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R. T. ROTH

TERMINAL BLOCK

Filed Sept. 28, 1923

Fig. 1.

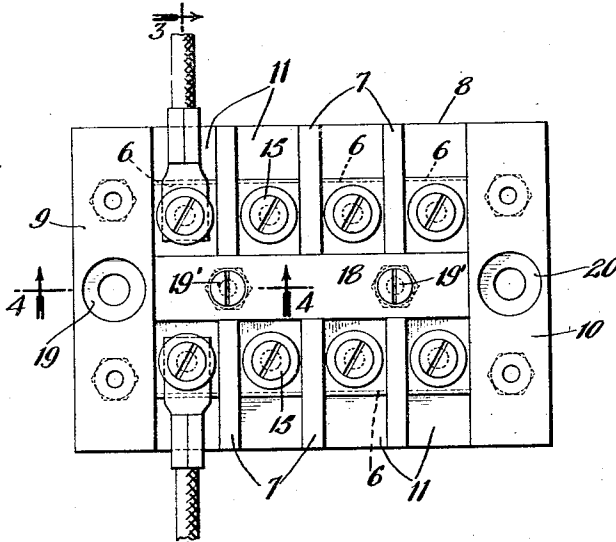


Fig. 2.

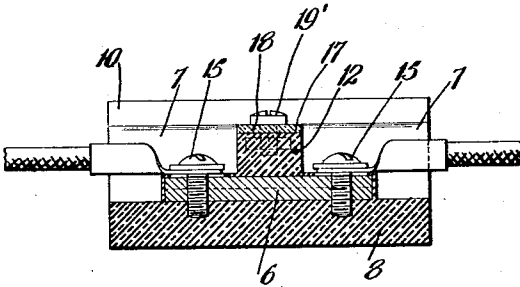
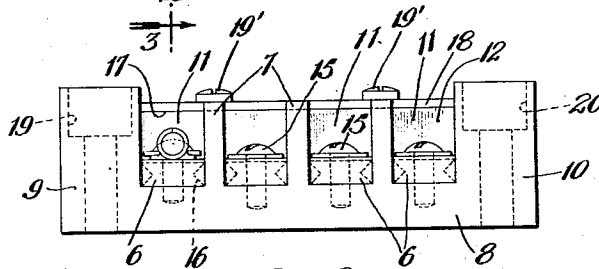


Fig. 3.

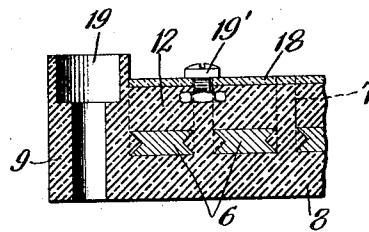


Fig. 4.

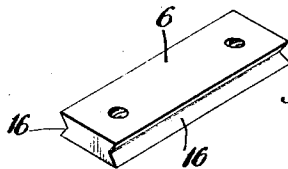


Fig. 5.

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UNITED STATES PATENT OFFICE.

RAYMOND T. ROTH, OF NEW YORK, N. Y.

TERMINAL BLOCK.

Application filed September 28, 1923. Serial No. 665,313.

To all whom it may concern:

Be it known that I, RAYMOND T. ROTH, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Terminal Blocks, of which the following is a specification.

This invention relates to terminal blocks and particularly to terminal blocks adapted to receive a number of conductor terminals for testing or interconnection of the circuits.

The object of the invention is to provide a block of simple durable construction which will insulate the various leads from each other and provide for the designation of the various circuits directly adjacent their points of connection.

Other objects of the invention particularly in the formation of the insulation and conductor strips as a solid block with integral partitions will appear from the following description taken in connection with the accompanying drawings in which,

Fig. 1 is a plan view of a terminal block embodying the invention.

Fig. 2 is a side view of the same.

Figs. 3 and 4 are sectional views taken on the lines 3—3 and 4—4 respectively of Fig. 1, and

Fig. 5 is a prospective view showing in detail a terminal conductor strip.

In the embodiment of the invention shown in the drawings the terminal block as a whole comprises a solid body of molded insulating material in which are embedded the terminal conductor strips 6 extending crosswise of the block and separated from each other by the transverse partitions 7 of the molded insulation of hard rubber, bakelite or similar material. The terminal strips 6 (see Fig. 5) of brass or other conducting material are supported in place in the mold into which is poured the insulating material to form the block embedding and holding the strips. The mold is shaped to give to the insulation a flat rectangular base portion 8 with enlarged supporting portions 9 and 10 at each end extending crosswise and intermediate partitions 7 dividing the block into a series of transverse channels or grooves 11, while a central longitudinal ridge 12 extends from end to end of the block.

There is thus formed a block construction with a series of recesses or cells on each side, the cell on one side being connected to

that on the other by the conductor strip 6 extending across the base part 8 and between the partitions 7 and through the ridge member 12 (see Fig. 3). In the molding of the block the strips 6 are preferably so supported that their exposed end portions are covered by a thin layer of insulation. These end portions are then tapped and threaded for the binding screws 15 and the top surfaces of the strips around the threaded holes has the insulation machined away to expose the metal. This tapping and threading is carried through the strip 6 and into the base portion 8 of the insulation (see Fig. 3). Each strip 6 may be formed with a side groove 16 to give a firm anchorage in the insulation.

The top surface of the longitudinal ridge member 12 is slightly below the top surfaces of the partitions 7 on each side of it so that there is left a central longitudinal groove 17 in which is located a marking strip 18 of bristol board, celluloid or the like fastened in place by the screws 19.

The end portions 9 and 10 are provided with openings 19, 20, for the fastening means holding the block in place and these end portions 9, 10 may also serve to carry a cover member when desired.

The terminal block of this invention is fastened in place to receive the terminals of the conductors of the circuits to be tested or interconnected, the circuits of each conductor strip 6 being designated by marking on the strip 18 just above the corresponding circuit. It is obvious that this terminal block permits the circuits to be connected in shunt or series in any desired manner, each circuit being plainly marked so as to indicate at a glance the relations of the various conductors. Any desired number of terminal strips 6 may be provided, the block being correspondingly increased in size.

The ends of the conductors are easily fastened in place as shown and the recesses between the partition 7 maintain the terminals safely separate from each other and sunken out of the way of accidental contact with moving parts or wires above.

I claim:—

1. A terminal block comprising a solid body of molded insulation having end supporting means, a longitudinal ridge member having means for carrying a marking strip, a series of transverse partitions, and a series of terminal strips embedded in said

insulation between said partitions and beneath said ridge member, said terminal strips having exposed ends in the inner portions of the recesses between said partitions.

- 5 2. A terminal block comprising a solid body of molded insulation having end supporting means, a longitudinal ridge member having means for carrying a marking strip, a series of transverse partitions, and a series of terminal strips embedded in said insulation between said partitions and beneath said ridge member, said terminal strips having exposed ends in the inner portions of the recesses between said partitions, and binding means for fastening the terminals to the exposed ends of said strips.

3. A terminal block comprising a solid body of molded insulation of generally rectangular shape having upwardly extending ends serving as supports, a series of transverse partitions extending in the direction of the short dimension of the rectangle, a central longitudinal marking strip extending across the upper surfaces of said partitions, a series of terminal strips between said partitions and fastened in place between said partitions by the molding of the solid block of insulation, and binding means for fastening the terminals to the exposed ends of said strips.

RAYMOND T. ROTH.