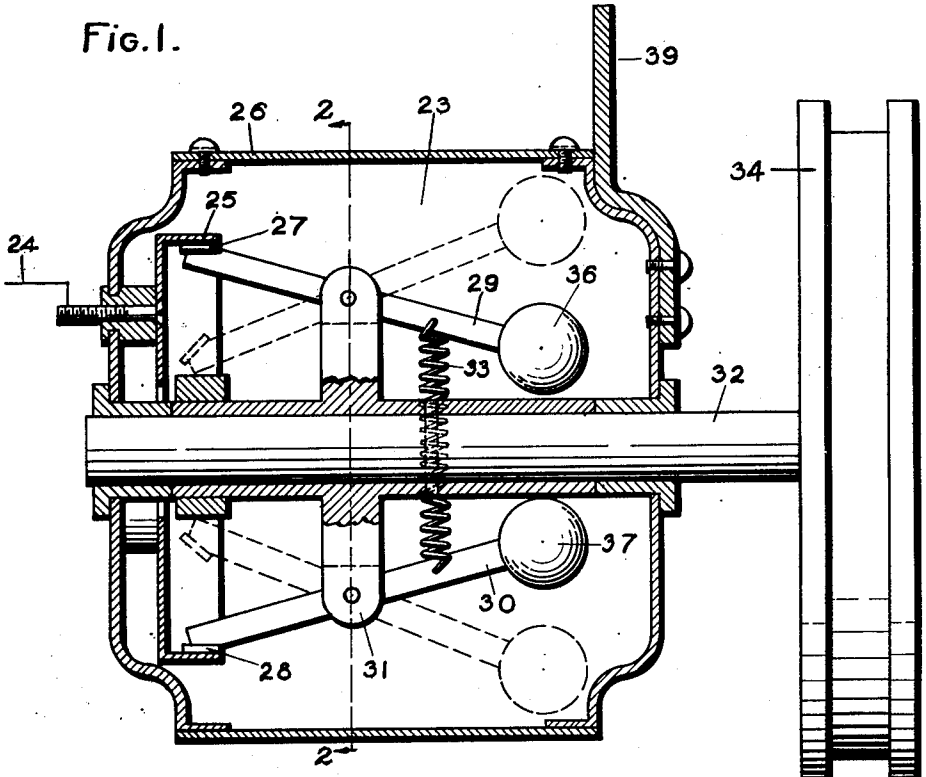
Aug. 9, 1932. A. C. DANNER 1,870,896

AUTOMATIC CIRCUIT BREAKING SWITCH

Filed Sept. 18, 1929

Fig. 1.



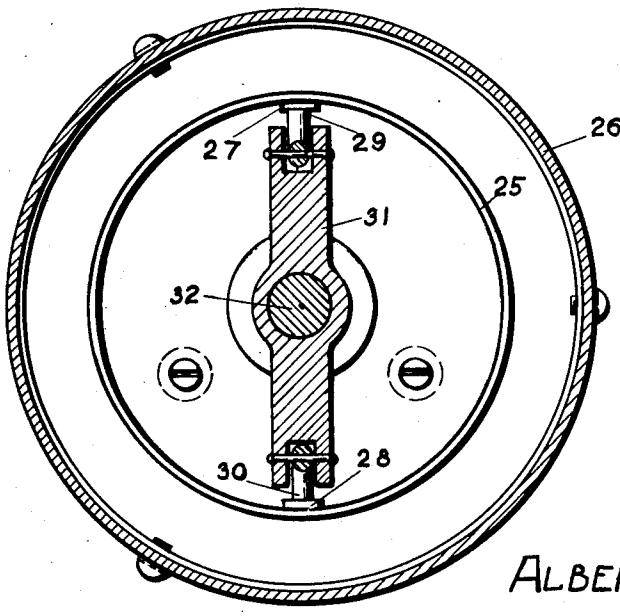


Fig. 2.

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UNITED STATES PATENT OFFICE

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AUTOMATIC CIRCUIT BREAKING SWITCH

Application filed September 18, 1929. Serial No. 393,553.

This invention relates to automatic switches, and a feature of the invention is the provision of means for instantly cutting out the switch upon the operation of certain rotary parts.

Other features and advantages will be hereinafter more fully set forth and pointed out in the accompany specification.

In the accompanying drawing which is made a part of this application.

Figure 1 is an enlarged detail sectional view thru the automatic circuit governor.

Figure 2 is a sectional view thereof as seen along line 2—2, Fig. 1.

Referring to the drawing in which similar reference numerals designate corresponding parts thruout the several views, the numeral 23 designates a governor comprising a circular contact ring 25 which is mounted within a housing 26 and insulated therefrom, the cable 24 being connected with said contact ring. Cooperating with the contact ring 25 are contact brushes 27 and 28, which are attached to the ends of arms 29 and 30, respectively, said arms being in turn pivotally mounted to a yoke 31 carried by and fixed to a shaft 32, extending thru the housing 26 and concentrically with the ring 25. The brushes 27 and 28 are moved into contact with the ring 25 thru the medium of a spring 33 which has its ends connected with the arms 29 and 30 on that side of the yoke 31 opposite the brush members 27 and 28, the tension of said spring being such as to hold the brushes 27 and 28 in more or less firm engagement with the ring 25.

In order to automatically release the brushes 27 and 28 from the ring 25 and thus break the electric circuit when the shaft 32 is rotated, counter weights or balls 36 and 37 are provided on the arms 29 and 30, on the ends opposite the brushes 27 and 28, and the centrifugal force incident to the rapid rotation of the shaft 32 and arms connected therewith will overcome the tension of the spring 33, and the contact brushes 27 and 28 are automatically and substantially instantly moved out of engagement with the ring 25 and will be held in this position so long as the shaft 32 is running.

The governor 23 in this instance is shown attached to a bracket 39 and thru which the governor is grounded, but it will be understood that if preferred, the governor may be mounted otherwise.

It will likewise be seen that this device will be positive in its operation, and can be cheaply manufactured as well as readily installed, and by very minor changes may be applied to many uses.

While I have illustrated in a general way, certain instrumentalities which may be employed in carrying my invention into effect, it is evident that many modifications may be made in the various details without departing from the scope of the appended claims, it being understood that my invention is not restricted to the particular examples herein described.

I claim as my invention:

1. A means for making and breaking a circuit comprising a single stationary circuit contact ring having an interior brush surface, contact brushes within said ring serving to make frictional and electrical contact therewith, arms, one end of each serving to carry one of said brushes, weights at the opposite ends of said arms, rotatable pivot means serving to pivot said arms between said brushes and the said weights, and yielding means for drawing the weight carrying ends of said arms inwardly for contacting the brushes with said ring; whereby the frictional and electrical contact of said brush and ring will be broken when said pivot means is rotated by the centrifugal action of said weights on said arms.

2. A circuit breaking means comprising a shaft, a yoke attached thereto and adapted to rotate therewith, arms on opposite sides of

said shaft and pivoted between their ends to said yoke, a brush at one end of each arm, a single stationary ring within which said brushes contact to close a circuit, weights at the opposite ends of said arms adapted to swing outwardly and disengage the brushes from the ring when the shaft is rotated, and spring means for drawing the weighted ends of said arms inwardly and re-establish contact between said brushes and ring, when rotation of said shaft is stopped.

In testimony whereof, I have hereunto set my hand on this the 27th day of August, 1929, A. D.

ALBERT C. DANNER.