(No Model.)

C. L. ASHLEY.

FUSE BOX.

No. 531,355. Patented Dec. 25, 1894.

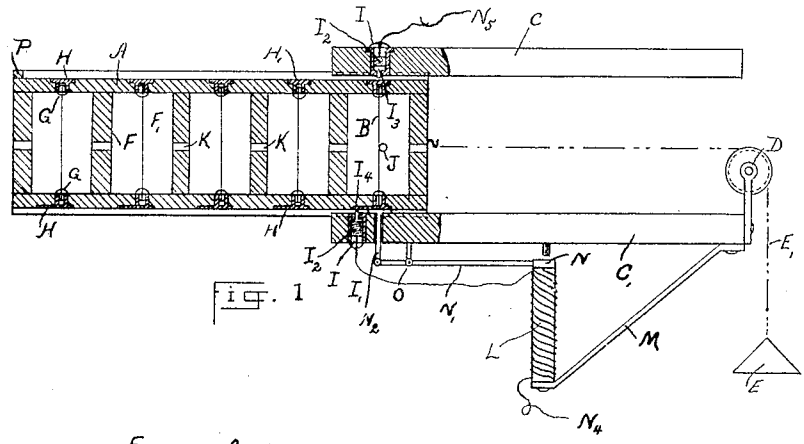

Fig. 1

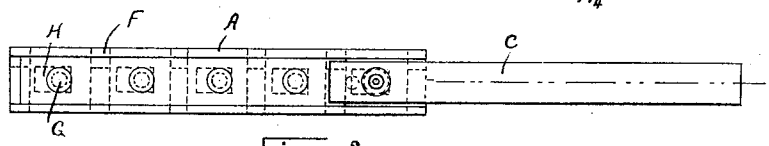

Fig. 2.

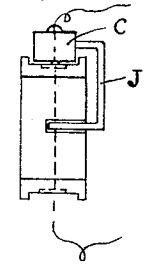

Fig. 3.

Witnesses,
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Inventor,
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By His Attorney,
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UNITED STATES PATENT OFFICE.

CLAUDE L. ASHLEY, OF ATLANTA, GEORGIA.

FUSE-BOX.

SPECIFICATION forming part of Letters Patent No. 531,355, dated December 25, 1894.

Application filed April 30, 1894. Serial No. 509,580. (No model.)

To all whom it may concern:

Be it known that I, CLAUDE L. ASHLEY, a citizen of the United States, residing at Atlanta, in the county of Fulton, State of Georgia, have invented new and useful Improvements in Fuse-Boxes, of which the following is a specification.

The object of my invention is to provide an automatic magazine fuse box. I attain this object by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1, is a vertical section through the center of my fuse case; Fig. 2, a top view of same; and Fig. 3, an end view of box and upper guide, showing slate arc breaker and stop to be described hereinafter.

The porcelain box A is made to slide easily in guides C, C′. At one end of guide C′ there is fastened a small sheave pulley D, over which runs a cord E′, one end being attached to box A and the other being attached to weight E. The box A contains several compartments F′ and in each compartment there is inserted a fuse wire B, and held in place by binding posts G being screwed into copper plates H, H′. Near one end of the guides C, C′, there are placed binding posts I, consisting of screw I′, spring I^2 and loose copper piece I^3. The object in using posts thus made is to have copper piece I^3 always pressed lightly against copper plate H, the pressure being small enough to always allow the box A to slide freely in the guides C, C′. To the guide C there is fastened a small piece of slate J of a thickness somewhat smaller than the thickness of gap K, left in partition P that it may slide through easily. There is a helix or magnet L suspended from the lower guide C′, by the rod M. The armature N having a rod N′ fastened to it, the rod N′ being pivoted at O. On the other end of rod N′ is pivoted a T shaped shoe N^2. N^4 is the wire from the generator and N^5 the wire leading to light. These wires are connected to binding posts I as shown.

The whole of this device is inclosed in a porcelain box and screwed to the wall of the building or any convenient place.

The device may be so placed in the box that the weight of box A will cause it to move along the guides C, C′ and entirely dispense with weight E.

The operation of my device is as follows: When the wire N^4, leading from the generator, from any cause becomes overcharged sufficiently to burn out the fuse B the circuit will break, the helix L loses its magnetism and the armature N will no longer hold the shoe N^2 against the bottom of box A; the weight of shoe N^2 with its leverage being greater than sufficient to overbalance the armature N with its leverage. As soon as the pressure of the shoe N^2 is released from the box A, the weight E will draw the box A forward until the copper pieces I^3, I^4 contacts with plate H′, H thereby closing the circuit. The instant the circuit is closed the helix will be magnetized and attract the armature N to it, and throw the shoe N^2 against the bottom of box A holding it firmly in that position. In case the momentum of the box should be sufficient to carry it beyond the points of contact before the shoe N^2 could act, the fuse B will run against the slate piece J and stop the box A in the correct position. When the fuse burns out the current arcs across and sometimes destroys the fuse box. To prevent this the slate J is placed so as to be between the binding posts which carry the generator and light wire N^4, N^5.

If from any cause whatever the box A should fail to act and be carried by the weight E to its last position the stop P would strike on the upper guide C and the last fuse would close the circuit.

The object of the partitions F in the fuse box A is to protect every other fuse from the one through which the current is passing. When all of the fuses have been burned out the box A may be drawn out and refilled.

The box may contain any number of fuses it simply being a question of increasing the length of the fuse box A.

When this device is to be used with an alternating current the helix and armature will not be used but I will depend on the slate J stopping the box when the fuse comes up to it as the box moves forward.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination in a fuse box, of the compartment box A, with the guides C C′ the

weight E, the slate piece J, substantially as herein described.

2. In a fuse box, the combination of a box A, a number of fuse wires contained in said box, binding posts to secure the wires in place, the copper contact plate H, the spring copper contact point I^3, means for moving the box along the guides C, C′, with the guides C, C′ and means for stopping the box at the correct position, substantially as herein described.

3. An automatic magazine fuse box controlled by gravity, said fuse box consisting of box A containing several compartments each of which contains a binding post G and fuse wire, the contact plate H, the spring contact point I^3, the guides C, C′, means for moving box A along the guides C, C′ and means for stopping the same at the correct position, substantially as herein described.

CLAUDE L. ASHLEY.

Witnesses:
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A. A. CLARK.