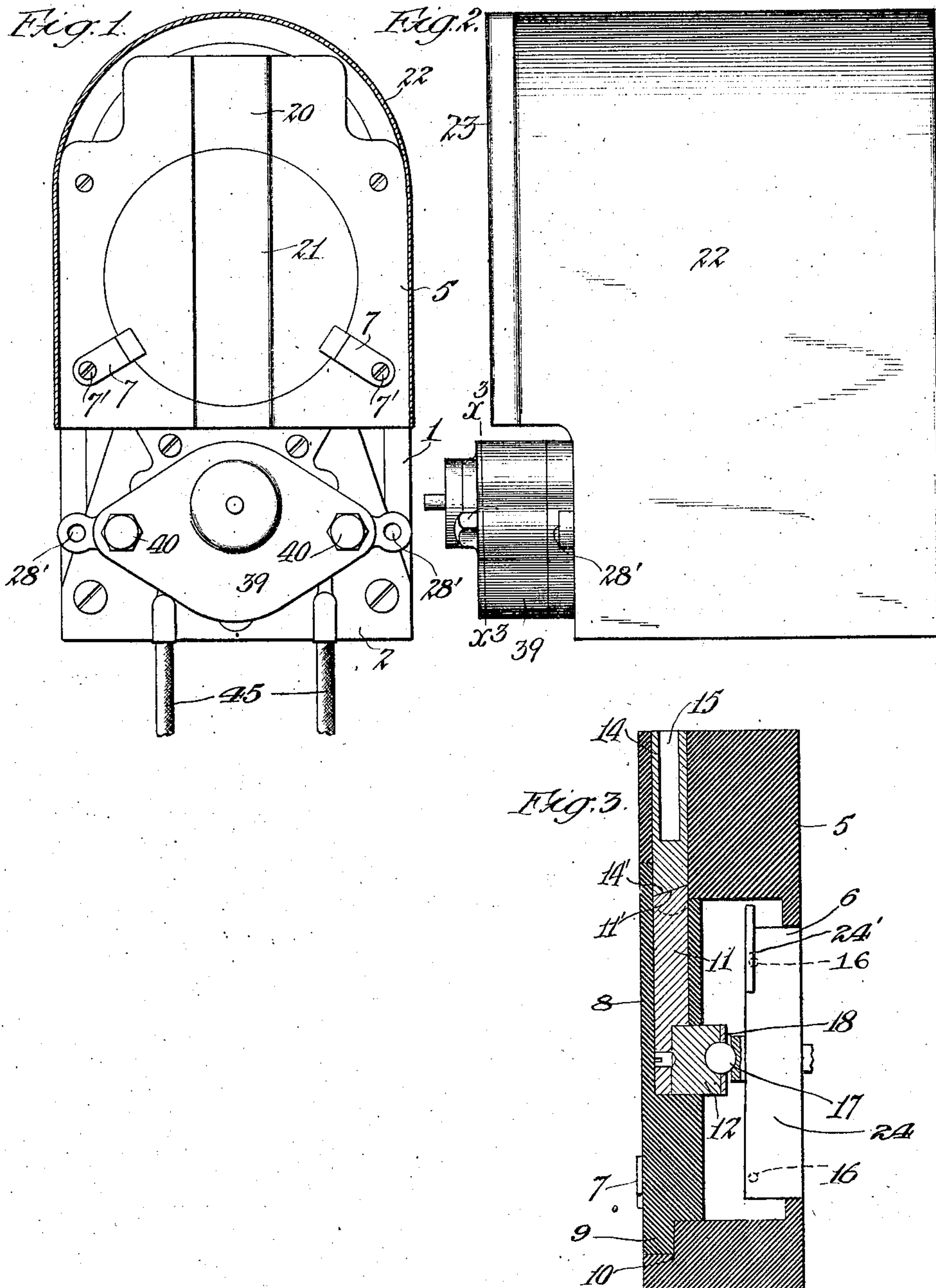


S. A. DUVALL.
MAGNETO.
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994,304.

Patented June 6, 1911.



Witnesses:
Louis W. Gratz.
[Signature]

Inventor
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UNITED STATES PATENT OFFICE.

STANLEY A. DUVALL, OF LOS ANGELES, CALIFORNIA, ASSIGNOR TO JOHN S. NASH, OF CHICAGO, ILLINOIS.

MAGNETO.

994,304.

Specification of Letters Patent.

Patented June 6, 1911.

Application filed April 27, 1910. Serial No. 558,065.

To all whom it may concern:

Be it known that I, STANLEY A. DUVALL, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Magneto, of which the following is a specification.

This invention relates to magnetos, particularly adapted for use in sparking circuits of automobiles, etc.

The main object of the present invention is to provide such a magneto with a cover means serving to retain the parts in place.

Another object of the invention is to provide an improved distributor construction in connection with the cover.

Other objects of the invention will appear hereinafter.

The accompanying drawings illustrate the invention, and referring thereto:—

Figure 1 is an end elevation of the magneto with the cover broken away. Fig. 2 is a side elevation of the magneto. Fig. 3 is a vertical section of the fixed member of the distributor.

1 designates the field magnet of the magneto, and 2 frame members at the lower portion thereof, in which is mounted the armature shaft 3 carrying the armature, not shown.

Secured at one end of the magneto is a fixed distributor member 5, of insulating material, provided with a circular opening 6 and with metallic brackets 7 secured to the member 5 and extending inwardly in front of said opening. A closure member 8 occupies said opening, being provided with a flange 9 to fit in a rabbet 10 at the edge of said opening, said closure member 8 being engaged and retained by the brackets 7 aforesaid, said brackets 7 being pivoted at 7' to the member 5 to enable them to be turned out of the way in inserting the closure member 8. Said closure member 8 has a vertically extending conductor bar 11 extending within said member 8 and connected at its lower end to a central block or boss 12 which projects within the space or opening 6 in the member 5, the upper end of the bar 11 being upwardly and rearwardly inclined, as shown at 11' to engage under and back of a terminal bar 14 which extends vertically within the member 5 and is inclined on its lower face, as shown at 14', to fit the upper end of the bar 11, thus lock-

ing the distributor in place. The terminal bar 14 is provided with a vertical socket or recess 15 to receive a suitable connecting plug. Said distributor member 5 is further provided with fixed contacts 16 located in different angular positions around the opening 6 and provided with suitable terminal connections, not shown, located in position to cooperate with a rotary distributor member indicated at 24 in Fig. 5 and having a distributing electrode 24'. The distributor is preferably of the high tension type, the contacts approaching within sparking distance but not touching. The connecting block 12 at the lower end of the bar 11 is provided with a central contact means, formed, for example, as a ball 17 retained in position by a plate 18, said ball being adapted to make contact with the rotary distributor member. The members 5 and 8 are provided with vertically extending flange or rib portions 20, 21.

A cover 22 for the magneto is adapted to fit tightly over the field magnet and over the distributor holding the parts firmly in position, and said cover is provided at one end with a vertical channel 23 adapted to fit over the ribs 21.

Any suitable means may be provided for connecting the fixed contacts 16 of the distributor in the circuit, the said connecting means extending, for example, downwardly through the distributor member 5 and passing out at the bottom thereof.

The auxiliary shaft 3 and the shaft of the distributor are connected to be driven in the usual manner, said armature shaft being adapted to operate a timer or circuit breaker 39, provided with means such as eyes 28' for connection to suitable operating means, electrical connection to said circuit breaker being made by conductors 45.

What I claim is:—

1. In a magneto, the combination with the field magnet, of a fixed distributor member mounted thereon, and a cover surrounding the field magnet and distributor member and fitting tightly thereon to hold said parts in position, said distributor member being provided with an opening; a closure member in said opening, ribs on said closure member and distributor member, and said cover being provided with a channel fitting said ribs.

2. In a magneto, a fixed distributor mem-

ber provided with a circular opening, a
closure member fitting in said opening, piv-
oted retaining members on the fixed dis-
tributer member to extend over said clo-
5 sure member, a conductor bar extending
within said closure member and provided
with terminal means at the center of said
closure member, a conducting terminal on
the fixed distributor member, said conductor
10 bar and terminal member being provided
with inclined end faces for engagement and
contact, and distributor contacts on the fixed
distributor member, in combination with a

rotary distributor member mounted within
the fixed distributor member for coöperation 15
with the aforesaid central contact on the
closure member and with the aforesaid con-
tact means on the distributor member.

In testimony whereof, I have hereunto
set my hand at Los Angeles, California, this 20
21st day of February 1910.

STANLEY A. DUVALL.

In presence of—

ARTHUR P. KNIGHT.

KRANK L. A. GRAHAM.