

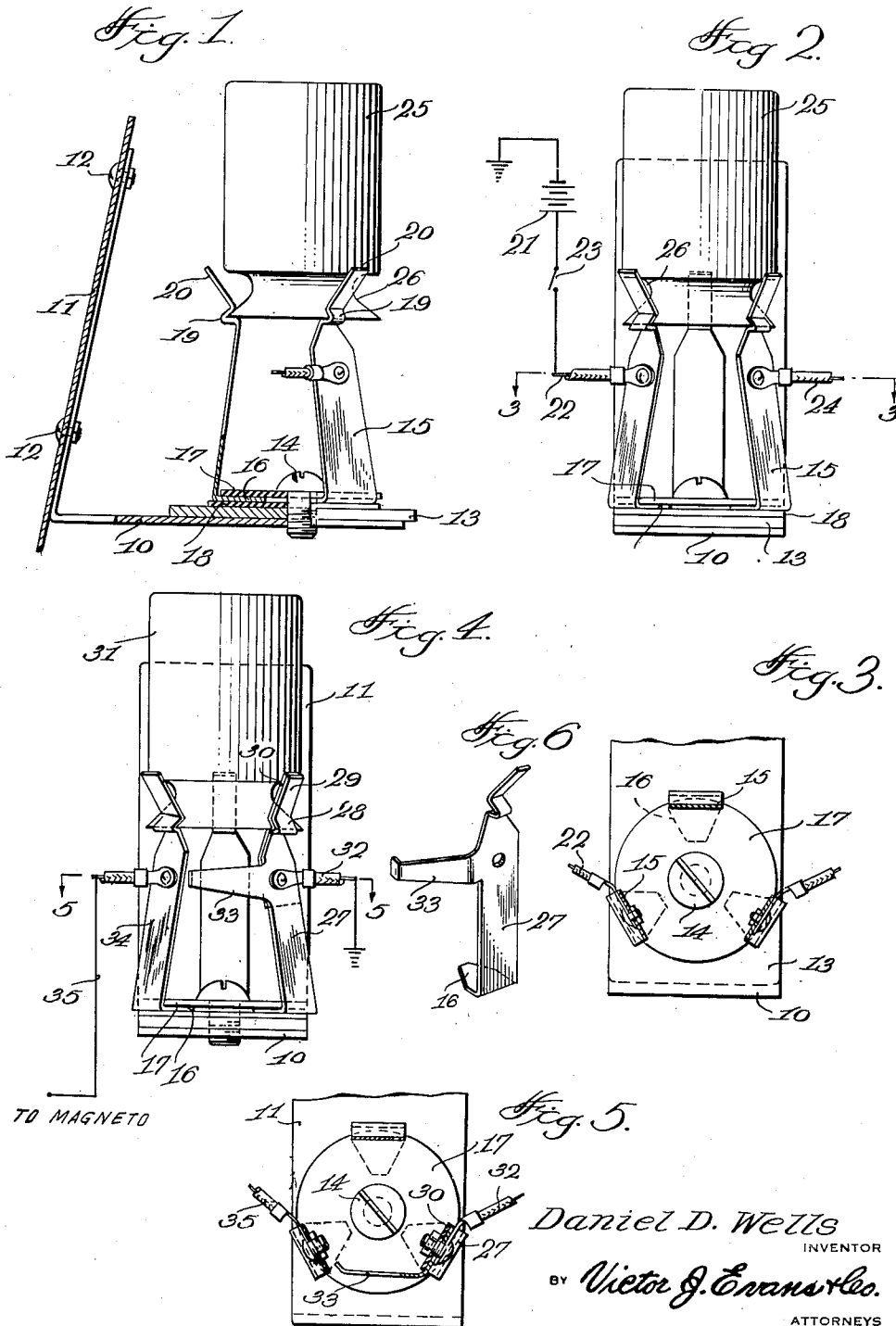
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EMERGENCY IGNITION CONTROL SWITCH

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EMERGENCY IGNITION CONTROL SWITCH

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2 Claims. (Cl. 200—52)

This invention relates to an emergency ignition control switch and has for an object to provide a device of this character adapted to render the ignition system inoperable and prevent the starting of fire which frequently happens when wires are broken in collision and when motor vehicles turn over.

A further object is to provide a device of this character including spring fingers forming conductors and a metal weight supported by the fingers and forming a conductor, dislodgment of a weight due to impact or turning over of the vehicle to a dangerous angle, disconnecting the ignition system automatically.

A further object is to provide apparatus of this character which will be formed of a few strong, simple and durable parts, which will be inexpensive to manufacture, and which will not easily get out of order.

With the above and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter fully described and claimed, it being understood that various modifications may be resorted to within the scope of the appended claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawing forming a part of this specification:

Figure 1 is a side elevation of an emergency ignition control switch constructed in accordance with the invention and mounted on the dash of a motor vehicle.

Figure 2 is a front elevation of a switch shown in Figure 1.

Figure 3 is a cross sectional view taken on the line 3—3 of Figure 2.

Figure 4 is a side elevation of a modified form of the control switch suitable for use with a magneto.

Figure 5 is a cross sectional view taken on the line 5—5 of Figure 4.

Figure 6 is a detail perspective view of one of the magneto grounding fingers shown in Figure 4.

Referring now to the drawing in which like characters of reference designate similar parts in the various views, 10 designates an angular bracket having one leg bolted to the dash 11 of a motor vehicle as shown at 12. A disk 13 is secured to the horizontal leg of the bracket by a screw bolt 14 and forms a support for the switch. The switch comprises a plurality of spring fingers 15 arranged in an annular series

and having their lower ends turned inwardly to provide feet 16 which are interposed between upper and lower insulating washers 17 and 18 which are clamped to the support 13 by the screw bolt 14. The fingers incline upwardly and inwardly and near their upper ends are bent to provide V-shaped socket members 19, and the upper end portions or tips of the fingers are bent outwardly at an angle as shown at 20.

The fingers form conductors and one of the fingers may be connected to the battery 21 by a wire 22 having a manually operable switch 23 connected thereto. A second wire 24 may be connected at one end to another of the fingers and at the opposite end may be connected to the ignition switch on the dash, not shown. A metal cylindrical weight 25, forming a conductor, is supported by the fingers and to accomplish this the weight is provided with a V-shaped groove 26 adjacent its lower end, the lower wall of which merges with the bottom face of the weight. The V-shaped socket members 19 of the spring fingers are placed astride of the lower wall of the groove 26 and the bottom face of the weight and yieldably clamp the weight in upright position on the support 13.

In the event of impact or the inclining of the vehicle to a dangerous angle the weight 25 will be dislodged from the fingers and disconnect the ignition devices from the battery or other source of electricity and thus prevent a fire hazard.

A modified form of the invention is shown in Figure 4 suitable for use with magnetos which must be grounded to cut out the ignition devices. The modified form of the invention is identically the same as the preferred form of the invention with the exception of one of the fingers 27, and this finger is provided in the V-shaped socket member 28 and along the inclined tip 29 with a strip of insulation 30 which insulates the finger from the metal weight 31. This finger is grounded by a wire 32 and opposite the wire is provided with a lateral extension 33 which normally is separated from an opposite finger 34 which finger is connected to a magneto by a wire 35. In the event of impact or dangerous inclination of the vehicle the weight 31 will be dislodged as previously described whereupon the spring finger 27 will engage the lateral extension 33 thereof with the opposite spring finger 34 and ground the magneto.

From the above description it is thought that the construction and operation of the invention

will be fully understood without further explanation.

What is claimed is:

1. An emergency ignition control switch comprising, a horizontally disposed support, a plurality of spring fingers arranged in annular formation on the support and insulated therefrom, the fingers being bent into V-shape adjacent their upper end portions, said upper end portions being bent outwardly at an angle, said fingers being formed of conducting material, an elongated cylindrical weight formed of conducting material provided with a V-shaped groove adjacent its lower end, the V-shaped portions of the fingers being adapted to be placed astride 15

of the lower wall of the V-shaped groove and the bottom face of the weight, means for attaching circuit wires to the fingers, said weight being retained in position between the spring fingers by the tension of the fingers under ordinary conditions and being adapted to be dislodged due to inertia by sudden impact or if the vehicle be tilted to a dangerous angle.

2. The structure recited in claim 1 but in which one of the fingers is provided with a lateral extension formed of conducting material adapted to contact another of the fingers, the said extension carrying finger being insulated from said weight.

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