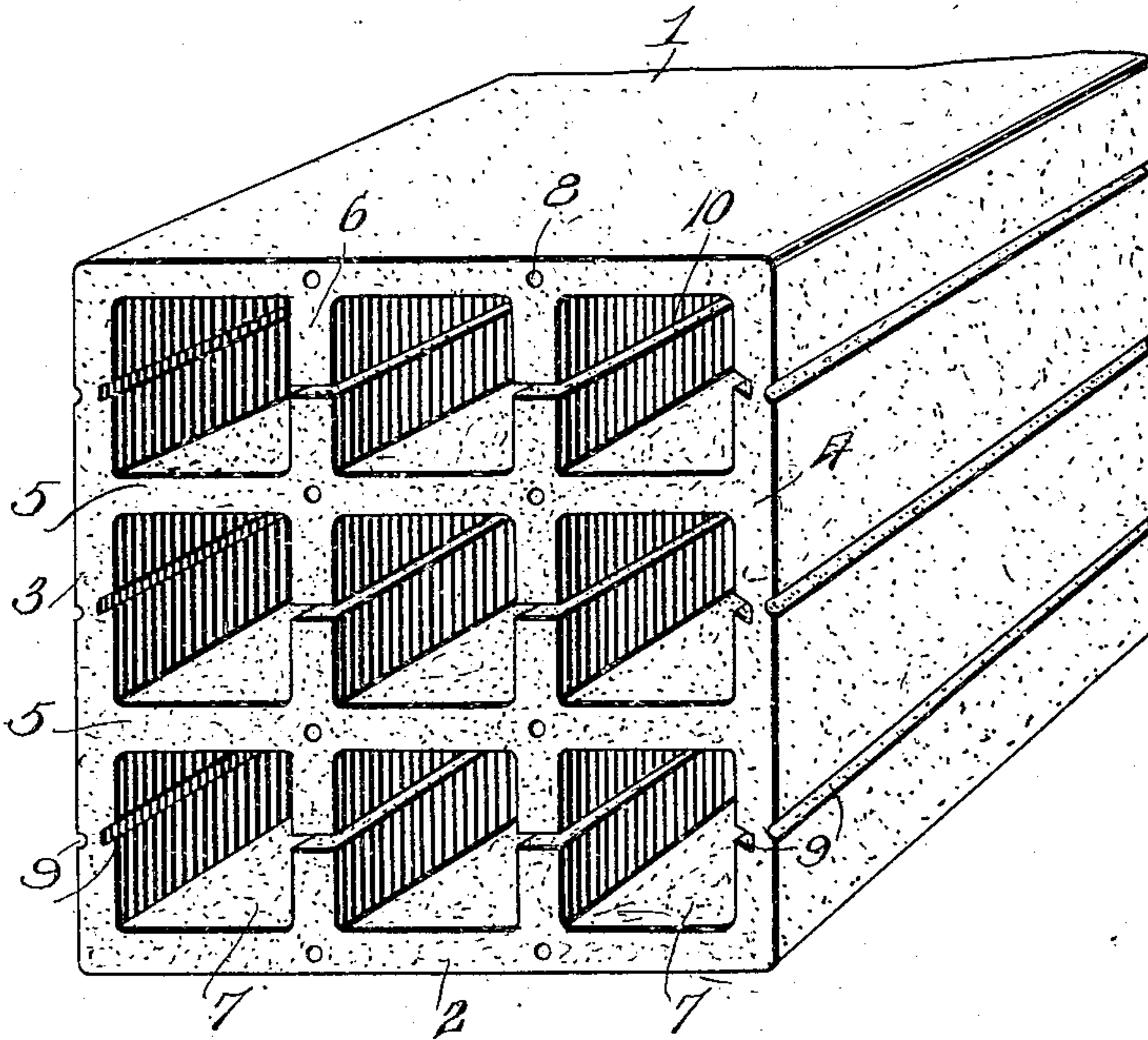


No. 875,489.

PATENTED DEC. 31, 1907.

J. BALCH.
CONDUIT TILE.

APPLICATION FILED FEB. 5, 1907.



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JOHN BALCH, OF NEWARK, NEW JERSEY.

CONDUIT-TILE.

No. 875,489.

Specification of Letters Patent.

Patented Dec. 31, 1907.

Application filed February 5, 1907. Serial No. 355,915.

To all whom it may concern:

Be it known that I, JOHN BALCH, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented new and useful Improvements in Conduit-Tiles, of which the following is a specification.

This invention relates to an improved tile designed for use in the construction of conduits for electric wires, the object of the invention being to provide a tile which may be employed with equal advantage for general and repair work, and which is designed to afford convenience in the operation of breaking away the conduit at desired points for the purposes of making branch connections with one or more of the main wires within the conduit.

A further object of the invention is to provide a construction of tile in which opposing outer walls of the tile are provided with longitudinal grooves or scores and the intermediate or division walls of the tile forming the compartments therein formed with coinciding longitudinal slots, the described construction permitting a portion of the tile to be conveniently broken away to gain access to the wires within one or more of the compartments therein without liability of breaking away or damaging the conduit to an objectionable extent.

The accompanying drawing shows in fragmentary perspective a tile constructed in accordance with my invention.

The tile is made of clay, cement or other suitable plastic material molded into shape, preferably of oblong rectangular form, the numerals 1, 2, 3 and 4 respectively representing the top, bottom and opposite side walls of the tile. As shown, the interior of the tile is divided by horizontal transverse and vertical division walls 5 and 6, to provide a plurality of longitudinal channels or compartments 7 through which the electric wires or cables are designed to extend. Each end of the tile may be formed with dowel seats or recesses 8 to receive dowel-pins upon the connecting end of another tile, whereby the tiles composing the conduits may be secured together. Cement or other means may be used in conjunction with the dowel connections for coupling the tiles in a firm and secure manner.

In accordance with my invention, opposing walls of the tile, such as the side walls 3 and 4, are provided with longitudinal weak-

ening grooves or scores 9, preferably arranged on the outer and inner sides thereof, the outer and inner grooves being in line with one another. Certain of the division walls are also in alinement with the grooves or scores in the outer walls. In the form of the invention shown, the vertical division walls 6 are split or provided with longitudinal slots 10, and these slots are disposed in horizontal alinement and parallel relation with the grooves or scores 9 in the companion portions of the walls 3 and 4. The compartments 7 are arranged in vertical and transverse rows, and the slots and grooves are disposed in such manner as to permit portions of the tile to be removed to gain access to the compartments or channels of either row. In other words, it will be observed that the tile is divided into sections by the grooves and slots according to the number of rows of compartments employed, so that the upper third of the tile may be removed to gain access to the upper row of compartments, the upper half to gain access to the intermediate row of compartments, and two-thirds of the body of the tile measuring downward removed to gain access to the lower row of compartments, as will be readily understood.

It is well known that a serious objection has existed in conduits of this class, in that none of them afford safe and reliable means for breaking away the conduit at a desired point for the purpose of making branch connections with one or more of the main wires therein. It frequently arises that it is necessary to break away a portion of the conduit for the purpose of tapping in a new wire to connect one of the main wires in the conduit with a new residence, store or other structure. Owing to the fact that there has been a lack of provision in any of the tiles of this nature with which I am familiar to enable the tiles to be cleanly broken, the operation of tapping generally results in the breaking away of unnecessarily large portions of the conduit in cutting through the same, thus rendering extensive repair work necessary. The improved tile constituting the present invention may be used both in general and repair work, and by its use access may be obtained to any of the conductors extending therethrough without breaking away the conduit to unobjectionable extent. If, for instance, it is desired to reach a wire within one of the upper compartments of the tile, it is simply necessary to break away the

upper portion down to the line of the upper longitudinal grooves 9, which may be quickly and conveniently accomplished by the use of a hammer and chisel applied at the weakened points formed by these grooves. The provision of the slots 10 in the vertical division walls 6 obviates the necessity of cutting through these walls and allows a section of the tile to be removed immediately after the outer walls have been cut through. Furthermore, the provision of the slots 10 overcomes objections to tiles of that character in which the division walls are simply formed with weakening grooves. In tiles of such character, it is necessary to cut through the division walls after the operation of cutting through the outer walls has been performed, a difficult procedure, liable to result in the mutilation of the tile from an uncleanly cut or the breaking away of too much of the division wall, preventing the tile from being repaired. It is also difficult to insert a chisel through a fractured outer wall to aline accurately with a weakening groove in a division wall, making it necessary to break away the portion of the outer wall before the division wall could be cut through, which objection my construction avoids. After, for instance, the outer walls of a conduit tile embodying my invention are cut through, which can be accomplished in a cleanly manner, it will be understood that the entire top section of the upper tile may be lifted off, and, as a clean break is secured, such section may be readily re-applied and cemented in position to close the tile, an advantage which can not be effectively secured by the use of a tile in which ordinary grooves are formed in the intervening division walls. The arrangement of the grooves and slots also facilitates and permits separation of the tile at different points, allowing ready access to be secured to the conductors within any of the compartments. As a clean fracture may be made, it will be understood that the removed section of the tile may be again applied in position after the new wire has been tapped in and cemented or otherwise secured in place.

By the use of the term "grooves" as applied in the specification and claims to the features denoted by the reference numeral 9 I mean any weakening cuts or recesses extending but partially through the walls 3 and 4 and designed to facilitate and permit convenient splitting of said walls in the manner described, while by the term "slots" or "slotted" I mean the splitting of the walls 6, as indicated at 10, by cuts extending en-

tirely therethrough, as will be readily understood.

Having described my invention what I claim as new, is:—

1. A conduit having grooved opposing outer walls and slotted interior division walls.

2. A conduit having opposing outer walls provided with longitudinal grooves and interior division walls having slots arranged in alinement with the grooves.

3. A conduit having outer opposing walls formed with inner and outer longitudinal grooves and inner division walls provided with slots in alinement with said grooves.

4. A conduit provided with a series of compartments formed by interior division walls, said walls being provided with longitudinal slots, opposing outer walls of the conduit having weakening grooves in alinement with said slots, whereby the conduit may be divided at different points for access to the different compartments.

5. A conduit provided with rows of transverse compartments formed by division walls, the vertical division walls being provided with longitudinal transverse slots, the outer side walls of the conduit being formed with weakening grooves in alinement with the slots of the division walls of the different compartments.

6. A conduit provided with interior division walls forming rows of transverse compartments, the vertical division walls being provided with transverse longitudinal slots, and the outer side walls of the conduit having longitudinal weakening grooves arranged in alinement with said slots.

7. A conduit provided with compartments formed by division walls, said walls being provided with slots separating the portions thereof, and having opposite outer walls formed with a series of grooves alining with the slots in the division walls, whereby the conduit may be divided at different points.

8. A conduit provided with rows of compartments having longitudinal slotted division walls, and formed in its side walls with longitudinal grooves alining with the grooves in the division walls, whereby the conduit may be separated on the line of either set of slots and grooves to permit access to any one of the rows of compartments.

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

JOHN BALCH.

Witnesses:

CHAS. T. ZIEGLER,
MAX BLASBERG.