(No Model.)

B. BOYER.

CONDUIT FOR ELECTRIC WIRES.

No. 269,379. Patented Dec. 19, 1882.

Fig. 1.

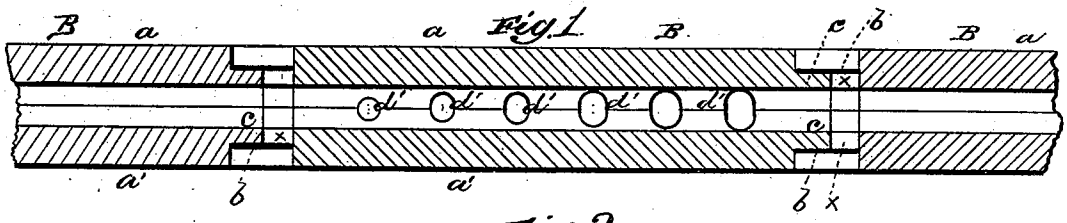


Fig. 2.

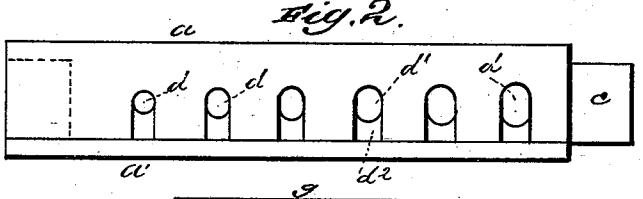


Fig. 3.

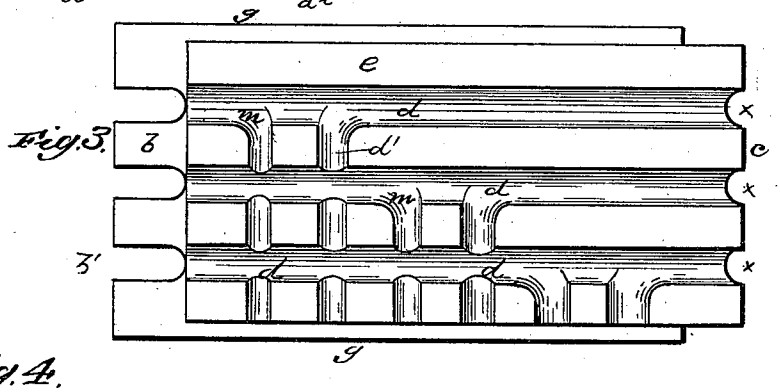


Fig. 4.

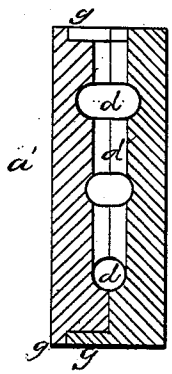
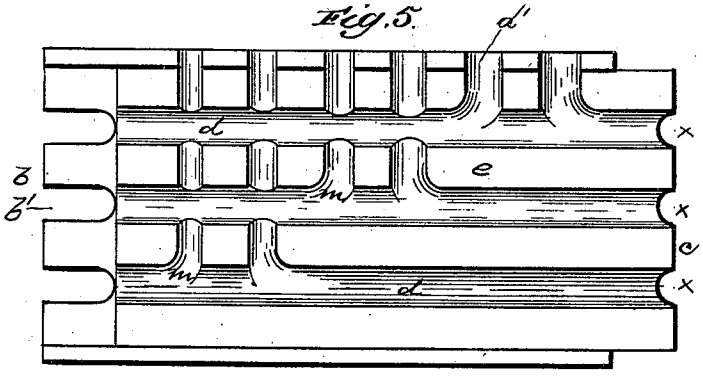


Fig. 5.



WITNESSES

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UNITED STATES PATENT OFFICE.

BASSLER BOYER, OF LEBANON, PENNSYLVANIA.

CONDUIT FOR ELECTRIC WIRES.

SPECIFICATION forming part of Letters Patent No. 269,379, dated December 19, 1882.

Application filed February 16, 1882. (No model.)

To all whom it may concern:

Be it known that I, BASSLER BOYER, a citizen of the United States, and a resident of Lebanon, in the county of Lebanon, and State of Pennsylvania, have invented a new and valuable Improvement in Conduits for Electric Wires; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 is a horizontal longitudinal sectional view of my device. Fig. 2 is a plan view. Fig. 3 is an inside elevation of one part of one of the sections of the conduit. Fig. 4 is a vertical cross-sectional view, and Fig. 5 is an inside elevation of the other part of a section of the conduits.

This invention relates to conduits for electric wires; and it consists in the novel construction of the sectional grooved and notched blocks or supports cast of the slag of blast-furnaces, substantially as hereinafter described and claimed.

The object of this invention is mainly to supply continuous insulators for long lines of electric conductors, whether under ground or on the surface—as, for instance, in laying telegraph, telephone, or electric-light wires or electric railways.

In the accompanying drawings, the letters *a a'* indicate the two parts or sections of the insulating-block B, which forms one of the sections or portions of an insulating-line, consisting of a series of blocks joined end to end, usually by means of the end sockets, *b*, and end tongues, *c*.

The sections of each block B are formed in molds, the melted slag from the blast-furnace being poured into the molds and removed therefrom and annealed. The sections or blocks thus formed are designed to have grooves, channels, or seats *d*, of any desired size or depth, or of different depths, on their inner faces, or on the faces *e* of the sections, which are fitted together in forming the entire or inclosing block. If necessary, holding channels or seats for the wires or other conductors can be formed on any or all of the outer faces of a block. The blocks are made in two parts, *a a'*, the part *a* being provided with edge flanges, *g g*, to hold them in proper relation to each other. At one end of the block a socket or recess, *b*, is formed, the walls of which have notches *b'* in line with the grooves *d* of the parts *a a'*, and at the other end a tongue, *c*, of a form designed to fit the end recess of the next block, is made and provided with notches *x*, also in line with the grooves *d* of the parts *a a'*. The blocks B are placed end to end, and are laid upon their edges to form a continuous line. The entire line is not made of the blocks B, as they are only necessary at the points where the wires are to be taken out of the conduits. The other sections therefore need not have the notches *b'* and *x*. Vertical grooves *d'* are also made in the faces *e* of the parts *a a'* and intersect the grooves *d*, as shown. The upper flange, *g*, of the part *a* is also notched, as at d^2, to permit the wires to be taken out at these points when it is desired to run them in a vertical direction, as to the top of a building.

In order to render the receptacle water-tight the sections can be cemented together, and this should be done in such a manner that the sections can be easily separated if it should be necessary to examine the conductor or conductors at any point.

The blocks or receivers can be laid deep in the ground or near or upon the surface, the slag of which they are formed being an excellent non-conductor of heat as well as of electricity.

When several wires are run through the same line of non-conductors the grooves or channels may vary in depth so that the wires can readily pass each other when deflected in the bends or curves *m* of the grooves to be carried away from the main line. At the points where the deflected wire crosses the other wires it should be carefully insulated therefrom. In this manner each conductor is perfectly insulated, and no danger need be apprehended from the approximation of the wires of a dynamo-electric machine—such as are used in electric-light circuits—to the ordinary battery-wires of a telegraphic of telephonic line.

These receivers may be joined end to end in vertical lines—as, for instance, when extended upward in a building.

It will be noticed that the wires may be

taken out laterally from either side of the block, and that one, two, or all of them may be taken out, if desired.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. In a conduit for electric wires, a separable block, B, consisting of the parts *a a'*, having the tongues *c*, provided with notches *x*, connecting with the grooves *d*, the other end having the notches *b'*, registering with grooves *d*, substantially as and for the purposes set forth.

2. In a conduit and insulator for electric wires, a separable block, B, consisting of the parts *a a'*, cast of the slag of a blast-furnace and having the longitudinal grooves *d* of varying depths, and the intersecting grooves *d'*, the latter connecting the deeper groove with the edge of the conduit and the groove next to that with the deeper groove, &c., the intersecting grooves being of the same depth as the shallower of the grooves connected, substantially as and for the purposes set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of witnesses.

BASSLER BOYER.

Witnesses:
LEWIS REHR,
W. B. ELM,
JOHN HENRY HUBER.