

No. 865,265.

PATENTED SEPT. 3, 1907.

A. A. PAULY.
CONCRETE CONSTRUCTION.
APPLICATION FILED JUNE 3, 1905.

Fig. 1.

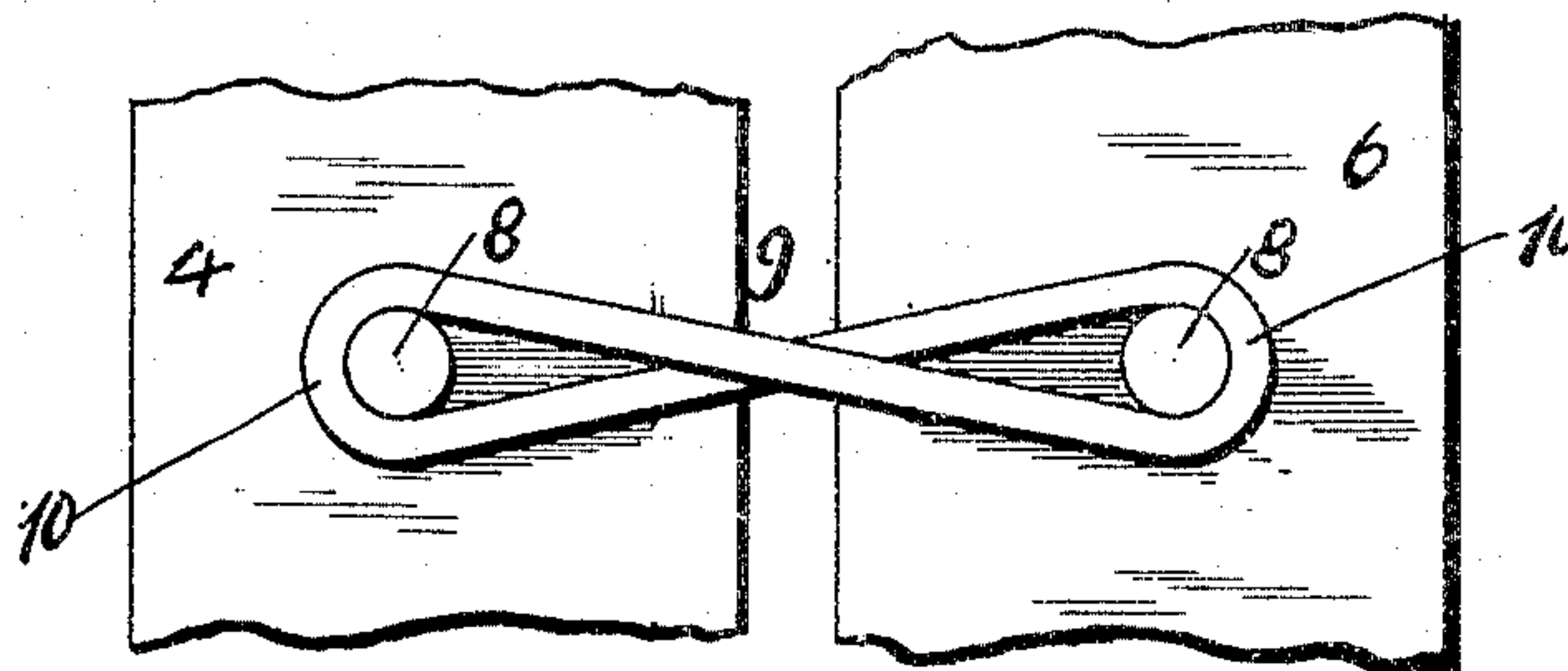
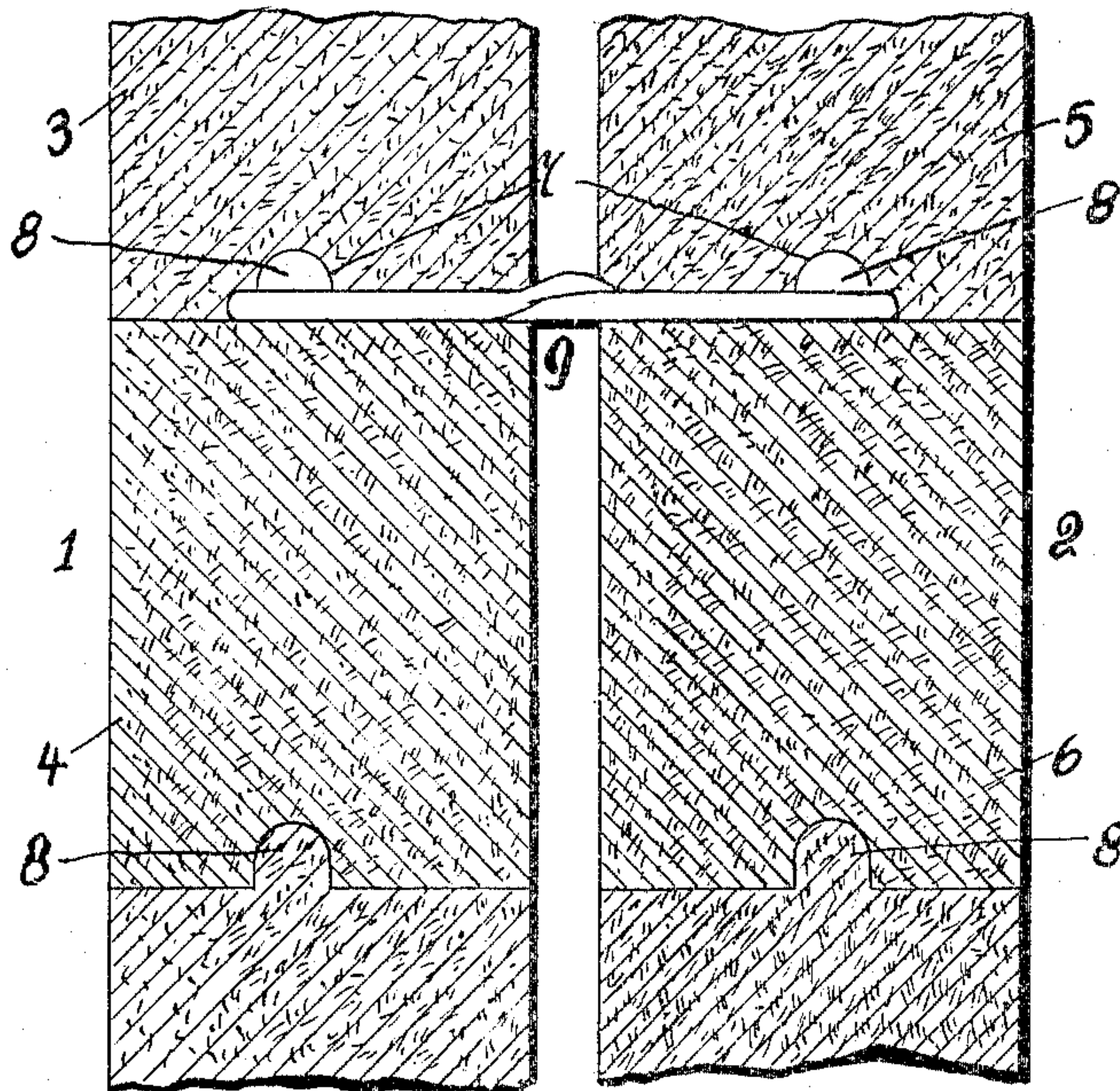


Fig. 2.

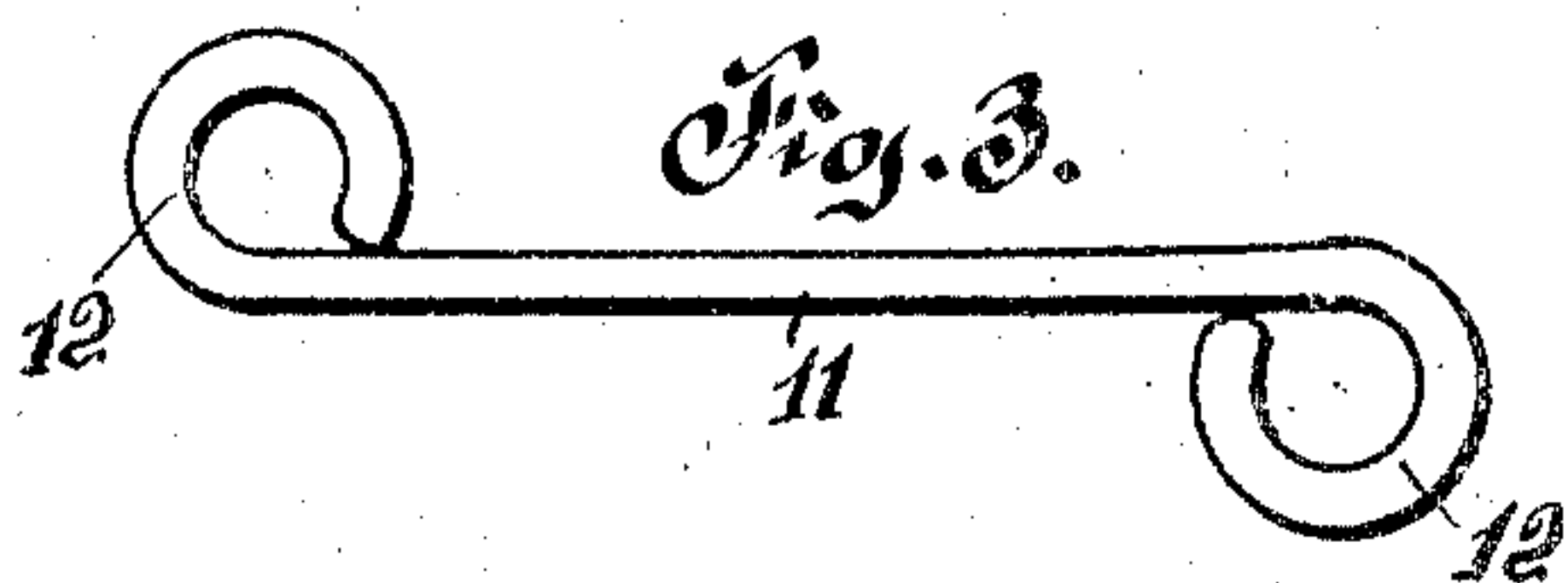


Fig. 3.

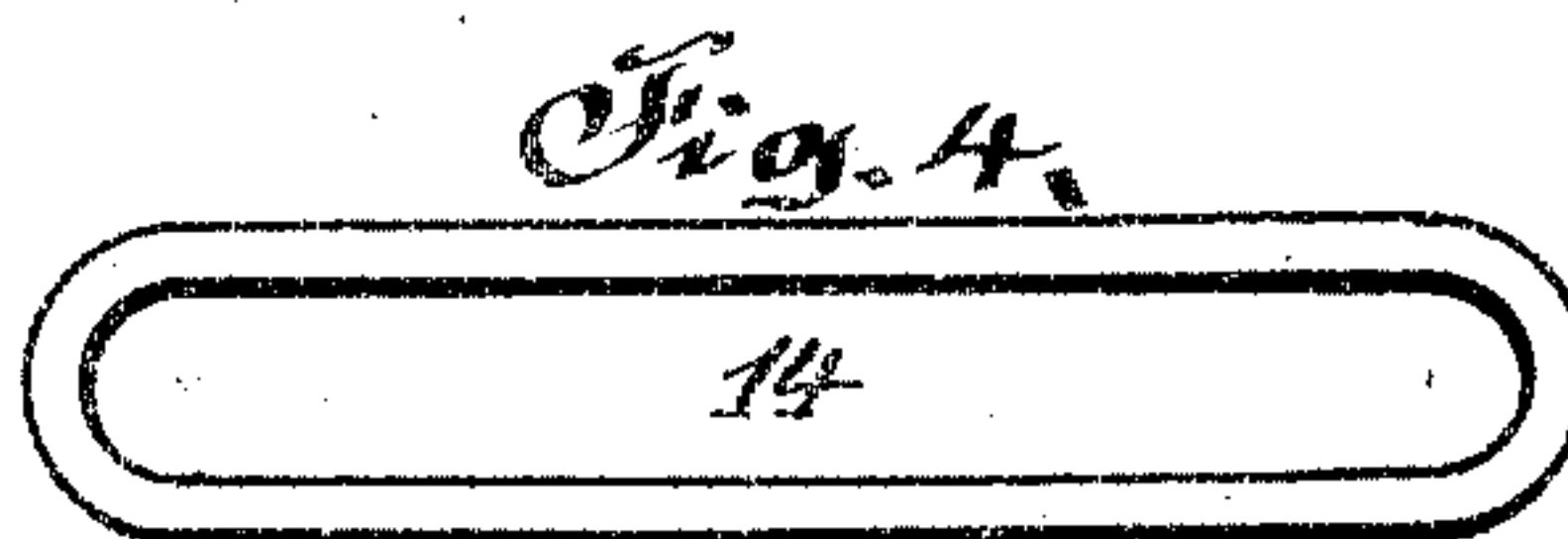


Fig. 4.

Witnesses:
C. H. Mott
H. H. Baker

Inventor,
A. A. Pauly.
by H. C. Ewert & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

ALBERT A. PAULY, OF YOUNGSTOWN, OHIO.

CONCRETE CONSTRUCTION.

No. 865,265.

Specification of Letters Patent.

Patented Sept. 3, 1907.

Application filed June 3, 1905. Serial No. 263,521.

To all whom it may concern:

Be it known that I, ALBERT A. PAULY, a citizen of the United States of America, residing at Youngstown, in the county of Mahoning and State of Ohio, have invented certain new and useful Improvements in Concrete Constructions, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in concrete construction, and the invention relates more particularly to a novel form of wall tie employed for locking two walls or sections of concrete together.

The primary object of the invention is the provision of novel means for locking two sections of concrete together whereby lateral displacement will be impossible.

Another important object of the invention is the provision of novel means for locking two distinct and separate walls or portions of concrete together. To this end, I have devised a novel means for interlocking the portions of concrete wall together, said means consisting of providing one section of concrete with lugs adapted to fit in suitable recesses formed in another portion of the concrete.

In connection with the interlocking feature of my improved concrete construction, I employ a wall tie consisting of a metallic rod or wire bent to engage the lugs of a concrete portion, said ties being impinged between the concrete portions when they are constructed.

In order that wall ties may be practical and be used, it is necessary that an inexpensive construction be employed, which will be strong and durable, consequently, I have constructed my improved interlocking feature for concrete constructions upon simple lines which will permit of its extensive use.

The above construction will be hereinafter more fully described and then specifically pointed out in the claims, and referring to the drawing accompanying this application, like numerals of reference designate corresponding parts throughout the several views, in which:—

Figure 1 is a vertical sectional view of a concrete construction, illustrating the interlocking feature of my invention, Fig. 2 is a top plan view of a portion of the same, and Figs. 3 and 4 are detail views of wall ties, the construction of the same representing a modification.

In the accompanying drawing, I have illustrated a portion of a concrete construction comprising two walls 1 and 2, said walls being formed of sections of concrete 3, 4, 5 and 6. The sections of concrete 3 and 5, which rest upon the sections 4 and 6, are provided with recesses 7, 7 adapted to receive lugs 8, 8 formed upon the top of the sections 4 and 6. These recesses

and lugs are preferably formed centrally of the concrete portions, and when the concrete portions are of considerable length, a plurality of lugs and recesses may be used to fix one concrete portion in engagement with its adjoining portion, whereby one cannot become laterally displaced independent of the other.

Prior to placing the concrete portions 3 and 5 upon the portions 4 and 6, I employ wall ties 9 for locking the wall 1 in engagement with the wall 2. The preferred form of wall tie is illustrated in Figs. 1 and 2 of the drawing, said tie simply consisting of a piece of wire or metallic rod bent to conform substantially to the shape of a figure eight, the loop ends 10, 10 of the tie engaging over the lugs 8, 8 of the concrete constructions 4 and 6, and when the concrete portions 3 and 5 are constructed upon the portions 4 and 6, the ends of the tie will be locked within the concrete construction, and it will be impossible for one end of the tie to move independently of the other, especially when the ties are given sufficient rigidity, such as acquired by constructing the ties of metal.

In Figs. 3 and 4 of the drawing, I have illustrated modified forms of ties, the tie 11 being formed of a single strand of wire or a rod, upon the ends of which are formed eyelets 12, 12, adapted to engage over the lugs 8, 8 of the concrete construction. In Figs. 4 of the drawing, I have illustrated a tie 14 which has ends substantially link-shaped, which serve functionally the same purpose as the ends of the ties heretofore described.

It will be apparent from the foregoing description that I have devised a novel interlocking connection for sections of concrete and I do not care to confine the use of my improved wall tie specifically to concrete constructions, as terra cotta bricks and blocks may be readily constructed with lugs and recesses in engagement with which my improved wall tie can be placed.

It will be noted that various changes may be made in the details of construction without departing from the general spirit and scope of the invention.

What I claim and desire to secure by Letters Patent, is:—

A concrete building construction consisting of two parallel walls each composed of concrete blocks each block having an integral projection on one side and a recess on the other side extending from one side facing inwardly and with the sides converging towards the face of the block and with a depression in the inner larger end of the recess to receive the projection of the adjacent block, and metallic tie members substantially figure 8 shaped and engaging the projections and corresponding to and engaging the sides of the recesses.

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

ALBERT A. PAULY.

Witnesses:

RICHARD GARLICK,
THOS. H. JENKINS.