July 17, 1962 J. CASSELLA 3,045,204

JUNCTION BOX BLOCK AND CARD

Filed Sept. 16, 1959

FIG. 1

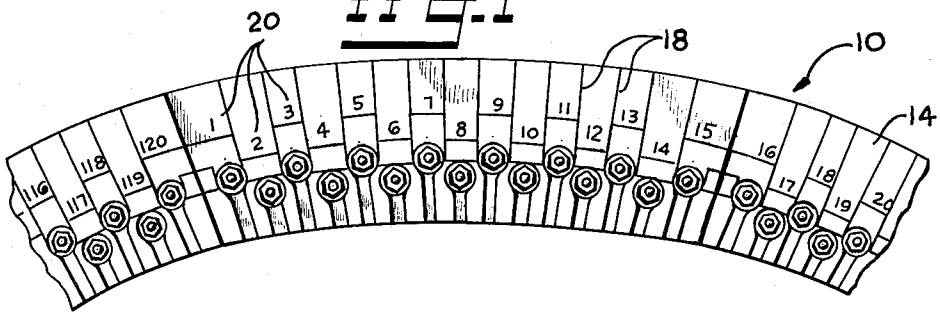


FIG. 2

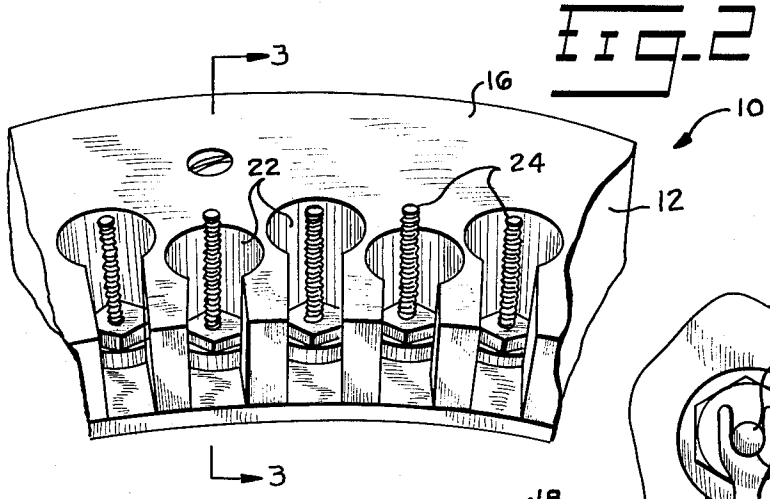


FIG. 3

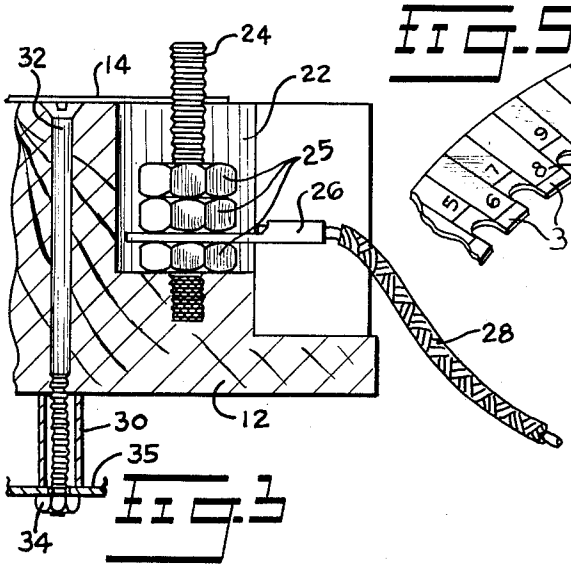


FIG. 5

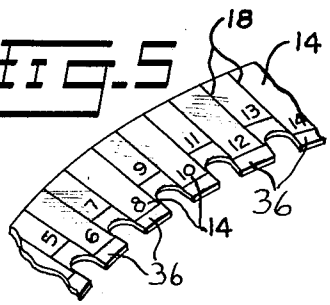
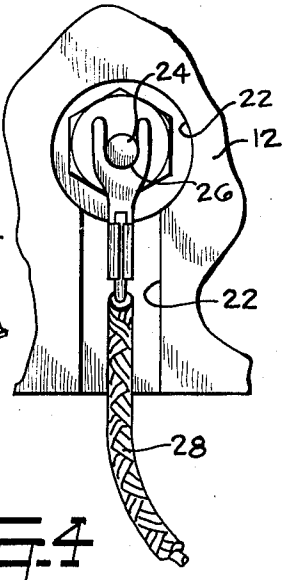


FIG. 4



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JUNCTION BOX BLOCK AND CARD

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This invention relates to electrical equipment and, more particularly, to a junction block.

Junction blocks are necessary for mounting a large number of conductors within a junction box, such as is required in many control systems of various types of machines. It is therefore an object of the present invention to provide a junction block which is extremely simple in construction, can be readily mounted in any desired location, and which will prevent the mounting of a large number of conductors thereon without entanglement.

Another object of the present invention is to provide a junction block box having self-contained identifying means for locating all of the terminals carried by the junction block.

Still a further object of the present invention is to provide a junction block of the type described which is extremely simple in construction, and which can be manufactured at a relatively low cost.

All of the foregoing and still further objects and advantages of this invention will become apparent from a study of the following specification, taken with the accompanying drawing, wherein:

FIGURE 1 is a fragmentary plan view of a plurality of junction block segments made in accordance with the present invention;

FIGURE 2 is an enlarged fragmentary perspective view of certain portions of a single junction block segment;

FIGURE 3 is a fragmentary transverse cross sectional view taken along line 3—3 of FIGURE 2;

FIGURE 4 is a fragmentary top plan view of the elements shown in FIGURE 3;

FIGURE 5 is a fragmentary perspective view of an indexing card forming a part of the present invention.

Referring now to the drawing, a junction box block assembly **10** made in accordance with the present invention is shown to include a plurality of substantially segmental dielectric annular blocks **12** having an index card **14** superimposed and secured in any desired manner upon the upper surface **16** thereof. The index card **14** of each such segmental annular block is provided with a plurality of circumferentially spaced apart radially extending lines **18** defining a plurality of spaces, each of which is provided with an identifying numeral **14** for identifying the location of each of the terminal studs **24** which are secured within alternately spaced long and short key hole slots **22** which open radially inwardly of the blocks.

Each stud **24** threadedly carries a plurality of lock nuts **25** which serve to secure the terminal lugs **26** of conductors **28** in electrical contact with the studs **24**. It will thus be recognized that the location of and connection to predetermined ones of the terminal studs **24** is facilitated by the identifying indicia **20** of the locater or marker cards **14** for circuit connection with corresponding elements.

Approximately eight such segmental annular blocks **12** are arranged in the form of a circle and conveniently mounted upon any supporting member **35**, such as by mounting bolts **32** and nuts **34**, in the manner shown in FIGURE 3. If desired, spacers **30** may also be used to space the junction blocks from the supporting surface, so as to allow for the free passing of conductors between the supporting surface and the blocks, as may be required.

It will be further noted that the index card **14** is provided with additional surfaces **36**, for the purpose of showing individual color schemes for like colored travel cables.

While this invention has been described with particular reference to the construction shown in the drawing, it is to be understood that such is not to be construed as imparting limitations upon the invention, which is best defined by the claim appended hereto.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

An annular assembly of junction block boxes, each of the boxes comprising a dielectric segmental annular block having a plurality of radially inwardly open alternately long and short keyhole slots that are open at the top, a terminal in each of the slots formed of a threaded end stud mounted on the block with a plurality of nuts for connecting at least one electrical lead thereto, and an indicia card fixed to the top of the block and having a plurality of imprinted radial lines dividing the card into spaces corresponding to the adjacent slots and a series of numerals each imprinted in one of the spaces to identify the adjacent terminal and such numerals being disposed adjacent the slot with the identified terminal.

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