

No. 751,003.

PATENTED FEB. 2, 1904.

C. L. PERRY.
CONTROLLER CASING.

APPLICATION FILED OCT. 26, 1900.

NO MODEL.

Fig. 1.

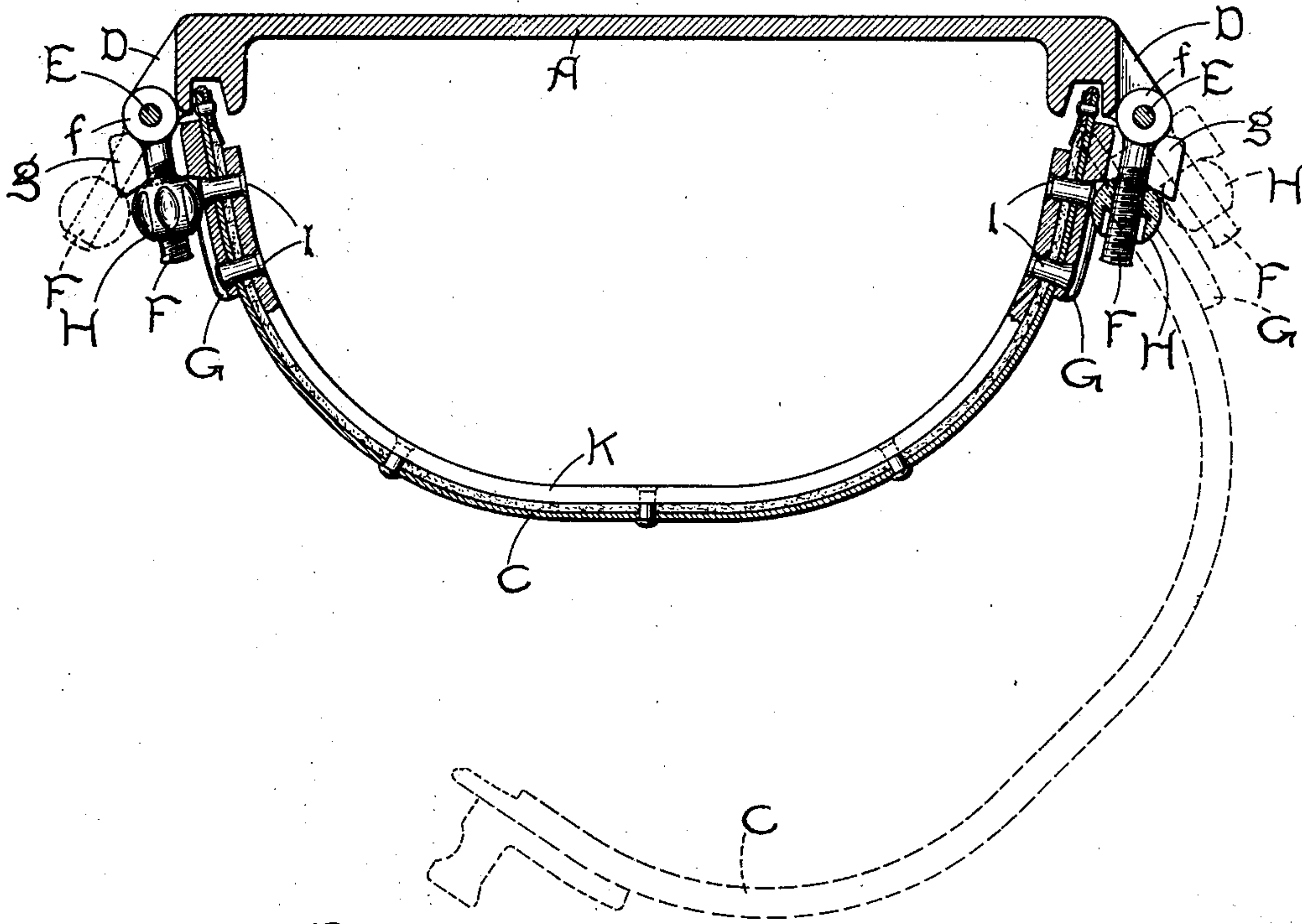
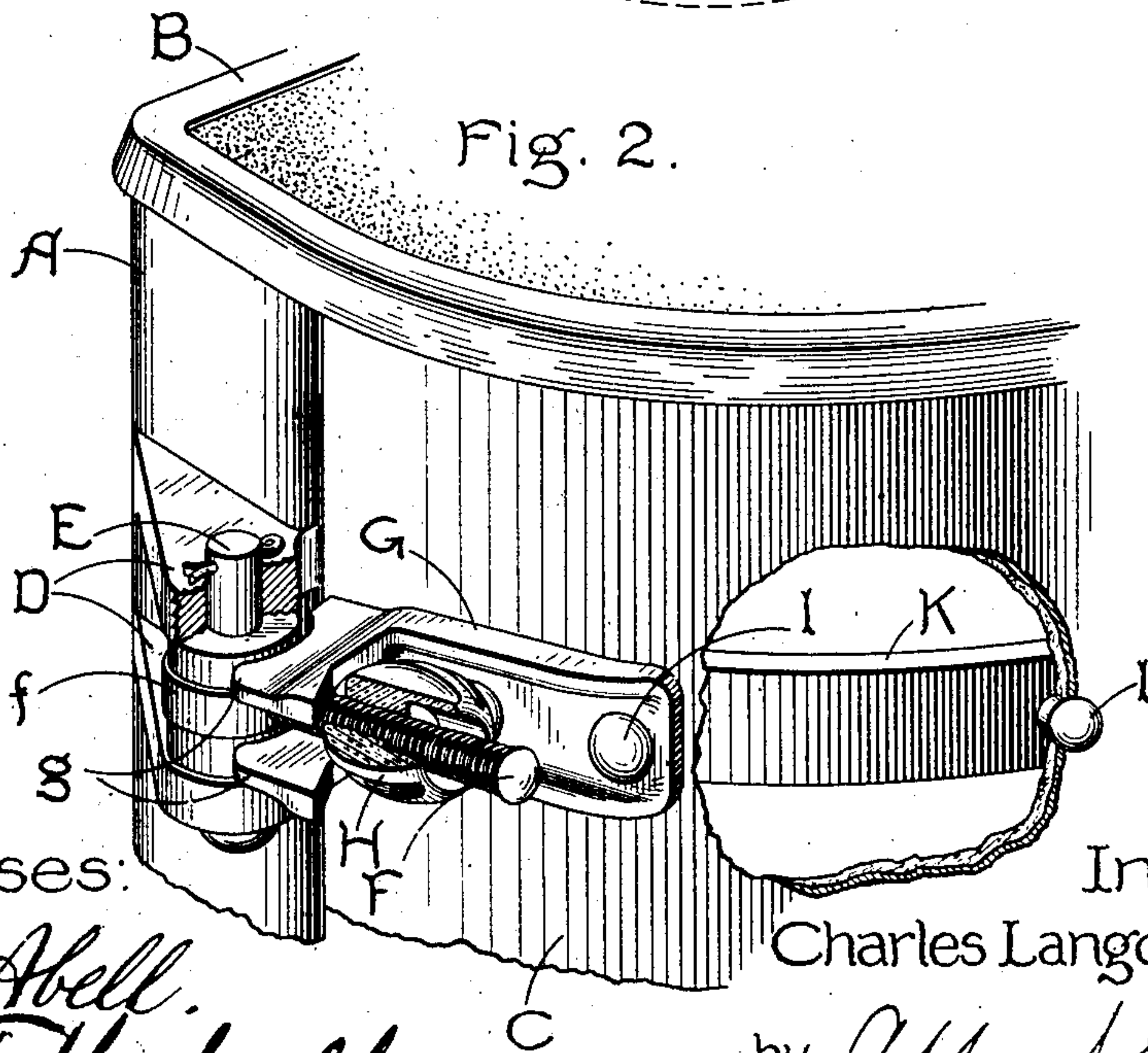


Fig. 2.



Witnesses:

Lewis B. Bell.
Alfred Macdonald.

Inventor:

Charles Langdon Perry
by *Albert G. Davis*
Atty.

UNITED STATES PATENT OFFICE

CHARLES L. PERRY, OF SCHENECTADY, NEW YORK, ASSIGNOR TO THE
GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

CONTROLLER-CASING.

SPECIFICATION forming part of Letters Patent No. 751,003, dated February 2, 1904.

Application filed October 26, 1900. Serial No. 34,407. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. PERRY, a citizen of the United States, residing at Schenectady, in the county of Schenectady, State of New York, have invented certain new and useful Improvements in Controller-Casings, of which the following is a specification.

My invention relates to controllers for electric motors; and its object is to facilitate the opening and removal of the cover of the controller-casing. As usually made, the cover is hinged on its right side. It sometimes happens that a controller must be placed in a corner or so close to a brake-staff or other piece of mechanism that it is impossible to open the cover to its full extent, or, perhaps, not at all unless it be hinged so as to open the other way—that is, from right to left. Indeed, it may even be desirable to so place the controller that the cover must be taken off entirely to give access to the mechanism.

It is the purpose of my invention to provide a cover with means whereby it can be opened in either direction, as may be desired, or may be taken off with equal facility.

My invention therefore consists of the combination of a casing, such as a controller-casing, having relatively fixed and movable portions, pivoted members provided with separable parts mounted along the edges of one of said portions, and means whereby the other portion may be detachably secured to said pivoted members without entirely separating said separable parts, so that said movable portion can swing in either direction relative to said fixed portion or be entirely removed therefrom.

In the drawings, Figure 1 is a horizontal cross-section of a controller-casing equipped with my improved hinges. Fig. 2 is a perspective view of one hinge and the adjacent portion of the casing on a larger scale and partly broken away.

The casing comprises the back A, top B, and cover C, all of the usual construction. The hinges are placed along each edge of the back and on the outside of the same. A description of one hinge will serve for all. The

back A carries one leaf of the hinge, consisting of two parallel lugs D, through which are registering holes to receive the upright pintle E. Pivoted on the pintle between the lugs is one part of the other leaf of the hinge, consisting of a screw-threaded eyebolt. On the outside of the cover C and in substantially the same longitudinal plane as the lugs on the back is secured the other part of the separable leaf of the hinge, the same consisting of a plate G, having a lug or projection at one end adapted to engage the head *f* of the eyebolt F, the projection being slotted to receive the shaft of the bolt between the jaws *g*. A thumb-nut on the screw-threaded portion of the eyebolt serves as a means for clamping the two parts of the separable leaf firmly together. In order to insure a more rigid union of these parts, the head may be shaped to fit into notches cut in the abutting edges of the jaws. I have shown the head and notches as circular, but an angular or other outline would be equally good. The backs of the jaws are also notched to receive the end of the nut, which is preferably ball-shaped and provided with a countersink around the projecting portion of the bolt to enable the nut to be run back far enough to disengage the jaws from the head of the bolt without overrunning the end of the bolt, which is upset to prevent the removal and loss of the nut.

To strengthen the cover at the points where the plates G are attached, a heavy strip of metal K is secured across the inside of the cover, and the rivets I pass through the plate and this strip.

The operation of my device is as follows: When the nuts of the eyebolts on one side of the cover are backed off from the jaws, the bolts can be swung out, as shown in dotted lines in Fig. 1, thereby disengaging the bolts from the plates and separating the two parts of this leaf of the hinge. The cover is thus left free to be swung open on the opposite set of hinges, as indicated in dotted lines in Fig. 1. It is evident that either set of eyebolts can be unfastened at will, so that the cover can be opened in whichever direction may be

desirable at the time. Moreover, by disengaging the eyebolts on both sides the cover can be entirely removed.

My invention renders it possible to use the same controller in any situation and yet have full access to all parts of the mechanism.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A casing comprising fixed and movable portions, pivoted members provided with separable parts mounted along both edges of one of said portions, and means for detachably securing the other portion to said pivoted members without entirely separating said separable parts, so that said movable portion can swing in either direction relative to said fixed portion.

2. A casing comprising fixed and movable portions, pivoted clamping members mounted along both edges of one of said portions, and slotted lugs on the corresponding edges of the other portion adapted to be clamped to said pivoted members and to be removed therefrom without entirely separating the parts of said pivoted clamping members.

3. A casing comprising fixed and movable portions, sets of pivoted eyebolts mounted along both edges of one of said portions, slotted plates mounted along the corresponding edges of the other portion, and means for detachably securing the slotted plates to the eyebolts so that said movable portion can swing freely on either of said sets of eyebolts as hinges.

4. A casing comprising a back and a cover portion, sets of similar pivoted clamping members provided with separable parts on both sides of one of said portions, so constructed and arranged that either set of pivoted clamping members can be used as a fastening device for the cover, the opposite set serving as hinges, the cover being adapted to be entirely removed from the back without completely separating the separable parts of said pivoted clamping members.

5. A casing comprising a back and a cover portion, a hinged eyebolt pivoted on one of said portions, a slotted plate mounted on the other portion, the slot in said plate being open at one side to receive the shaft of the eyebolt, and means for locking the plate to the eyebolt so that the cover portion may be swung thereon as a hinge.

6. A controller-casing comprising a back and a cover portion, hinged eyebolts pivoted along both edges of one of said portions, slotted plates mounted along both edges of the other portion, the slot in each of said plates being open at one side to receive the shaft of the eyebolt, and means for detachably securing the slotted plates to the eyebolts so that the cover portion may be securely locked in its closed position or swung open from either edge or entirely removed.

7. A controller-casing comprising a back and cover portion, eyebolts pivoted along both edges of one of said portions, nuts on said bolts, slotted plates mounted on both sides of the other portion, said eyebolts being provided with heads against which said slotted plates are adapted to be forced by means of said nuts, whereby the cover portion may be swung freely in either direction.

8. A controller-casing comprising a back and a cover portion, hinged eyebolts pivoted along both edges of one of said portions, nuts mounted on said bolts, slotted plates mounted along the edges of the other portion with which said eyebolts are adapted to coöperate in such a manner as to allow the cover portion to be securely locked in its closed position or swung open from either side or entirely removed without removing the nuts from said eyebolts.

In witness whereof I have hereunto set my hand this 24th day of October, 1900.

CHARLES L. PERRY.

Witnesses:

BENJAMIN B. HULL,
FRED RUSS.