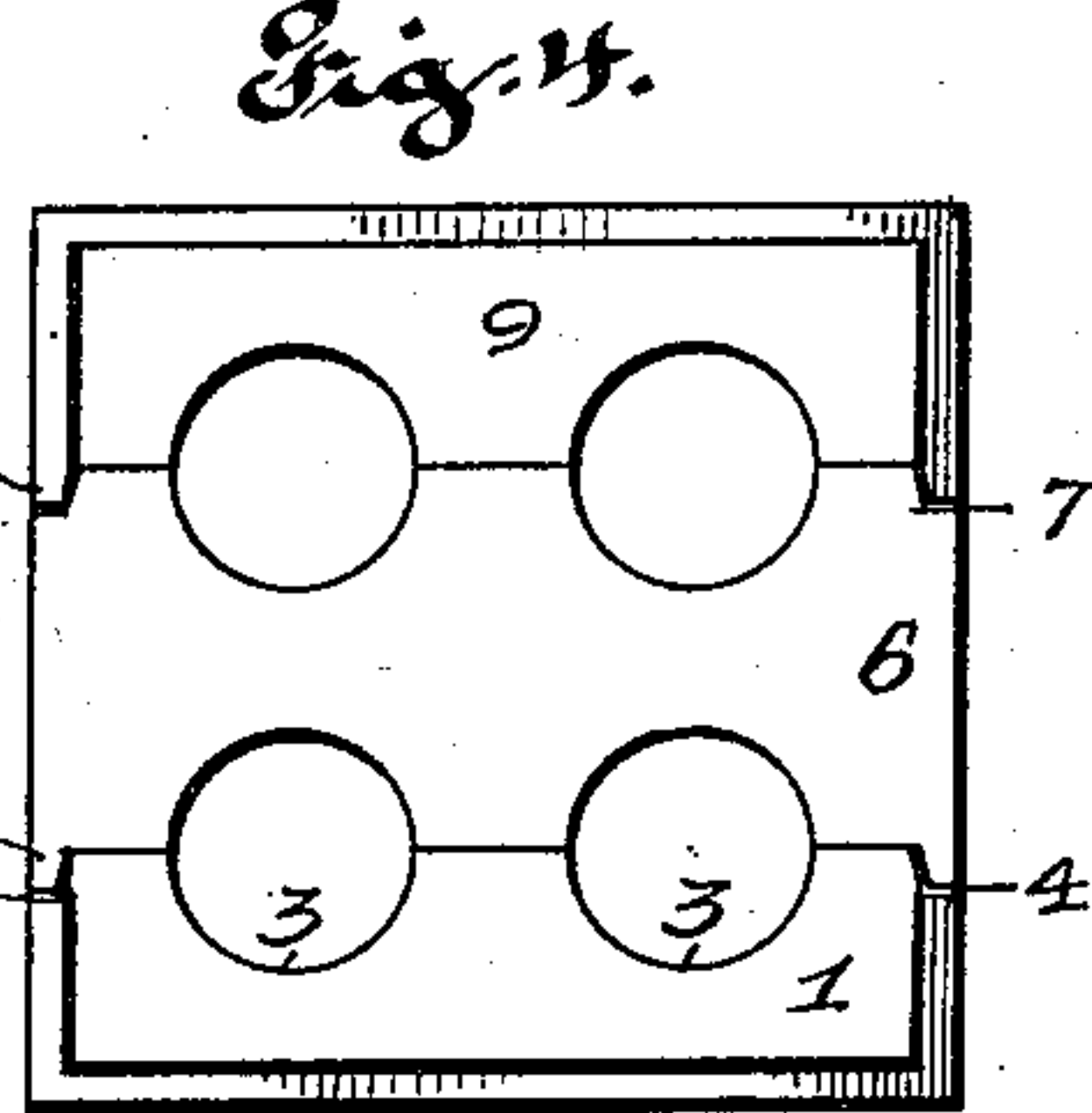
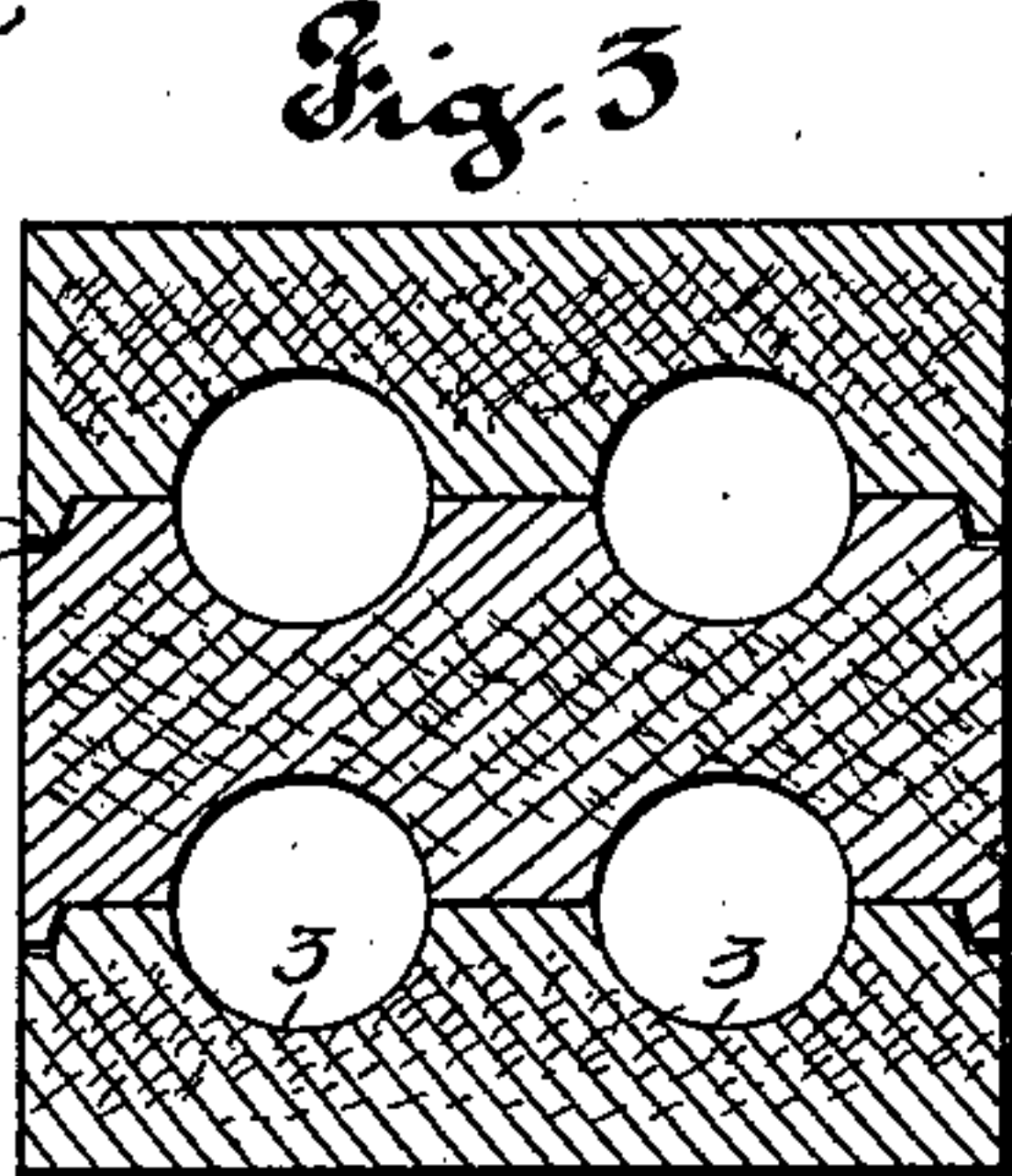
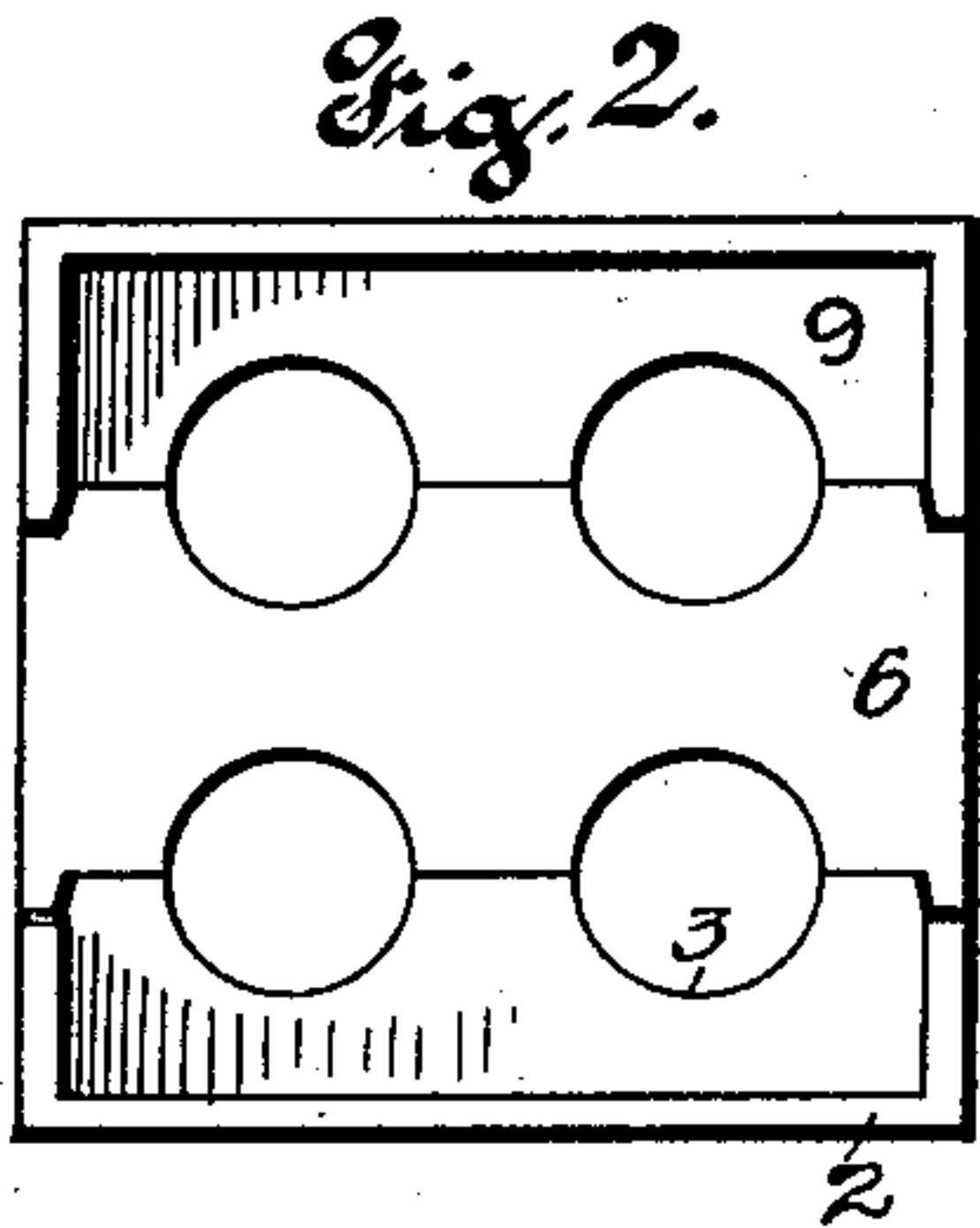
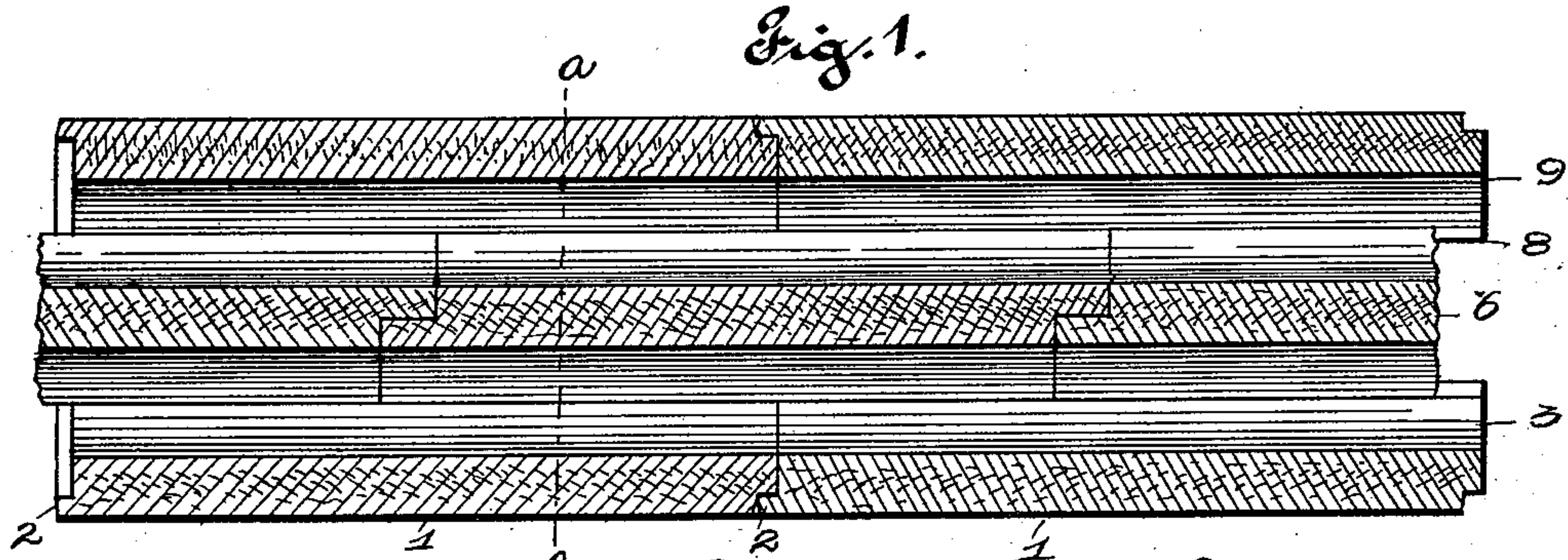


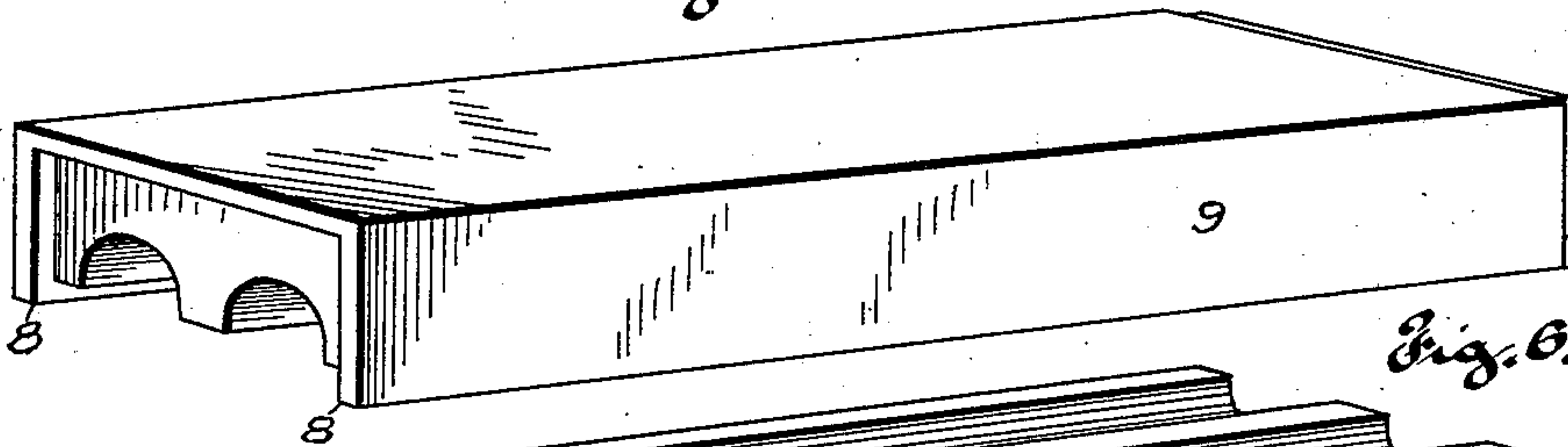
C. D. BUDD.  
CONDUIT.

(Application filed Dec. 9, 1901.)

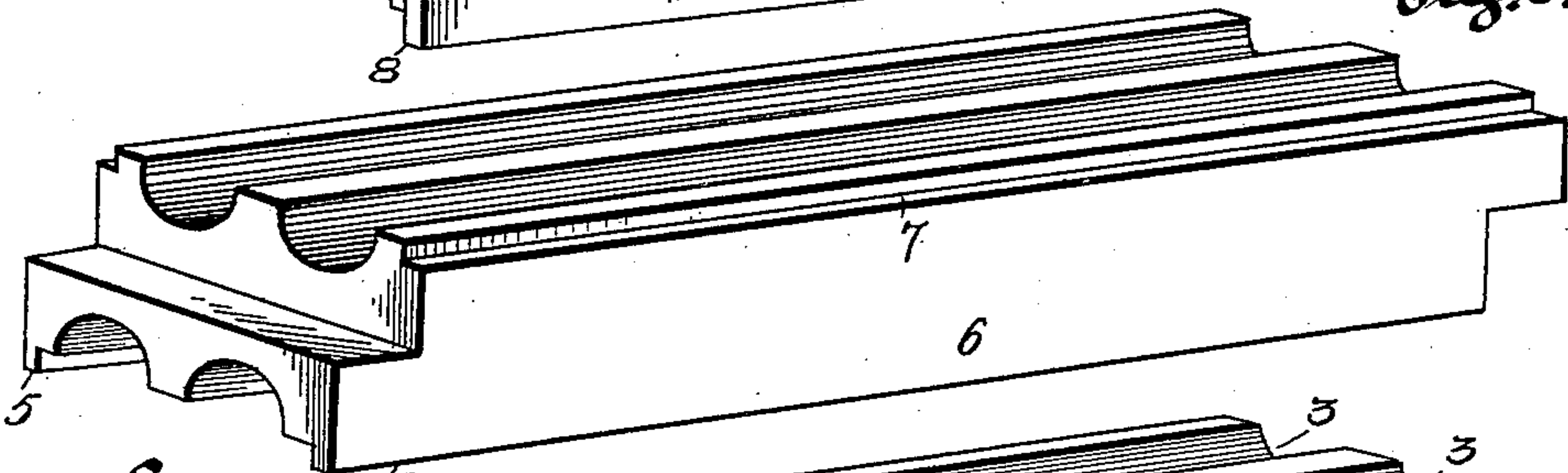
(No Model.)



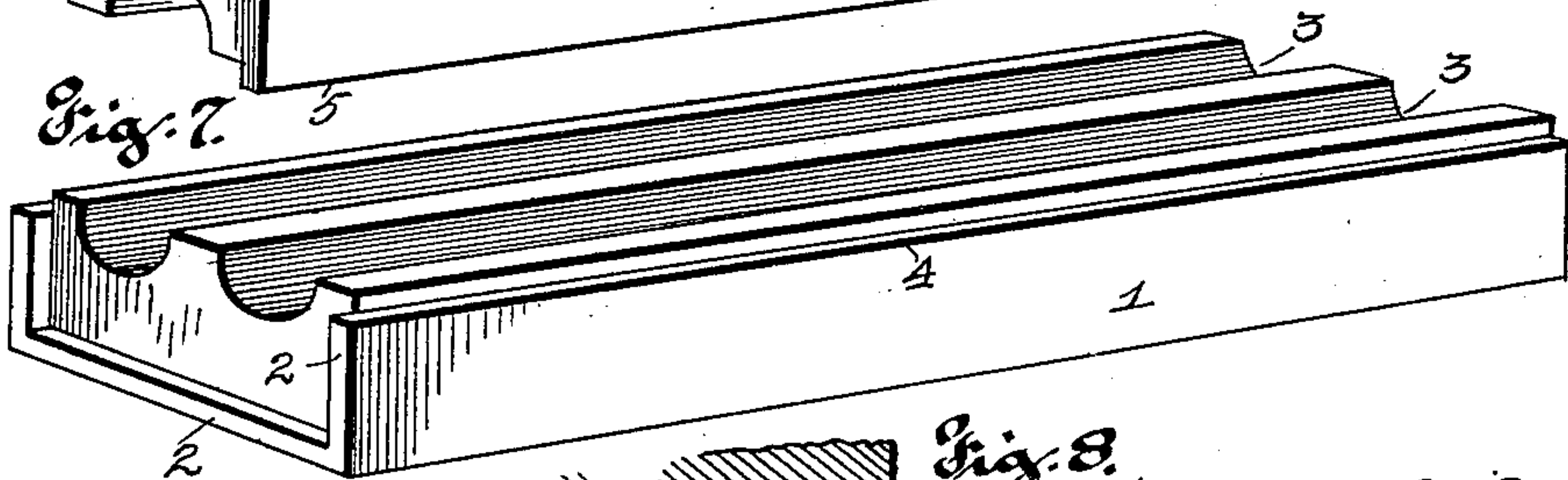
*Fig. 5.*



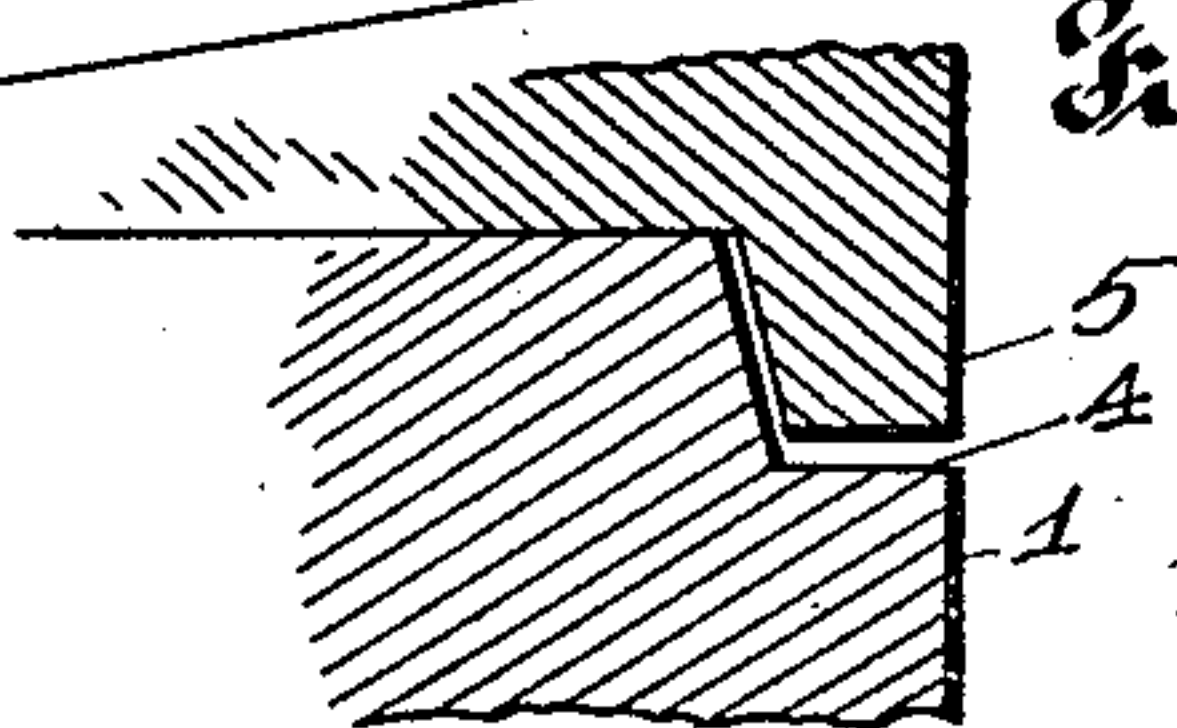
*Fig. 6.*



*Fig. 7.*



*Fig. 8.*



Witnesses  
Alfred W. Eicher  
Frank Turner

Inventor  
Chas. D. Budd.  
by Higdon & Longan attys



# UNITED STATES PATENT OFFICE.

CHARLES D. BUDD, OF ST. LOUIS, MISSOURI.

## CONDUIT.

SPECIFICATION forming part of Letters Patent No. 698,902, dated April 29, 1902.

Application filed December 9, 1901. Serial No. 85,189. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES D. BUDD, of the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in Conduits, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

This invention relates to improvements in conduits; and it consists of the novel construction, combination, and arrangement of parts, as will be more fully hereinafter described and claimed.

The object of my invention is to construct a self-contained conduit capable of being primarily constructed in sections and placed in use independently of all extraneous devices, such as fastening-bolts or supporting-beds, and each section provided with end and side flanges for preventing longitudinal and lateral movement of the sections relative to each other.

Figure 1 is a longitudinal sectional view of the conduit taken through the ducts, showing the manner in which the sections are placed together. Fig. 2 is a view showing one end of the conduit. Fig. 3 is a cross-sectional view taken on the line *a a* of Fig. 1. Fig. 4 is a view showing the opposite ends of the conduit. Fig. 5 is a detail perspective view of one of the sections which is used to form the top of the conduit. Fig. 6 is a detail perspective view of the middle section. Fig. 7 is a detail perspective view of the bottom section, and Fig. 8 is a detail cross-sectional view of a portion of two of the sections, showing the joint.

In carrying out my invention I form a block 1, having on its one end and sides flanges 2 and semicircular grooves 3, formed on the top throughout its length. On the upper edge of the sides of the block 1 are recesses 4, the purpose of which is to receive the flange 5, formed on each side of the center block 6. The center block 6 is also provided at its top and bottom with semicircular grooves to correspond with the grooves 3, and when said blocks are placed one upon the other the grooves form a perfect duct of sufficient size to allow the insertion of the cables now in common use. The ends of the block 6 are cut away to allow the blocks of the same con-

struction to be placed together. The connection can be clearly seen in Fig. 1. Recesses 7 are also formed on the upper edge of the sides to allow the flanges 8 on the block 9 to fit therein, and semicircular grooves are also formed in the bottom of said block to correspond with the like grooves previously mentioned. The flanges and recesses referred to are to come in contact with each other to make a perfect joint, allowing the surfaces of the remaining portion of the block to come in close contact with each other when the same are placed in their proper relation. The grooves and flanges on the sides of the blocks are so formed (see Fig. 8) as to allow the blocks to be adjusted laterally and at the same time forming sufficient space in which cement or like substance may be inserted for making a perfect and moist-proof joint. The ends of the blocks are of opposite formation, so as to fit one with the other, as shown in Fig. 1.

In constructing a conduit with the sections the section 1 is placed with the grooves up, and upon this section the center section 6 is placed, and, if desired, a section similar to section 6 may be placed one upon the other and topped by the section 9 and in this manner forming perfect and uniform ducts throughout the length of the conduit. A conduit of this construction is more simple of erection and more durable than any known at this present period. The sections are made of any desirable length and width containing as many grooves for forming the ducts as are found desirable. The same are laid together with the joints broken in the same manner as laying brick. If found desirable, I may construct the sections from clay or other suitable substance found to be durable.

It will thus be seen that I have provided a conduit that is self-contained without the assistance of any extraneous part or thing.

The conduit-sections are made complete of a single integral body of material (say concrete) and are placed in position in the earth and therein form a complete conduit independently of any other material or supporting device.

I claim—

1. A self-contained conduit made of sections composed of a single material and pro-



vided with cable-receiving grooves and end and side flanges, and each section being a complete integral body having sufficient superficial area, strength and weight to be self-supporting and to retain alinement of the sections independent of any extraneous device; substantially as specified.

2. A conduit-section made of concrete, having its ends cut away at diagonal corners and provided with semicircular grooves in its top and bottom faces, substantially as specified.

3. A conduit-section made of concrete and having on its one end and sides, flanges 2, and upon one of its faces semicircular grooves 3, in combination with two additional sections also made of concrete and having a transverse offset in each end, and semicircular grooves upon opposite sides; substantially as specified.

4. A conduit-section made of concrete and having on its one end and sides, flanges 2, and upon one of its faces semicircular grooves 3, in combination with two additional sections also made of concrete and having a transverse offset in each end, and semicircular grooves upon opposite sides of said additional sections, said additional sections being also provided with marginal recesses 7 in which said side flanges 2 are located, there being a space for cement between said side flanges and the walls of the said recesses, substantially as specified.

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

CHARLES D. BUDD.

Witnesses:

ALFRED A. EICKS,  
M. G. IRION.