Sept. 2, 1924.

1,506,996

P. F. PICKER

FUSE BOX

Filed Sept. 6, 1927

Fig. 1.

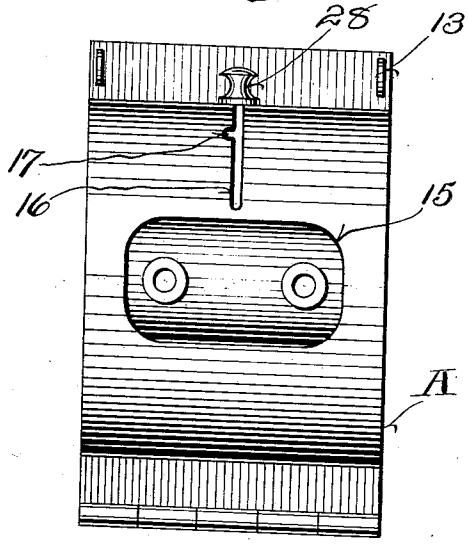


Fig. 2.

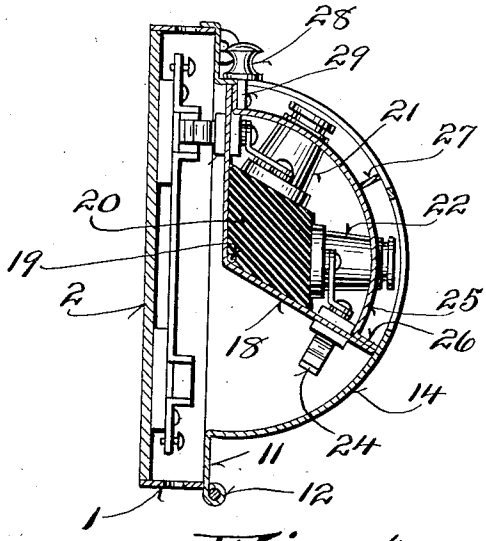


Fig. 3.

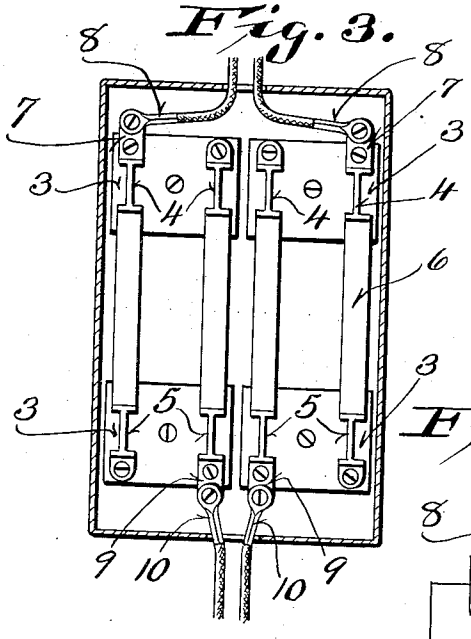


Fig. 4.

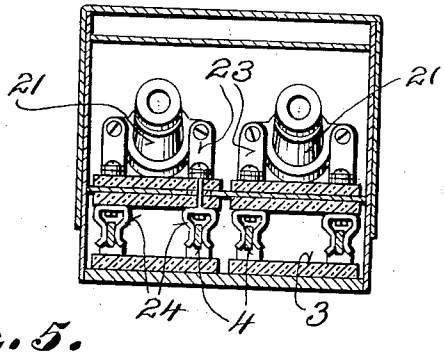
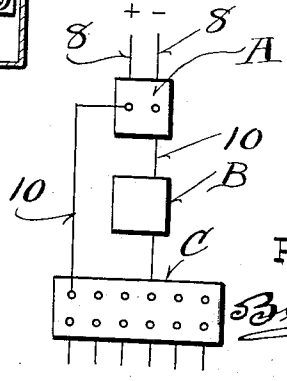


Fig. 5.



Witness:
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Patented Sept. 2, 1924. 1,506,996

UNITED STATES PATENT OFFICE.

PAUL F. PICKER, OF KENOSHA, WISCONSIN.

FUSE BOX.

Application filed September 6, 1923. Serial No. 661,190.

To all whom it may concern:

Be it known that I, PAUL F. PICKER, a citizen of the United States, and resident of Kenosha, in the county of Kenosha and State of Wisconsin, have invented certain new and useful Improvements in Fuse Boxes; and I do hereby declare that the following is a full, clear, and exact description thereof.

This invention relates to electrical equipment and is primarily directed to a combined fuse box and switch.

Objects of this invention are to provide a fuse box in which the fuse plugs may be readily replaced, in which this replacing of fuse plugs can only be effected when the fuse plug sockets are electrically disconnected from the system, and to provide a combined fuse box and switch in which an auxiliary or extra supply of fuse plugs is immediately available so that the service may be maintained with the minimum of interruption and the blown fuses may be replaced without delaying the reestablishing of the service.

Further objects are to provide a combined switch and fuse box which is so constructed that it may be operated to open the line, which may be temporarily locked in this open position, and in which provision is made to prevent any one from shunting the meter by plugging into one of the fuse sockets and, thereafter, by plugging into the distribution panel beyond the meter.

An embodiment of the invention is shown in the accompanying drawing, in which:—

Figure 1 is a front view of a fuse box.

Figure 2 is a transverse sectional view through the fuse box.

Figure 3 is a sectional view illustrating the back or panel portion of the box.

Figure 4 is a transverse sectional view of the box.

Figure 5 is a diagrammatic view showing the position occupied by the fuse box when associated with the supply system.

The fuse box comprises a shallow box like member having outwardly projecting walls 1 and a base 2. Upon this base 2 a plurality of insulating panels 3 are positioned. These panels carry a plurality of pairs of stationary contacts 4—4 and 5—5. Each of the contacts 4—4 is preferably integrally joined with the corresponding contact 5 by means of a bus bar 6. Certain of the contacts are provided with terminals as, for instance, the outer upper ones, as indicated at 7, such terminals being adapted to receive the incoming supply leads 8. The inner lower contacts 5 are provided with terminals 9 which receive the outgoing leads 10.

The box like portion 1 is provided with a cover 11 which is hinged at 12. Apertured ears 13 project outwardly from the body portion through slots in the cover and are adapted to receive seals in the usual manner. This cover is provided with a semi-cylindrical outwardly projecting portion 14 which is in turn provided with a centrally cut out portion 15 and with a slot 16,—such slot being provided adjacent its center with a lateral notch 17. Within the cover a V-shaped metal member 18 is pivotally mounted as, for instance, by means of the transverse pivot pin 19 (see Figure 2). This member carries an insulating block 20 upon which is mounted two pairs of fuse plug sockets 21 and 22. The terminals of these sockets are connected by means of short strap-like members 23 and bolts with spring switch elements 24 which are adapted to grip the contacts 4 or 5 as the case may be. A cylindrical sheet metal member 25 is carried by the member 18 and is spaced a slight distance from the cylindrical portion 14 of the cover, as shown in Figure 2. This member is provided with end walls 26 and with a centrally located partition 27. A handle 28 is located upon the outer side of the cylindrical portion 14 of the cover and is connected with the member 18 by means of a pin 29, such pin passing through the slot 16. In using the device the combined switch and fuse box indicated generally at A is connected directly to the incoming lead 8 and from thence by means of conductors 10 to the meter B. The meter is in turn connected with a distribution panel C.

The operation of the apparatus is as follows:—Assuming that the device is in the position indicated in Figure 2 and that the fuses then connecting the contacts 4—4 are blown, it is merely necessary to rock the pivotally mounted portion in a clockwise direction by means of the handle 28 thus establishing electrical connection between the pair of contacts 5 by means of the lower pair of fuses. When this has been done, the upper pair of fuses will then be positioned directly opposite the aperture 15 in the cover and may be readily renewed without interrupting the service. It will be seen,

therefore, that by means of this device fuses are immediately available so that in case one pair of fuses are burnt out another pair may be easily and quickly substituted therefor by merely manipulating the handle 28.

It will further be seen that the renewing of fuses can only be made while they are disconnected electrically from the system.

It will further be seen that it is impossible to shunt the meter by plugging into the fuse socket and into the distribution panel as the fuses, which are accessible at any time, are disconnected from the system.

Although one form of the invention has been described in considerable detail, it is to be understood that the invention may be variously embodied and is, therefore, to be limited only as claimed.

I claim:

1. A fuse box comprising a casing having an apertured cylindrical portion provided with a slot, a member pivotally mounted within said casing, a handle extending through said slot and connected with said member, switch mechanism located within said casing and operated by said member, and fuse plugs removably carried by said member and adapted to occupy a position beneath said aperture, said fuse plugs being electrically connected to said switch mechanism.

2. A fuse box comprising a casing having a cylindrical portion provided with a peripherally extending slot having a notch centrally thereof, said casing having a centrally located aperture, a member pivotally mounted within said casing, a handle extending through said slot and connected to said member and adapted to register with said notch in one position, switch mechanism located within said casing and operated by said member, and fuse plugs removably carried by said member and adapted to occupy a position beneath said aperture when said handle is at either end of said slot, said switch mechanism being open when said handle registers with said notch.

In testimony that I claim the foregoing I have hereunto set my hand at Kenosha, in the county of Kenosha and State of Wisconsin.

PAUL F. PICKER.