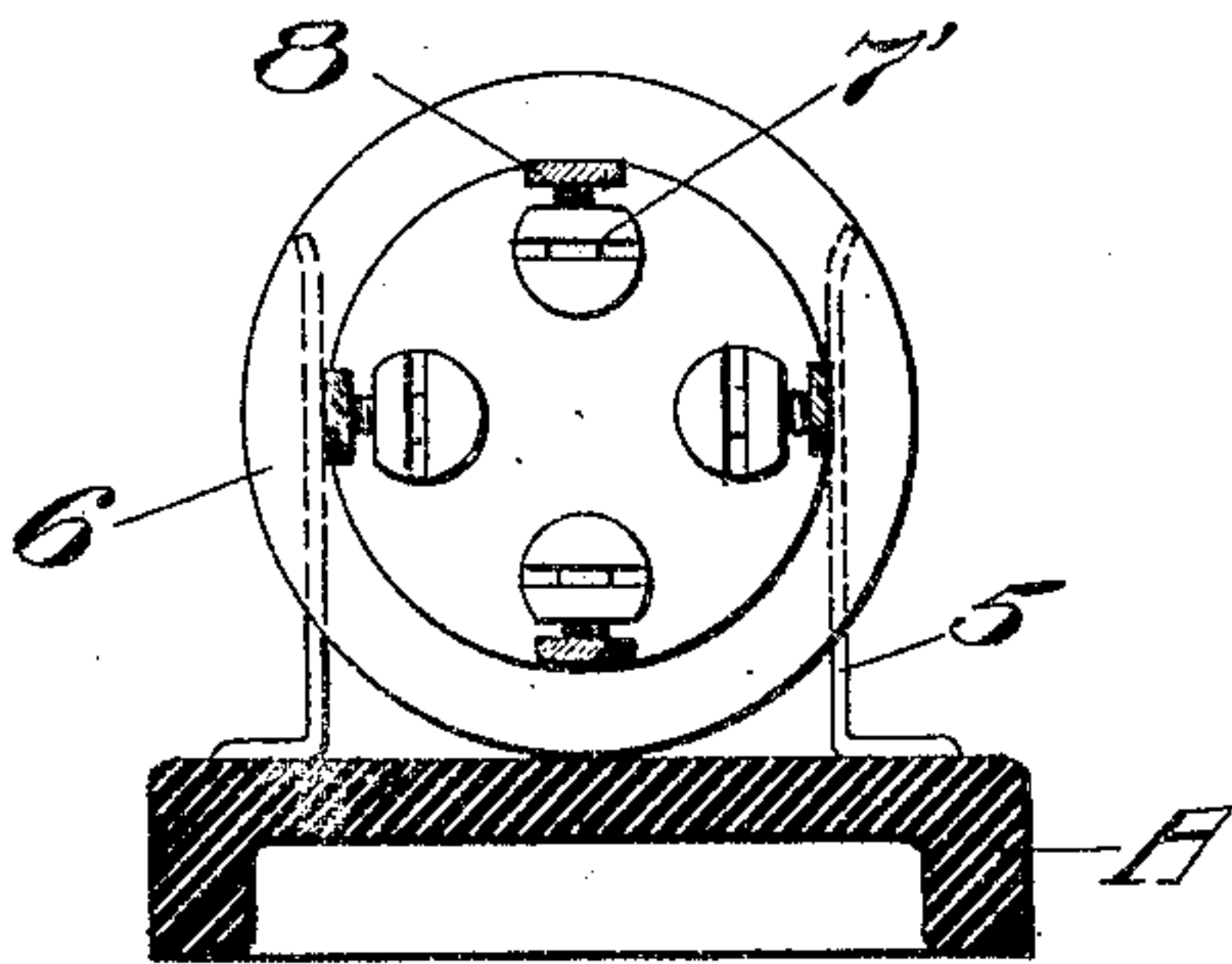


Fig. 1

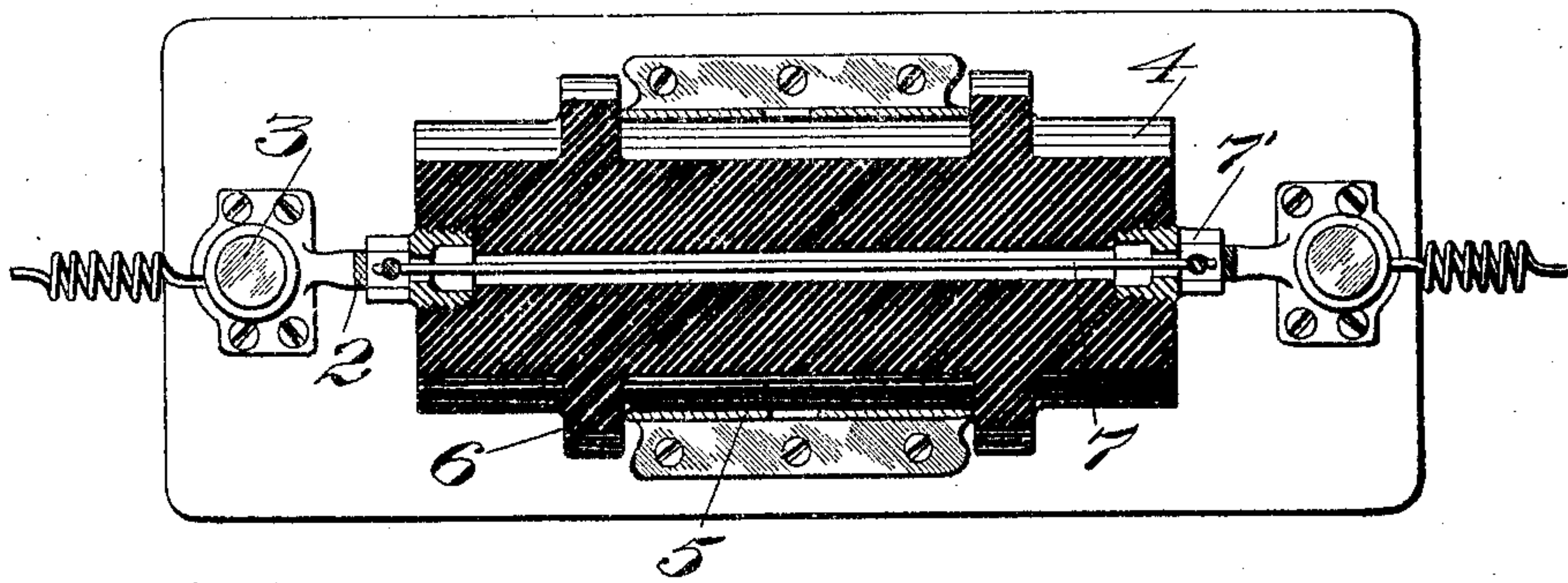


Fig. 2.

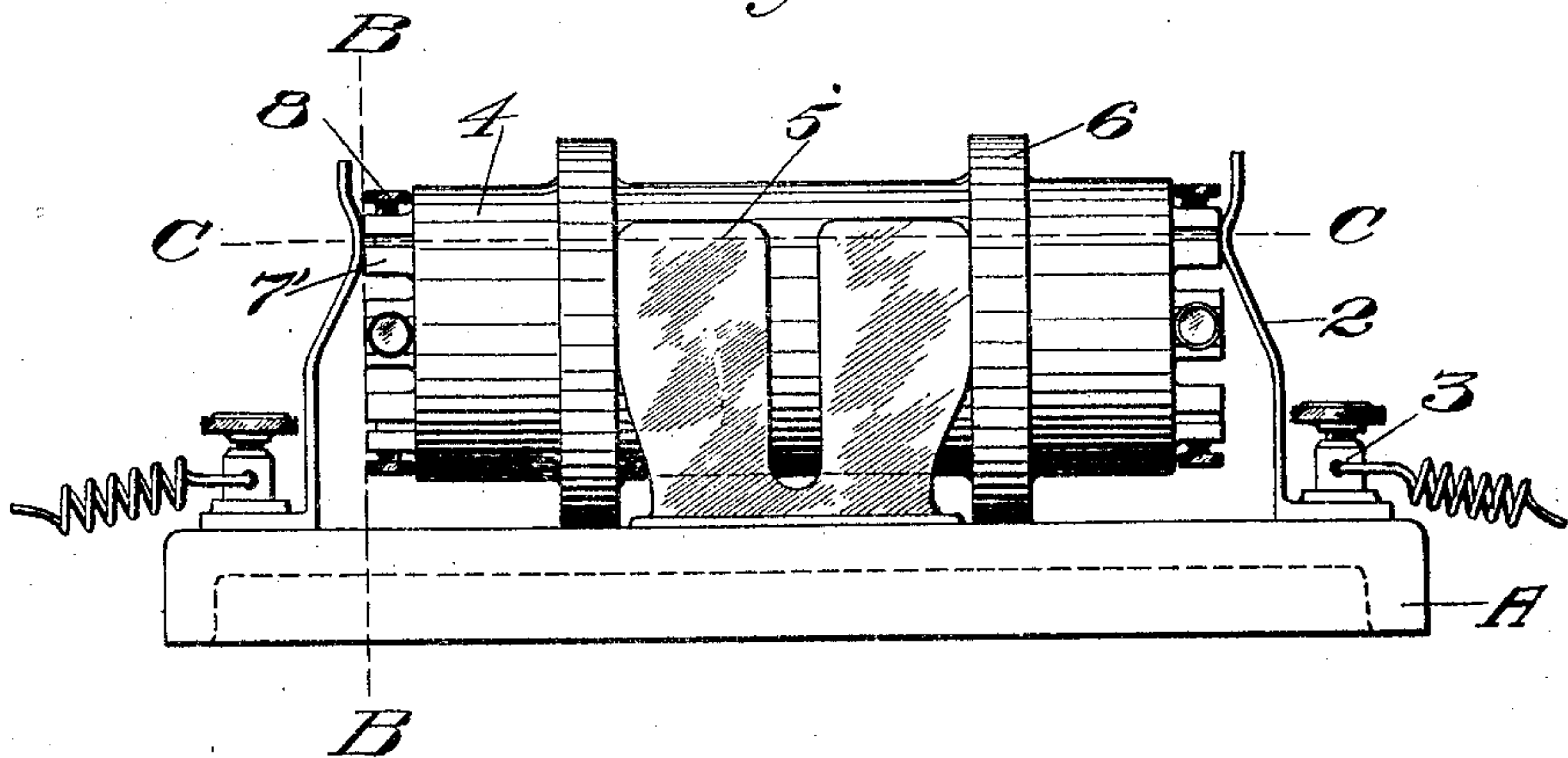


Fig. 3.

Witnesses:
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UNITED STATES PATENT OFFICE.

HERBERT ELGIN TRUMBO, OF SAN FRANCISCO, CALIFORNIA.

ELECTRIC CUT-OUT.

No. 328,974.

Specification of Letters Patent.

Patented July 24, 1906.

Application filed November 20, 1905. Serial No. 283,192.

To all whom it may concern:

Be it known that I, HERBERT ELGIN TRUMBO, a citizen of the United States, residing in the city and county of San Francisco and State of California, have invented new and useful Improvements in Electric Cut-Outs, of which the following is a specification.

My invention relates to electrical apparatus, and especially to protective cut-outs, or "fuse-blocks," as they are commonly called.

With the systems usually in vogue whenever a fuse burns out it is necessary to shut down all the machinery run by the power from the line in which the destroyed fuse is located in order to replace the fuse. The fusible strip has generally to be removed and a new one put in place, requiring more or less skill and the use of a screw-driver or other tool or tools. The few minutes delay necessary for the putting in of a new fuse may prove serious, especially in mines or mills, and is always a source of annoyance, at least.

The object of my invention is to provide a simple, inexpensive, practical device which will carry a plurality of fuses, so that if one burns out a slight movement of the fuse-holder will operate to replace the burned-out fuse with a new one, so that the interruption in the circuit need be but momentary.

The invention consists of the parts and the construction and the combination of parts, as hereinafter more fully described and claimed, having reference to the accompanying drawings, in which—

Figure 1 is a section on line B B of Fig. 3. Fig. 2 is a section on line C C, Fig. 3. Fig. 3 is a side elevation of my electric cut-out.

A represents a base of any suitable insulating material, as rubber, porcelain, or the like. The base is provided with two spring-clip terminals 2, connected by appropriate means, as the binding-posts 3, with the line to be protected.

4 is my fuse-holder, arranged between the terminals 2, made of any suitable insulating material. The holder is adapted to be removably held in position between the terminals by any appropriate means, as the spring-clips 5. The holder may be of any shape or size, but is preferably rounded or made polygonal, so as to be rotated between the clips 5. The annular peripheral flanges 6 serve as guides cooperating with the clips 5 to prevent longitudinal displacement of the holder. The holder is provided with any suitable number of longitudinal perforations to receive the fusible strips 7, and each perforation has screwed into it at each end of the holder a hollow contact-piece 7', which projects more or less beyond the end of the holder in order to form a support for the binding-screw 8 and is adapted to be brought into operative contact with the corresponding terminal 2. The latter are each bent ogee fashion, so that each may contact with only one of the contacts 7' at any one time. The contact-pieces 7', with their binding means, as the screws 8, enable the common ordinary lead fuses to be used, a fuse-section of suitable length being slipped in through one of the contact-pieces and passed through the holder and locked by the screws 8.

While I have shown my holder adapted to carry four fuses, it is manifest that the holder may be made to carry any desired number of fuses.

In operation the holder being properly loaded with fusible sections is inserted into the clamping device 5 and between the terminals 2 to bring one pair of contacting pieces 7' in circuit with the clips 2. If for any reason this fuse burns out, all the operator has to do is to give the holder a quarter-turn to bring a succeeding fuse and its contacting pieces 7' into circuit with the terminals 2, it being possible to repeat this operation until all the fuses in the holder have been destroyed, whereupon, if necessary, this holder can be pulled and a freshly-loaded holder instantly put into position. It is thus manifest with what rapidity a burned-out fuse can be replaced.

The holder and the several parts may be of any suitable size, depending on the work for which the particular cut-out is intended, and there may be one or more holders employed, depending on the character of the system to be protected.

It is possible that various other modifications in my invention may be made without departing from the principle thereof, and I do not wish to be understood as limiting myself to my specific construction beyond what is required by a reasonable interpretation of my claims.

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

1. A fuse-block comprising an insulated base, terminals at opposite ends thereof, a fuse-holder between said terminals, said holder having longitudinal perforations en-

larged at the outer ends, a plurality of fusible sections within said perforations, hollow contact-pieces fitted to the enlarged ends of the perforations and receiving the ends of the fusible sections, said contact-pieces arranged in pairs to contact with said terminals to close the circuit therebetween.

2. A fuse-block comprising an insulated base, a holder revoluble thereon said holder having longitudinally-extending perforations through it, fusible sections extending through said perforations, contact-pieces fitted to the holder in line with the perforations and made hollow to receive the ends of the fusible sections, and terminals at the ends of the holder and bearing against the ends of the contact-pieces.

3. A fuse-block comprising an insulated base, a holder revolubly mounted thereon, and having a plurality of longitudinal perforations through it, fusible sections extending through said perforations, contact-pieces at the ends of the holder, having threaded bases screwing into the ends of the perforations,

said pieces being hollow to receive the ends of the fuse-sections, means for clamping the ends of the sections in the contact-pieces, and spring-terminals fitted to opposite ends of the base and bearing inwardly toward each other, and against the ends of the contact-pieces.

4. The combination of a base, a fuse-holder revolubly mounted thereon, a plurality of removable fusible sections carried by the holder, contact-pieces at the ends of the holder and receiving the ends of said sections, spring-contacts engaging said contacts, said holder having spaced peripheral flanges, and spring-clips secured to the base and extending up along the sides of the holder between the flanges thereof.

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

HERBERT ELGIN TRUMBO.

Witnesses:

S. H. NOUSE,

D. B. RICHARDS.