

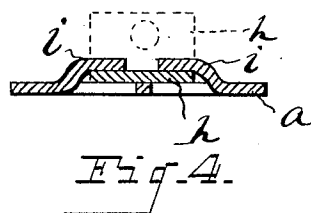
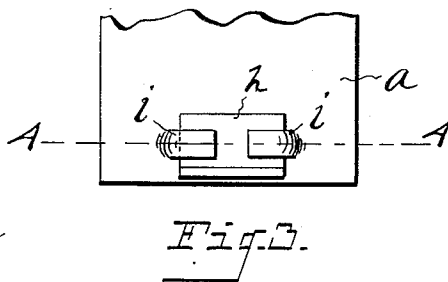
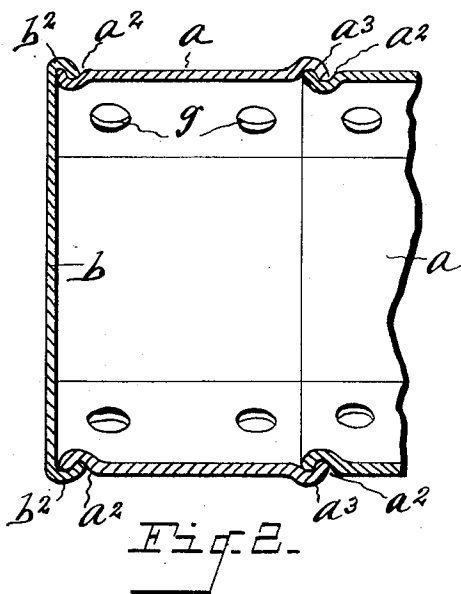
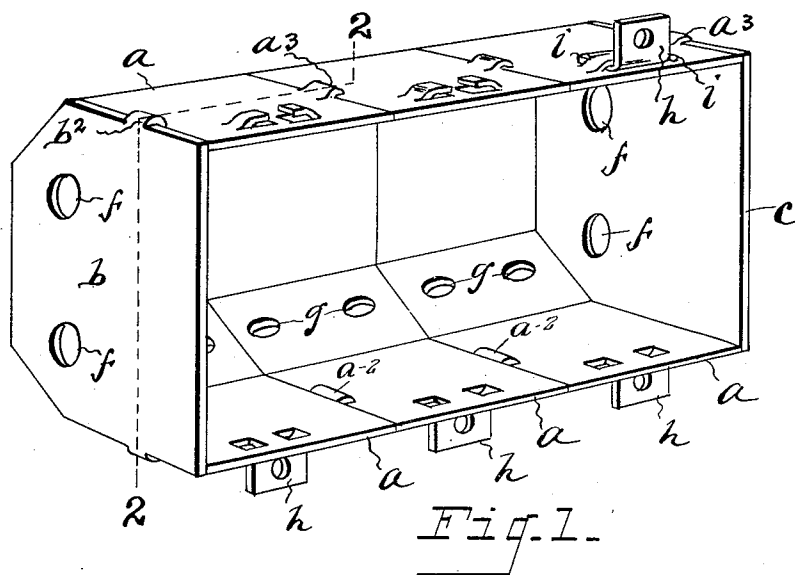
May 22, 1923.

A. T. KVARNSTROM

1,456,385

FUSE BOX

Filed July 30, 1920



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Patented May 22, 1923.

1,456,385

UNITED STATES PATENT OFFICE.

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FUSE BOX.

Application filed July 30, 1920. Serial No. 400,088.

To all whom it may concern:

Be it known that I, ALFRED T. KVARNSTROM, citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Fuse Boxes, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to fuse boxes, the object being to provide an inexpensive, substantial fuse box capable of being assembled without the use of screws, bolts or other separate connecting elements, but merely by interlocking the component parts of the wall structure of the box and which, when assembled, forms a rigid, substantial box maintaining its rigid shape by virtue of tension in one of the wall members which tends to hold the other parts thereto.

The box as formed is constructed in sections capable of use singly or of being "ganged" or grouped together in close formation to provide a box of larger proportion, but of similar structure, component parts held together in similar manner and serving the same purpose.

In the drawings,—

Figure 1 is a perspective representing three sections locked together.

Fig. 2 is a fragmentary sectional view showing the locking means, being taken on the line 2—2 of Fig. 1.

Figure 3 is a fragmentary elevation showing means for securing the box to the wall of a building.

Fig. 4 is a cross-section taken on the line 4—4 of Fig. 3.

In a switch or fuse box of this character it is not only desirable that an inexpensive article of rigid structure be produced, but also that a box be provided capable of being quickly assembled or disassembled, composed of separate sections so that a box of larger proportion may be easily constructed. Of course this box must be capable of being attached to the wall.

My fuse box consists of independent units adapted to be used singly, or ganged together to form a multiple elongated structure as shown in Fig. 1. Each unit, when used singly, comprises a substantially U-shaped resilient metal section a adapted to

serve as back and sides of the unit and two end sections b and c adapted to engage with section a to complete the box. It is evident that when several sections are ganged together, that the end sections of the intermediate units are omitted. The side portions of this U-shaped section are provided at one end with projecting turned over ears a^3 , and near the other end with corresponding depressions a^2 .

The end section b is provided with inturned ears b^2 adapted to overlap the adjacent sides of the U-shaped section and engage in the depression a^2 formed therein, as shown in Fig. 2. End section b therefore holds the opposite sides of the U-shaped section inwardly toward each other. End section c is adapted to abut the opposite end of the U-shaped section and be received between the inturned ears a^3 . This end section c is of such width as to spread the side portions of the U-shaped section a apart, when it is forced into position between the ears. By virtue of the end section c exerting outward pressure on the side portions of the U-shaped section a tending to force such side portions apart, and the end section b exerting inward pressure, tending to draw such side portions toward each other, and the resilient character of the U-shaped section itself, the several sections of the unit are held securely together forming a rigid, substantial unitary structure, capable of withstanding any blow or shock to which it is likely to be subjected.

When several units are ganged, as shown in Fig. 1, the ears a^3 of one U-shaped section a engage in the corresponding depressions a^2 in the adjacent U-shaped section to hold intermediate sections of the box together.

Apertures f are provided through the end sections b and c to permit the passage of electric wires therethrough, and the U-shaped section a is likewise provided with punch outs g for the same purpose.

A perforate tab h is held in position between securing ears i in the U-shaped sections a , as shown in Figs. 3 and 4. (This tab is provided for the attachment of the box to the wall or ceiling or wherever used.

What I claim is:

1. In a fuse box, a substantially U-shaped resilient metal section adapted to serve as the back and sides of the box, said U-

shaped strip provided at one edge with projecting in-turned ears each adapted to form a pocket for an end piece to be received therein, and provided at the other side with depressions opposite and in line with said ears, an end piece adapted to be received in the pocket formed by said ears on the U-shaped section so as to be held securely therein, being forced into said pocket against the inward tension of said U-shaped section, an opposed end piece provided with in-turned ears engaging said U-shaped section on the opposite end, the ears of said end piece adapted to be received in the depressions in the U-shaped section and adapted to be held thereon by the outward tension of the U-shaped section.

2. An article of manufacture of the class described comprising three wall sections, one a substantially U-shaped section of resilient metal adapted to form the back and sides of a box provided at one end with depressions and at the other end with projecting, in-turned ears, the other sections being end pieces, one being a section adapted to be received within the pocket formed by the projecting ears on the U-shaped section so as to exert outward tension on said U-shaped section, the other end piece being provided with ears adapted to be received

within the depressions in said U-shaped section so as to exert inward tension thereon, clamping said sections securely and rigidly together to form a box.

3. In a fuse box, in combination, a substantially U-shaped resilient metal section adapted to form the back and sides of the box, each of which sides is provided at one end with an external depression and at the opposite end with a turned over ear, an end section provided with turned over portions at opposite sides engaging in the external depressions of the sides of the U-shaped section, and an opposed end section received between the turned over ears of said sides of the U-shaped section and exerting pressure thereon to spread said sides apart.

4. In a fuse box, in combination, a substantially U-shaped resilient metal section forming the back and sides of the box, an end section gripping opposite sides at one end holding the same inwardly, an opposed end section positioned between said sides at the opposite end spreading the same outwardly, said ends held in place by the contained tension in the U-shaped section.

In testimony whereof, I sign this specification.

ALFRED T. KVARNSTROM.