No. 756,844. PATENTED APR. 12, 1904.

G. M. GEST.

BRACKET BLOCK FOR CONDUIT MANHOLES.

APPLICATION FILED DEC. 13, 1902.

NO MODEL.

Fig. 1.

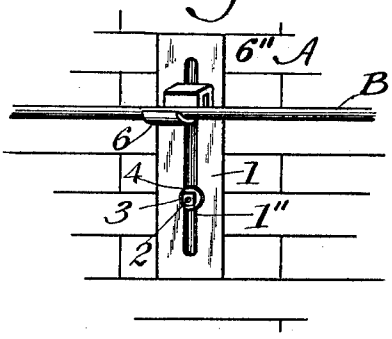


Fig. 2.

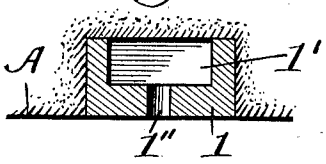


Fig. 3.

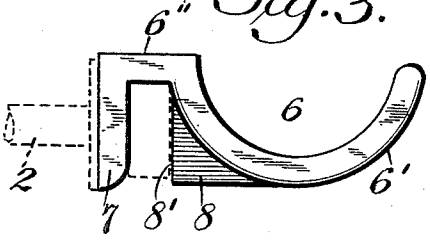


Fig. 4.

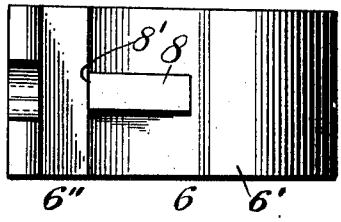
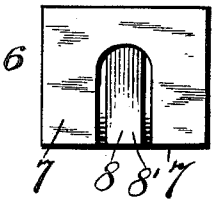


Fig. 5.



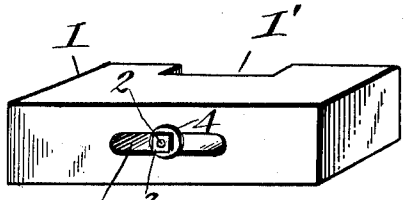
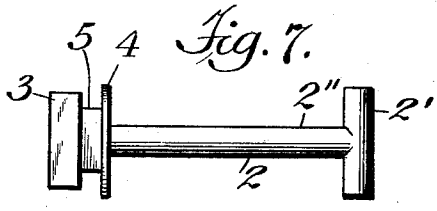


Fig. 6.

Fig. 7.



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No. 756,844. Patented April 12, 1904.

UNITED STATES PATENT OFFICE.

GUY M. GEST, OF CINCINNATI, OHIO.

BRACKET-BLOCK FOR CONDUIT-MANHOLES.

SPECIFICATION forming part of Letters Patent No. 756,844, dated April 12, 1904.

Application filed December 13, 1902. Serial No. 135,031. (No model.)

To all whom it may concern:

Be it known that I, GUY M. GEST, a citizen of the United States, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Bracket-Blocks for Conduit-Manholes, of which the following is a specification.

My present invention pertains to means for supporting within the manholes of conduits the cables, wires, tubes, or other elements which are located within the conduits which lead to or from said manholes.

An object of my invention is to provide a fixed and stable member adapted to be built into a wall of masonry and to which suitable brackets may be secured for the purpose mentioned.

Another object of my invention is to provide simple and reliable means for adjusting the relative position of each bracket used.

A further object of my invention is to provide a bracket which may be quickly attached to or detached from a wall of a manhole.

I attain these ends by means of simple and durable elements of moderate cost, and which do not require for their emplacement the services of mechanics who are specifically skilled in the work appertaining thereto.

In the drawings, Figure 1 is a front elevation in perspective of a bracket-block in position in a wall and a bracket attached thereto, a bracket-bolt being also shown separately from the bracket and part of a cable being shown in position on the bracket. Fig. 2 is a horizontal transverse section of a bracket-block. Fig. 3 is a side elevation. Fig. 4 is a bottom plan view, and Fig. 5 is a rear elevation of a bracket, other members being shown in broken lines in Fig. 3. Fig. 6 is a front elevation in perspective of a modified form of bracket-block, a bracket-bolt, a nut, and a washer being shown in position therein; and Fig. 7 is a plan view of a bracket-bolt and a nut and a washer.

Corresponding parts in all the figures are denoted by the same reference characters.

Referring to the drawings, A represents a wall into which is built a bracket-block 1, which is preferably made of vitrified clay and is in a general way prismatic in cross-sectional form, but having a channel or groove 1′ formed centrally from end to end of one of its sides and of sufficient depth to permit a bracket-bolt head to be moved longitudinally thereof when the block is built into a wall, as shown in Fig. 1. A slot 1″, sufficiently wide to permit a bracket-bolt body to move freely therein, is formed through the block 1 into and alined centrally of the groove 1′ and extends nearly from end to end of the block 1.

A bracket-bolt 2 has a T-head, which is preferably of the same cross-sectional dimensions as the body 2″ of the bolt. The head 2′ may, however, be square in cross-section, if preferred. The body 2″ is screw-threaded for a portion of its length and is adapted to carry a nut 3 and a washer 4. A perimetrally angular or non-circular element 5 is introduced between the wrench-engaging faces of the nut 3 and the washer 4, and said element is in this instance square. The element 5 may be formed integrally of either the washer 4 or of the nut 3, or it may be made separately from either, and it is of less cross-sectional dimensions than the nut 3. When in an operative position, two sides of the element 5 should be vertical.

A bracket 6, which may be formed of any suitable material, but preferably of cast-iron, has a curved table 6, which is adapted to hold a cable B or other conductor or element which may be laid thereon. A planiform portion 6″ connects the table 6′ to depending lugs 7 7, which are formed at right angles to the general horizontal plane of the bracket 6 and are properly interspaced to receive the non-circular element 5 and to engage opposite faces on said element when the latter and the bracket 6 are properly positioned relatively to each other. A rib 8 projects below and to the rear of the table 6′ and has a contact-face 8′ formed thereon opposite the interspace between the lugs 7, being thus properly positioned to contact the outer face of the nut 3 when all parts are operatively positioned one with another. The rib 8 serves to reinforce and strengthen the table 6′.

The form of bracket-block shown in Fig. 6

is practically similar to that shown in Figs. 1 and 2, except for the dimensional differences adapting it to be inserted horizontally into a wall, the slot 1″ being, however, horizontally positioned in this form when the block is in position for use.

The operation and advantages of my invention will be readily understood by those skilled in the art to which it appertains. The bracket-block 1 should be securely built into the wall where it is to be used, the channel 1′ and slot 1″ being kept free and clear of all matter. A bolt-head 2 may be inserted vertically through the slot 1″ into the channel 1′ and being then turned to a horizontal position by means of the body 2″. A washer 4 and a non-circular element 5 should be mounted upon the bolt-body 2″, and a nut 3 should be screwed upon the latter to bind the bolt in the position in which it is to remain, care being taken meantime to maintain two opposite faces of the element 5 in vertical positions. A bracket 6 may then be mounted upon the bracket-block 1 by inserting the lugs 7 thereof between the nut 3 and washer 4, the lugs thus necessarily engaging the element 5 and the contact-face 8′ necessarily engaging either the nut 3 or the outer end of the bolt 2. When the bracket 6 is thus positioned, the table 6′ will lie horizontally transversely of the wall A, and one or more cables B may be properly supported on the bracket. It will be noted that a plurality of brackets may be secured to one bracket-block and that they may be adjustably interspaced.

I do not desire to be understood as limiting myself to the details of construction and arrangement as herein described and illustrated, as it is manifest that variations and modifications may be made in the features of construction and arrangement in the adaptation of the device to various conditions of use without departing from the spirit and scope of my invention and improvements. I therefore reserve the right to all such variation and modification as properly fall within the scope of my invention and the terms of the following claims.

Having thus described my invention, I claim and desire to secure by Letters Patent—

1. A device for supporting cables in conduit-manholes, comprising a bracket-block designed to be built in the wall of the manhole and provided with a channel and a slot communicating with said channel, a bolt slidable on said block and provided with an elongated head designed to enter said channel through said slot and means on the other end of said bolt coacting with said head to independently secure the bolt at different positions on said block, and a bracket detachably connected to one end of said bolt, as set forth.

2. The combination of a bracket-block provided with a channel and a longitudinal slot communicating with said channel, a bolt slidable on said block and having means for independently securing it at different positions thereon comprising a head within said channel and a body in said slot and projecting outwardly therefrom, a nut screwing on said body and designed to contact with the wall of the block to bind the bolt, and a bracket provided with legs designed to take over said nut and bolt and provided with means whereby it will be prevented from turning thereon, as set forth.

3. The combination with a bracket-block provided with a channel and a longitudinal slot communicating with said channel, a bolt slidable on said block and having means for independently securing it at different positions thereon comprising a head within said channel and a body in said slot and projecting outwardly therefrom, a non-circular element on the projecting end of said bolt, a nut screwing on said end beyond said element to bind the bolt, and a bracket provided with two downwardly-extending lugs spaced apart and designed to take over said nut and straddle said non-circular element, as set forth.

4. The combination of a bracket-block provided with a channel and a longitudinal slot communicating with said channel, a bolt slidable on said block and having means for independently securing it at different positions thereon comprising a T-head within said channel and adapted to be inserted therein through said slot, and a body designed to project through the latter, a non-circular element on the projecting end of said bolt, a nut screwing on said end beyond said element to bind the bolt, and a bracket provided at one end with a rib having a contact-face and with two spaced-apart lugs designed to straddle said non-circular element and to receive between them and the contact-face the said nut, as and for the purpose set forth.

In testimony whereof I have signed my name in the presence of the subscribing witnesses.

GUY M. GEST.

Witnesses:
J. R. LITTELL,
CHAS. H. DAVIDS.