J. H. LEHMAN.

ELECTRICAL APPLIANCE.

APPLICATION FILED DEC. 3, 1912.

1,084,645. Patented Jan. 20, 1914.

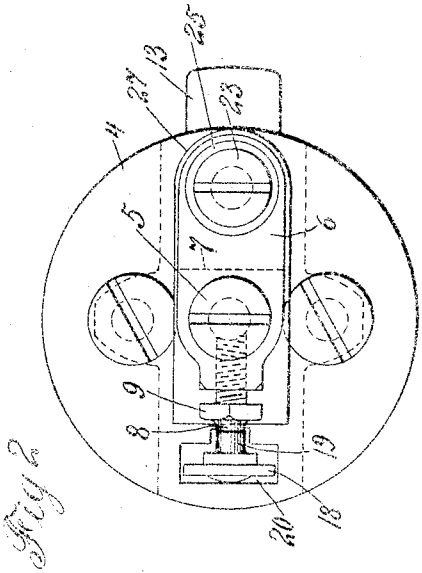


Fig 2

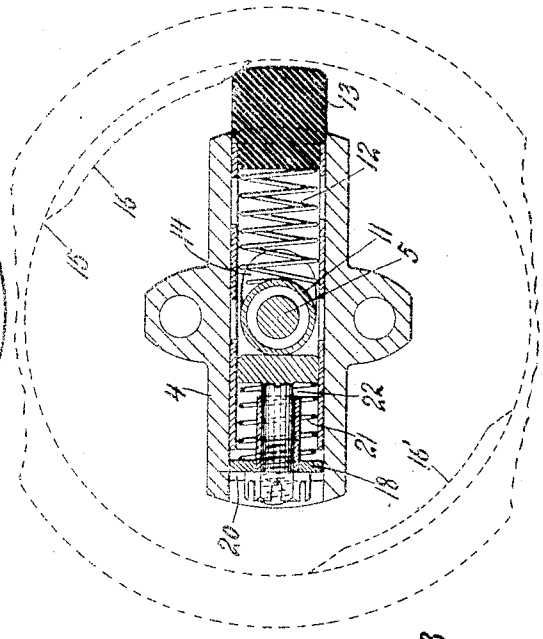


Fig 3

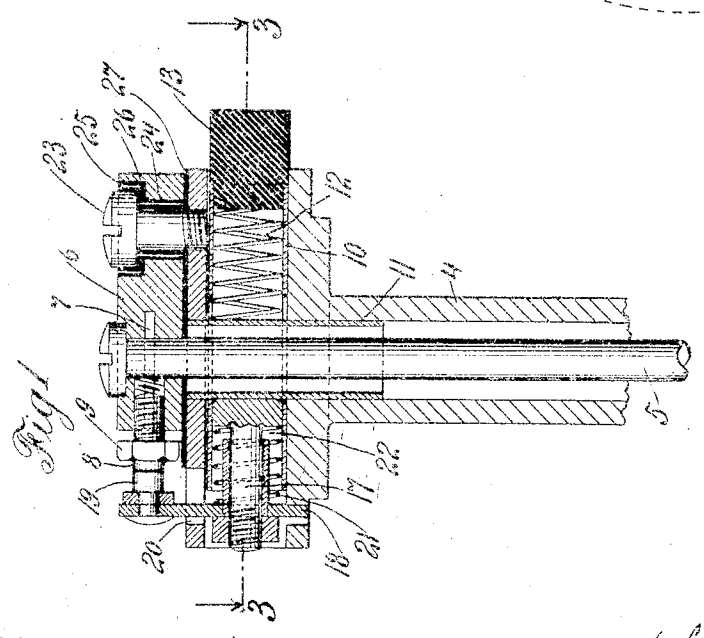


Fig 1

Witnesses:
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UNITED STATES PATENT OFFICE.

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ELECTRICAL APPLIANCE.

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To all whom it may concern:

Be it known that I, JOSEPH H. LEHMAN, a citizen of the United States, residing in the borough of Manhattan, in the county of New York and State of New York, have invented certain new and useful Improvements in Electrical Appliances, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to improvements in circuit breakers and has particular reference to a circuit breaker adapted for use in combination with a magneto and distributer as used for igniting the charges in an internal combustion engine.

In the accompanying drawings I have illustrated a preferred form of my invention.

Figure 1 is a vertical cross section of such a circuit breaker with the lower portions broken away. Fig. 2 is a plan view looking down at Fig. 1, and Fig. 3 a cross section on the line 3—3 of Fig. 1 showing in dotted outline the outer frame or bearing for the brush which breaks the circuit.

4 is the outer tube, frame or support of the device and is mounted upon the central shaft 5. Upon the upper portion is mounted the block 6 provided with the slit 7 penetrated by the shaft 5 and entered at the left by the bolt 8 so that when the shaft 5 is screwed down upon the slit 7, the bolt 8 is secured in position and may be adjusted in or out of its bearing by the nut 9. Within the support 4 is mounted the tube 10 and through this tube penetrates the longitudinal tube 11 as shown. The tube 10 is provided with the coil spring 12 which backs up the brush or bumper 13. The tube 10 is provided with an elongated opening 14 so as to allow it to shift from right to left past the longitudinal tube 11. From this it will be seen that as the circuit breaker revolves within the outer frame 15 shown in dotted outline in Fig. 3, the tube 10 is forced leftwardly looking at Fig. 1 as the bumper 13 strikes the cam or elevations such as 16. As the tube 10 travels leftwardly is carries with it the bolt 17 secured to the upright 18 carrying the contact point 19, and thus the circuit is broken between the points 8 and 19. The distance it would break is determined by the space 20 and as previously stated this may be adjusted by the nut 9. After the upright 18 has reached the end of the passage 20, the spark gap formed between the points 8 and 19 cannot of course be increased until the nut or bolt 9 has been adjusted. Should one of the cams such as 16—16′ be a little higher than the other, the additional movement given thereby to the bearing 13 is taken up by the coil spring 21, sufficient space being allowed at 22 for that purpose. Thus it will be seen that any unevenness or irregularities in the wearing surfaces of the circuit breaker are cared for without interfering with the adjusted spark gap. The screw 23 serves to further secure the parts in position and is completely insulated by the sleeves 24 and 25 and by the washer 26. Further insulation is of course provided by the disk 27. From this it will be seen that the current leaves the ground from the outer tube or support 4, through the upright 18 and across the contact points 19—8, into the bolt 9, base 6 and shaft 5.

Of course it will be readily understood that various modifications may be made without departing from the spirit of the invention as set forth in the claim.

I claim:

A circuit breaker having a projected bearing and a contact piece, said bearing when moved adapted to move said contact piece, a stop to limit the movement of said contact piece, and said bearing adapted to continue to move after said contact piece has stopped moving, an outer frame adjacent to said bearing, and said bearing when rotating adapted to move upon said outer frame.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH H. LEHMAN.

Witnesses:

LOUISE ENDERLE,

THOMAS A. HILL.