J. SACHS.

CLIP.

APPLICATION FILED JULY 26, 1916.

1,267,457. Patented May 28, 1918.

Fig. 1.

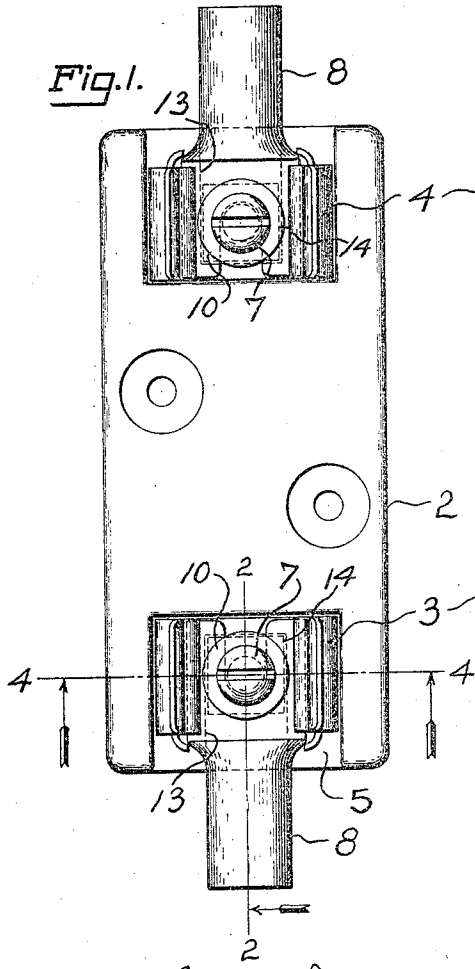


Fig. 2.

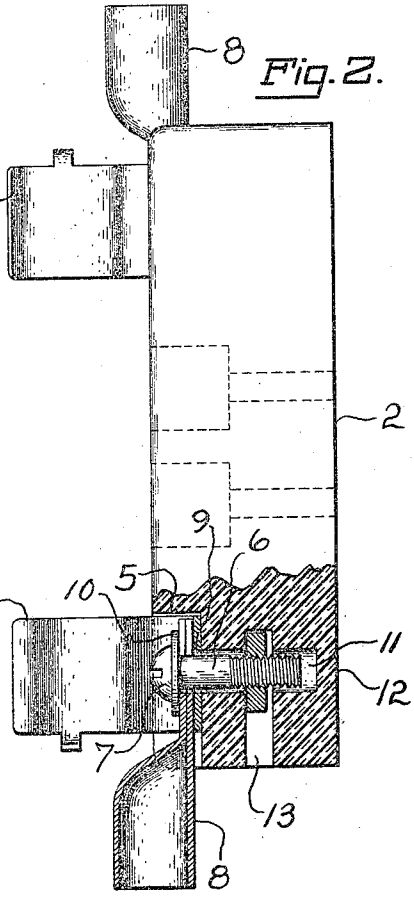


Fig. 3.

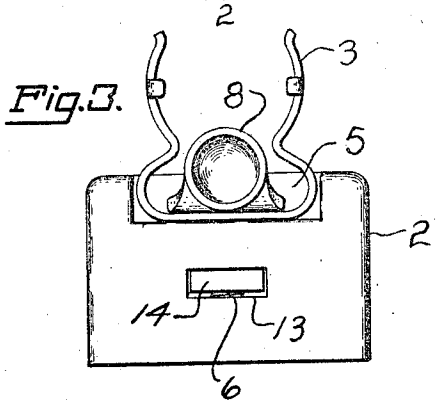
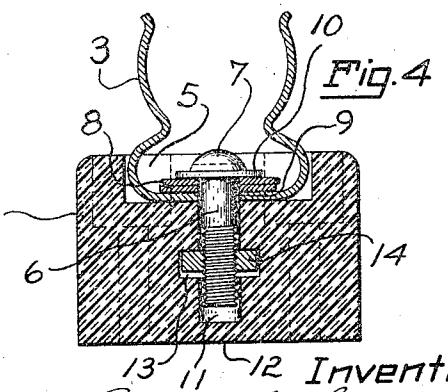


Fig. 4.



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CLIP.

1,267,457. Specification of Letters Patent. Patented May 28, 1918.

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To all whom it may concern:

Be it known that I, JOSEPH SACHS, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Clips, of which the following is a specification.

This invention relates to clips. One of the principal objects of the invention is the provision of means of a simple nature by which said clip can be connected to its support and by which a conductor can be maintained in electrical connection with the clip. A clip involving the invention can be employed with advantage in several connections. For instance two of the clips can be carried upon the same support, and in this event they can jointly receive a connector which may be either plain or fused and which may function in any desirable manner.

In the drawings accompanying and forming part of the present specification I have shown in detail one convenient form of embodiment of the invention, which will be set forth fully in the following description. I do not restrict myself to this disclosure; I may depart therefrom in several respects within the scope of the invention defined by the claims following said description.

Referring to said drawings:

Figure 1 is a front elevation of a fuse block equipped with clips, the two being mounted in accordance with the invention.

Fig. 2 is a side view partly in section on the line 2—2 of Fig. 1 of the block shown in the latter.

Fig. 3 is an end elevation of the same, and

Fig. 4 is a transverse section on the line 4—4 of Fig. 1.

Like characters refer to like parts throughout the several figures of the drawings.

One of the elemental considerations I have in view is the provision in conjunction with a clip of suitable type, of unitary means for holding down a clip and at the same time maintaining a conductor in electrical connection with the clip. When I use the word "unitary" I do not mean to imply that the means in question is of a single piece, but that it has means in the nature of a unit which serves a dual function, or which is capable of performing the two offices, although it need not necessarily do so at the same time. In the present case this combined holding down and conductor connecting means is advantageously interlocked with the block which constitutes a suitable support for the clip or for several of such clips when a plurality is used. Obviously the means to which I have alluded may vary decidedly as to character, although a screw and a nut answers satisfactorily in this connection, the nut in the present case having an interlocked connection with the block or equivalent support and the head of the screw holding the clip to the support and at the same time functioning to connect a conductor mechanically and electrically with the clip, whether the head does so directly or indirectly.

With the foregoing general observations I will now set forth more in detail the particular structure which I have selected for illustration. The support for the clip will naturally vary with the use to which said clip is to be put. A support which meets the conditions is that denoted by 2 and which consists of a block of insulating material such as porcelain or composition. It is equipped with two of the clips as 3 and 4. The clips *per se* present no part of the invention and therefore need not be described in detail any more than to observe that each comprises a base and complemental resilient lips extending therefrom, the clips as shown fitting seats or apertures as 5 in the end portions of the support or block 2. It will be obvious that any type of clip suitable for the selected purpose may be utilized and that one or more may be provided and also that the support may be of any suitable nature. I might note at this point that while I have termed the invention a "clip", this is merely for convenience, because while the invention does involve in its make up a clip, it resides, however, primarily in the holding down means therefor which comprises as a part thereof conductor connecting means.

As the clip holding down and conductor connecting means is the same in both cases, a detailed description of one will apply to the other and as will be inferred I am describing a form of the structure which is quite satisfactory. Said means involves a screw as 6, the head 7 of which acts as a holding down portion. The conductor to be held may be of any suitable kind, the lug 8 being shown for this purpose. The base of the clip 3 has an opening 9 through which the plain or unthreaded part of the screw 6 extends so as to bring the head of the screw between the companion lips 3. While the

head 7 might directly engage the lug 8, or equivalent part, it is not, however, so illustrated, the washer 10 surrounding the plain or unthreaded part of the shank of the screw, being fitted between said head and lug. This screw 6 extends longitudinally of the passage 11 disposed as represented depthwise of the block 2 between the sides thereof. The passage or bore 11 it should be noted, does not extend entirely through the block, by reason of which the web 12 at the outer end of said passage or bore acts as a seal for the passage or bore. This seal obviously is an integral part of the block. As will be clear the upper or forward end of the passage 11 opens into or intersects the seat 5.

The passage or bore 11 between the ends thereof is intersected by a slot as 13 which receives the nut 14 of the screw 6, said slot or passage 13 constituting a convenient way of interlocking the nut 14 with the block 2 when the nut is in threaded relation with its screw. As shown the distance between the side walls of the slot 13 is approximately equal to the diameter of the nut 14 constituting a suitable securing element; as shown the slot is slightly wider than the nut so as to permit of the free introduction of the nut into the slot. The slot 13 opens into the adjacent end of the block 2, and it crosses the passage or bore 11 a distance sufficient to provide for the proper positioning of the nut 14 to receive its screw 6. The depth of the slot is a little greater than that of the nut.

It is believed that the ready way in which a clip as 3 can be connected with the block 2 will be readily comprehended. Nevertheless I consider it desirable to briefly set forth the same. Initially if desired, a nut as 14 is passed through the open end or mouth of the slot 13 and pushed back until one of its faces practically abuts against the end wall of the slot. This brings the axis of the opening of the nut into coincidence with the axis of the passage 11, the nut resting on the back face of the slot. The base portion of the clip 3 will then be introduced into the aperture 5 and the screw-receiving perforation in the base of the clip will be brought into register with the passage 9. The threaded portion of the screw 6, the latter previously having been equipped if desired with a washer, will then be passed through the perforation of the base of the clip and into the passage 9, so that the threaded portion of the screw can enter the threaded opening of the nut at which point by turning the screw in the proper direction the nut can be connected therewith. It will be understood that the side walls of the slot prevent lateral motion of the nut. If necessary the lug 8 can be passed into the space between the washer 10 and the base of the clip when by further turning the screw the nut 14 will be caused to abut substantially against the front face of the slot 13 so as to securely clamp the lug 8 to the clip and at the same time hold down the clip.

What I claim is:

1. The combination of a block, a clip, a holding down device for the clip, the block having an opening to receive the holding down device and also having a lateral slot intersecting said opening, and a securing element insertible through said slot and engaging the holding down device to maintain the same in operative position.

2. The combination of a block, a clip, a bolt extending through the clip, the block having an opening extending from the upper side partially therethrough, and a nut on the bolt, the block having a lateral slot intersecting said opening to permit of the connection of the bolt and the nut by way of the lateral portion of the block.

3. An insulating block having a bore extending partly therethrough and also having a nut receiving slot intersecting and extending across the bore, said block having a clip seat in one face into which said bore opens at one end.

4. A support provided with a clip, a screw extending through the clip, the head of the screw constituting clip holding down means and conductor connecting means, the support having a bore to receive the screw and also having a slot intersecting and extending crosswise of the bore, and a nut in the slot in threaded engagement with the screw.

5. A support provided with a clip, a screw extending through the clip, the head of the screw constituting clip holding down means and conductor connecting means, the support having a bore to receive the screw and also having a slot intersecting and extending crosswise of the bore, and a nut in the slot in threaded engagement with the screw, said bore extending partially through the support.

In testimony whereof I affix my signature in the presence of two witnesses.

JOSEPH SACHS.

Witnesses:
L. L. MARKEL,
HEATH SUTHERLAND.