

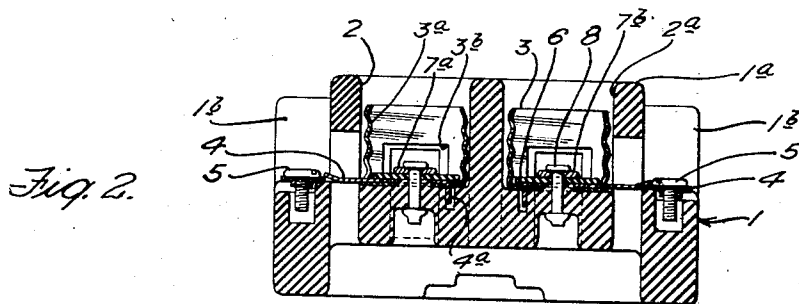
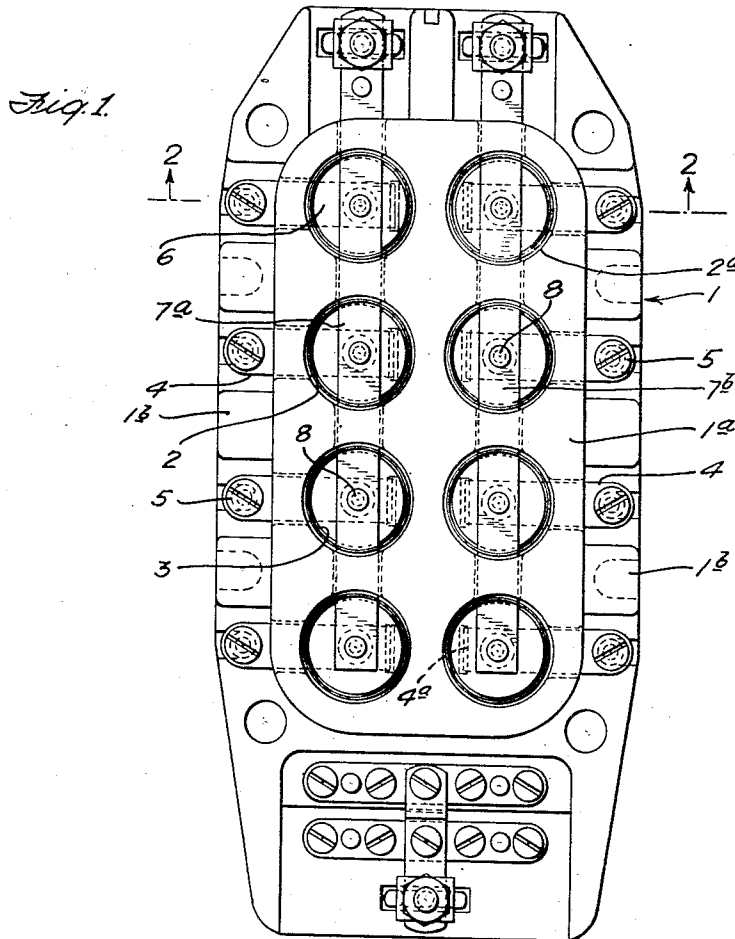
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FUSE PANEL

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FUSE PANEL

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3 Claims. (Cl. 175-369)

The invention herein disclosed relates to a fuse panel and more particularly to a fuse panel for plug fuses of the type that are screwed into a shell.

5 Heretofore, it has been the practice to construct fuse panels of this type by providing recesses in one surface of a block of insulating material, usually porcelain, in which threaded fuse shells are received. The buses through which
10 current flows to the fuses are mounted on the opposite side of the porcelain block. A screw, located at the center of each fuse shell passes through the porcelain block and into the bus on the underside of the block. This screw consti-
15 tutes the connector between the bus and one side of the plug fuse. The fuse shell constitutes the connection to the other side of the plug fuse and it is connected to a conductor strip to which a wire may be connected.

20 An object of this invention is to simplify the construction of such fuse panels and to eliminate the hazards of short circuits and grounds that are present when the buses are mounted on the under side of the porcelain block.

25 In accordance with this invention, the buses are mounted on the porcelain block and positioned to pass through the threaded fuse shell from which they are electrically insulated. A rivet passes through the bus, an enlarged opening in the fuse shell and the porcelain block.
30 The head of the rivet forms a contact for the end contact of the fuse.

Such a fuse panel is illustrated in the accompanying drawing in which:

35 Fig. 1 is a plan view of a fuse panel, and
Fig. 2 is a transverse section taken on the line 2-2 of Fig. 1.

The fuse panel shown in the drawing comprises a porcelain block 1 molded to the form shown. This particular fuse panel is especially
40 adapted for eight circuits from a three wire single phase supply. In an oblong central section 1a that is thicker than the rest of the block there are formed two series of recesses 2 and 2a
45 each series containing four recesses. In each recess there is mounted a plug-fuse shell 3.

Each fuse shell is cup-shaped and pressed to form threads 3a in the walls thereof. Slots 3b
50 are cut in the wall of the fuse shell at diametrically opposite points and when the fuse shells are mounted in the recess in the block, the slots 3b of the several fuse shells of a series are in alignment. Each fuse shell rests upon the base of the recess in which it is mounted.

55 A terminal strip conductor 4 is electrically

connected to each fuse shell. This conductor extends across the base of the shell and it is provided at one end with a lateral extension 4a that extends through the base of the shell and into a recess provided therefor in the porcelain block.
5 The fuse shells are thus positioned in the recess with the slots 3b in alignment. The opposite end of the terminal strip extends through a slot formed in the shell, the strip extending at right angles to the line of the slots 3b, and through a
10 slot in the porcelain block. On the exposed end of the terminal strip there is a terminal screw 5. Between each terminal strip there is a barrier 1b formed on the porcelain block. On the upper side of the terminal strip, there is a disk 6 of
15 insulating material.

For each series of fuse shells there is a bus 7a and 7b. The buses extend longitudinally of the fuse panel. The bus 7a extends through the porcelain block and through the aligned slots 3b
20 in the several fuse shells of one series of fuse shells and the bus 7b also extends through the porcelain block and through the aligned slots in the other series of fuse shells. The disks 6 serve to electrically insulate the buses from the terminal strip 4 and the bottom of the fuse shells, the opening 3b through the wall of the fuse shells being of sufficient size to prevent contact with the fuse shell. A series of rivets 8, one for each
25 fuse shell secures the several elements together 30 and to the porcelain block. Each rivet passes through a bus, the insulating disk, enlarged openings in the base of the shell and the terminal strip, and through the porcelain block.

It will be seen from the foregoing description
35 of the embodiment of the invention illustrated in the drawing that there is provided a fuse panel for plug fuses in which the buses are mounted on the upper side of the porcelain block. These
40 fuse panels are commonly mounted in metal boxes and the fact that the buses are on the upper or outer surface of the panel and extend through the porcelain block avoids the hazards of grounds and short circuits that attend fuse
45 panels as they have heretofore been constructed. The finished fuse panel is also a more rigid and simple construction than those heretofore made.

It will be obvious that various changes may be made by those skilled in the art in the details
50 of the embodiment of the invention illustrated in the drawing and described above within the principles and scope of the invention as expressed in the appended claims.

I claim:

1. In a fuse panel of the type described, the 55

combination comprising a block of insulating material, a threaded fuse shell mounted on the block of insulating material, a bus extending through the fuse shell and electrically insulated therefrom, a connector bus connected to the fuse shell, and a rivet securing the bus, fuse shell and connector bus to the block of insulating material.

2. In a fuse panel of the type described, the combination comprising a block of insulating material, a series of aligned fuse shells mounted on the block of insulating material, a bus extending through the several fuse shells and electrically insulated therefrom, a connector bus for each fuse shell and a rivet extending through each fuse shell, the bus, the corresponding connector bus and the insulating block.

3. In a fuse panel of the type described, the combination comprising a block of insulating material, a threaded, cup-shaped fuse shell having diametrically opposite openings through the wall thereof mounted on the block of insulating material, a bus extending through the openings through the fuse shell and electrically insulated therefrom, a connector bus electrically connected to the fuse shell and a securing element extending through the bus, the fuse shell and the block of insulating material and securing the bus, the fuse shell and connector bus to the block of insulating material.

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