

April 8, 1930.

W. P. BRAND

1,753,846

SWITCH

Filed Dec. 1, 1925

Fig. 1

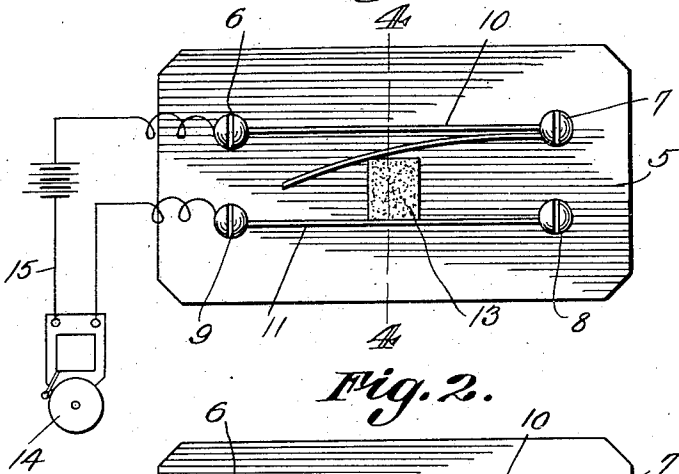


Fig. 2.

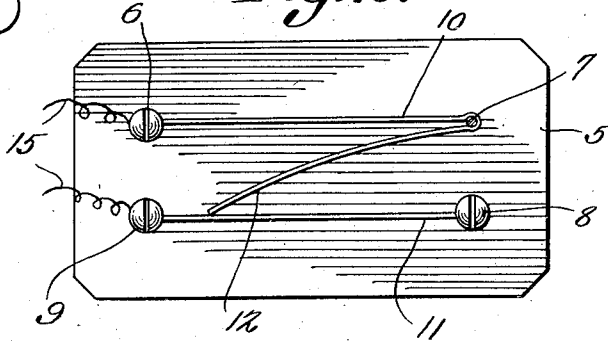


Fig. 3.

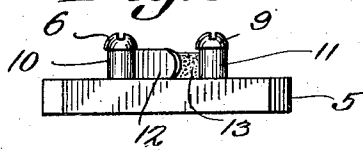
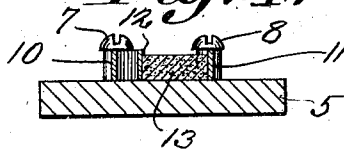


Fig. 4.



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SWITCH

Application filed December 1, 1925. Serial No. 72,560.

This invention has reference to fire alarms and aims to provide a novel form of switch which will be affected by the heat caused by the fire, to the end that an electric circuit will be completed to the signal to give the alarm.

An important object of the invention is to provide a signal member of this character wherein the fusible block is supported in such a way that the fusible block cannot in any way interfere with the contact being made between the members of the switch.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawing:

Figure 1 is an elevational view of a switch constructed in accordance with the invention and showing the same in a set position.

Figure 2 is an elevational view thereof and showing the switch elements in their active positions or completing the circuit.

Figure 3 is an end elevational view thereof. Figure 4 is a sectional view taken on line 4—4 of Figure 1.

Referring to the drawing in detail, the device includes a base indicated generally by the reference character 5, which base is constructed of any suitable insulating material such as hard rubber, fiber or the like.

Supported by the base 5 are bolts 6, 7, 8 and 9 respectively, the bolts 6 and 7 supporting the contact member 10 while the bolts 8 and 9 provide means for supporting the contact member 11.

This contact member 10 is in the form of a metallic strip which has an eye at one end to accommodate the bolt 6, the intermediate portion thereof being looped around the bolt 7, and having its free end extended forwardly as shown by the drawing.

The free end of the member 10 is indicated at 12 and owing to the resiliency of the member 10, it will be obvious that member 12

will be normally urged towards the contact member 11. Positioned between the members 11 and 12 is a fusible block indicated at 13, and which may be constructed of any suitable material, adapted to melt at approximately 120°. This block 13 is positioned in such a way that it will be subjected to the heat of a fire within a certain range of the device so that the same will melt allowing the member 12 to move into engagement with the contact member 11 as shown by Figure 2, thereby completing a circuit.

The signal which is in the form of an electrically controlled bell is indicated at 14, and is in circuit with the members 10 and 11 through the wires 15 and bolts 6 and 9.

It might be further stated that should the flames caused by the fire come in direct contact with the detector or switch, the device will perform its duty much more quickly.

I claim:—

A switch of the class described, including a base, a wide flat contact member secured to the base, the upper and lower surfaces of the contact member being disposed in a plane at right angles to the upper surfaces of the base to provide a supporting surface, a contact member secured to the base and disposed in parallel spaced relation with the first mentioned contact member, bolts for securing the contact members to the base, the last mentioned contact member being formed of resilient material and bent around one of the bolts at a point intermediate the end of the contact member, the free end of the last mentioned contact member adapted to engage the first mentioned contact member to complete a circuit, and a block of fusible material positioned between the contact members to normally hold the contact members separated.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

WILLIAM PAUL BRAND.