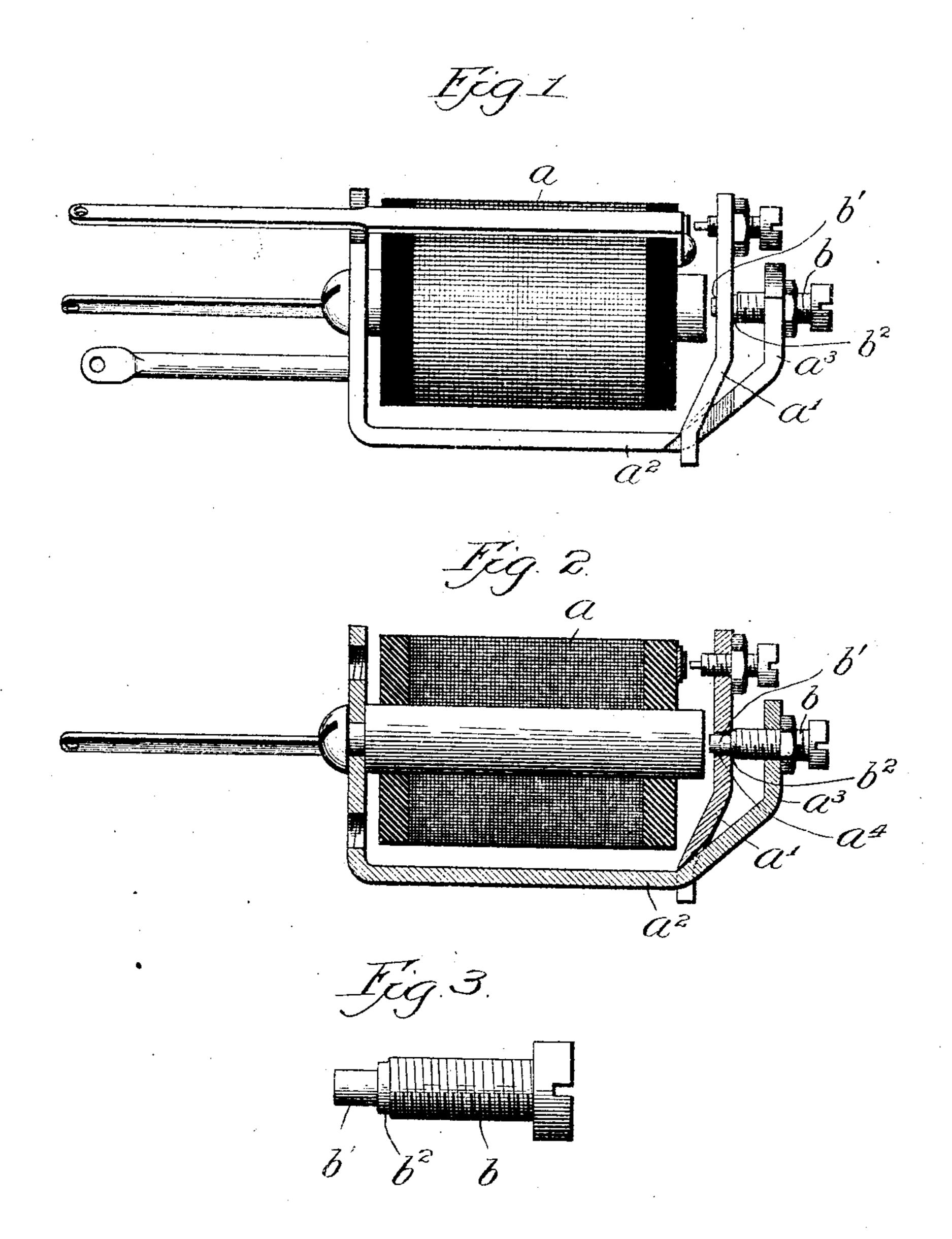
PATENTED AUG. 6, 1907.

F. R. McBERTY.

RELAY.

APPLICATION FILED JULY 16, 1908.



Ultresses;
Fed Survey.

Growing Mac Wonald.

Truentor:
Frank R. M. Berty
By Rayton Sangey
Filleys.

## UNITED STATES PATENT OFFICE.

FRANK R. McBERTY, OF NEW ROCHELLE, NEW YORK, ASSIGNOR TO WESTERN ELECTRIC COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

## RELAY.

No. 862,580.

Specification of Letters Patent.

Patented Aug. 6, 1907.

Application filed July 16, 1906. Serial No. 328,329.

To all whom it may concern:

Be it known that I, FRANK R. McBerry a citizen of the United States, residing at New Rochelle, in the country of West hester and State of New have inthe vented a certain new and useful Improve at in Relays, of which the following is a full, clear, concise, and exact description.

My invention relates to a relay and has for its object to provide an improved and simple device therefor arranged to serve the double function of a back-stop for the relay armature and a guide to prevent the same from being unseated.

I will describe my invention by reference to the accompanying drawing, wherein

Figure 1 is an enlarged side elevation of a relay equipped in accordance with my invention with a combined guide and back-stop; Fig. 2 is an enlarged detail cross-section through the armature and pole piece, with the stop and guide in elevation; and Fig. 3 is an enlarged detail view of the guide and backstop.

Similar letters of reference designate similar parts throughout the several views.

The armature a' of the magnet a is mounted in knife-edge bearings upon the pole piece  $a^2$  of said magnet, and is provided with an adjustably mounted pin or screw b forming a backstop for the armature and a guide to prevent the same from being unseated. The screw b is preferably carried by an angular extension  $a^3$  of the pole piece, extending from the point of support of said armature alongside the armature a'

The screw b is provided with a contracted or unthreaded end portion b' which passes through a hole  $a^4$  in the armature to serve as a guide therefor, said end portion having a shoulder  $b^2$  thereon, which serves as a backstop for the armature.

With my construction, as above described, a very simple and inexpensive means is provided for guarding against unseating of the armature and at the same time acting as a backstop therefor. The screw may be adjusted to vary the length of attractive movement of the 40 armature, as desired.

I claim:—

1. The combination with a magnet, of an armature therefor, an adjustably-mounted screw having an unthreaded end portion passing through said armature to 45 prevent the same from being unseated, and a shoulder on said end portion acting as a stop for said armature.

2. The combination with a magnet, of an armature therefor, a pole piece for said magnet upon which the armature is mounted in knife-edge bearings, an angular 50 extension of said pole piece from the point of support of said armature, a screw passing through said extension and laving an unthreaded end portion passing through said armature is prevent the same from being unseated, and a shoulder on said end portion acting as a backstop 55 for said armature.

In witness whereof, I, hereunto subscribe my full name this 10th day of July, A. D. 1906.

FRANK R. MCBERTY.

Witnesses:

E. F. BEAUBIEN, CLARENCE A. COGGIN.