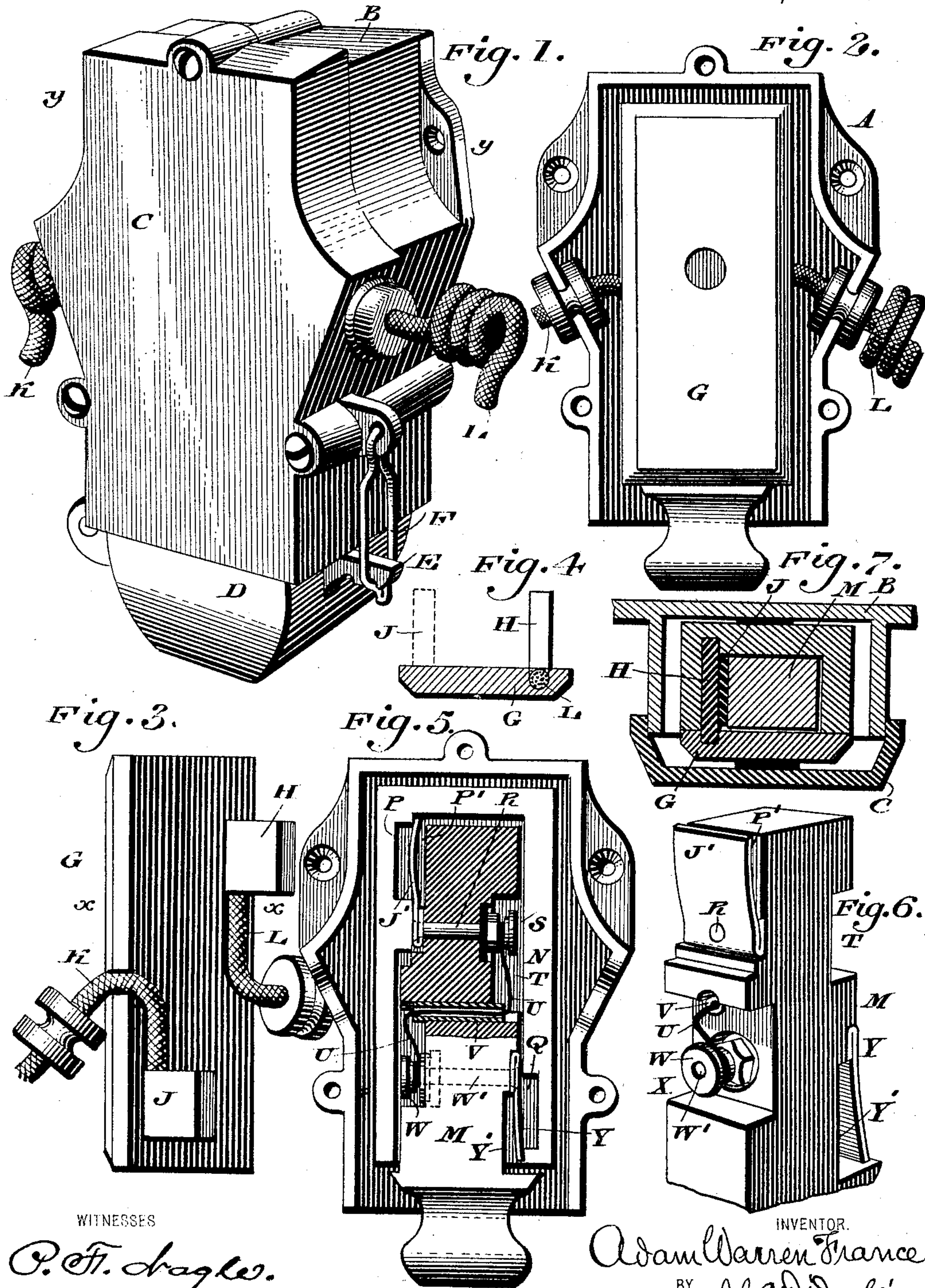


(No Model.)

A. W. FRANCE.
FUSE BOX.

No. 591,917.

Patented Oct. 19, 1897.



WITNESSES

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FUSE-BOX.

SPECIFICATION forming part of Letters Patent No. 591,917, dated October 19, 1897.

Application filed March 30, 1897. Serial No. 629,904. (No model.)

To all whom it may concern:

Be it known that I, ADAM WARREN FRANCE, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Fuse-Boxes, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of an improved construction of fuse-box, which is readily accessible under all conditions, the novel features of the same being hereinafter fully set forth, and pointed out in the claims.

Figure 1 represents a perspective view of a fuse-box embodying my invention. Fig. 2 represents on a reduced scale a front elevation of a fuse-box, a portion of its outer casing being removed. Fig. 3 represents a perspective view of a non-conducting plate employed, in which a portion of the conductors and their contact devices are embedded. Fig. 4 represents a section on line *xx*, Fig. 3. Fig. 5 represents a front elevation of the fuse-box seen in Fig. 2, showing the outer plate removed and a portion of the inner conducting-block in sections. Fig. 6 represents a perspective view of the inner conducting-block seen in Fig. 5, in detached position. Fig. 7 represents a section on line *yy*, Fig. 1, showing the parts in assembled position.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates a casing, the same consisting of the sections B C, the lower portions of the casing having the cap D, which is pivotally attached to one of the sections B C, said cap being normally held in closed position by means of the hook or latch F, which engages the lug E.

In Fig. 2 I have shown the section C of the casing removed, thereby showing the fuse-box which has the plate G, the latter having embedded or otherwise secured therein the contacts H and J, which are oppositely located, and have connected therewith the insulated conductors K and L, which latter are embedded in the plate G, as will be understood from Figs. 3 and 4, it being of course understood that said plate is composed of suitable non-conducting material.

M designates a non-conducting plug or

block which is adapted to be placed within the case N, also composed of non-conducting material, and in the present instance open at its bottom, the general construction of said block M being apparent from Fig. 6.

P and Q designate recesses in the walls of the case N, said recesses being oppositely located, as will be evident from Fig. 5.

R designates a conducting screw or bolt, one end of which holds in position the contact-spring J', while its other end or head S is adapted to serve as a binding-post for the conductor U, which is composed of fusible material, said head S being located in the recess T of the block M.

The conductor U leads from the binding post or head S through the tube or conduit V, of rubber or similar material, which latter is located in an opening extending through the block M, the extremity of said conductor U being held in position by means of one end of the binding-post W of the screw or conductor, said binding-post being located in the recess X, the other end of said screw serving to hold in position the contact-spring Y, it being noted that the block M is provided with oppositely-located recesses P' and Y' in order to allow the contact-springs J' and Y sufficient play.

The operation is as follows, the manner of assembling the parts being first described: The case N is placed in one of the sections of the casing A, in the present instance in B, and the non-conducting plate G is placed on said case N, the contact H being inserted in the recess P, so that it abuts against the spring T', and the contact J entering the recess Q, so that it abuts against the spring Y. The plug or block M may now be inserted in the open end of the case N. The section C may be secured in place, for it will of course be evident that by reason of the cap D access to the block M may be readily had without separating the sections.

The course of the electricity is as follows: The current enters the conductor K and passing through the contact J reaches the spring Y, and passes thence through the conductor W' to the conductor U, and thence to the conductor R and spring J' to the contact H, and out the conductor L, it being of course

evident that the electricity may take the opposite course to that already described if desired. When the current has reached the proper predetermined amount, the conductor U will fuse, and especial emphasis is laid upon the fact that by reason of the peculiar construction and combination of parts there is no liability of the electricity jumping from the conductor W' to the conductor R after fusing of the conductor U, nor is there any liability of the current passing from the fuse-box to the casing.

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

1. A fuse-box having an outer casing, an inner casing of non-conductible material, a non-conductible plate with oppositely-located contact-points thereon having insulated conductors connected therewith, a block in said inner casing having conducting-bolts passing therethrough from opposite sides thereof, springs connected with the ends of said bolts and in contact with said contact-points and a fusible conductor passing through said block and connected at its ends with said bolts on opposite sides of the said plug.

2. A fuse-box having a sectional outer casing, an inner casing having the oppositely-located recesses P and Q in its inner face, the non-conducting plate G with contacts H and J, having the conductors K and L connected therewith, the block M, the conducting-bolts R and W' passing through the block from opposite sides thereof, the springs J' and Y connected with said bolts, and in contact with said contacts H and J, and the fusible conductor U passing through said block and having its ends connected with the heads of said bolts on opposite sides of said plug.

3. A fuse-box having within an inner case, a non-conducting block with an open-

ing therethrough, conducting-bolts passing through said block, spring-plates secured to said bolts on opposite sides of said block, a tube in said opening in the block, and a fusible conductor leading through said tube and connected at its ends with the heads of said bolts and insulated conductors having connection with contact-points in contact with said spring-plates.

4. In a fuse-box, a non-conducting block N, having recesses P and Q located oppositely therein, conductive screws R and W' located in said block, contact-springs J' and Y held in position by said screws, a suitable conductor U intermediate said conductive screws, a passage through said block and a tube of rubber or similar material located in said passage and incasing said fusible conductor, in combination with a plate G having the oppositely-located contacts H and J, projecting therefrom and conductors leading from said contacts, the latter being adapted to enter said recesses P and Q and contact with the springs J' and Y when the parts are assembled.

5. A fuse-box consisting of an outer casing, composed of the sections B and C, a bottom cap D pivotally attached to one of said sections, means for holding said cap in closed position, the non-conducting case N contained within said casing and open at its bottom, the non-conducting block M constructed as described and adapted to be inserted into said case from the bottom thereof, conducting devices carried by said block and the non-conducting plate G having conductors projecting therefrom and adapted to contact with said conducting devices.

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Witnesses:

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