

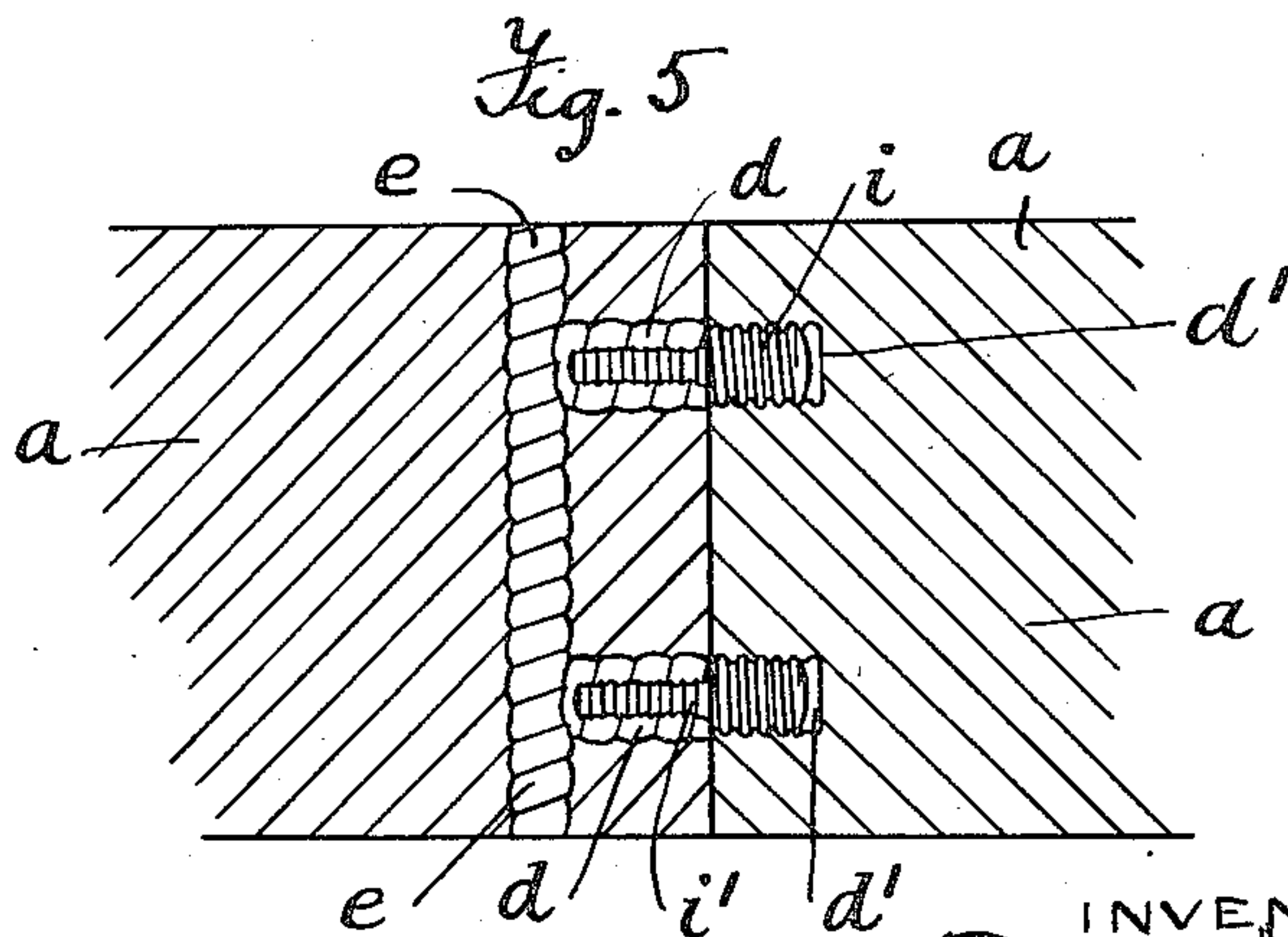
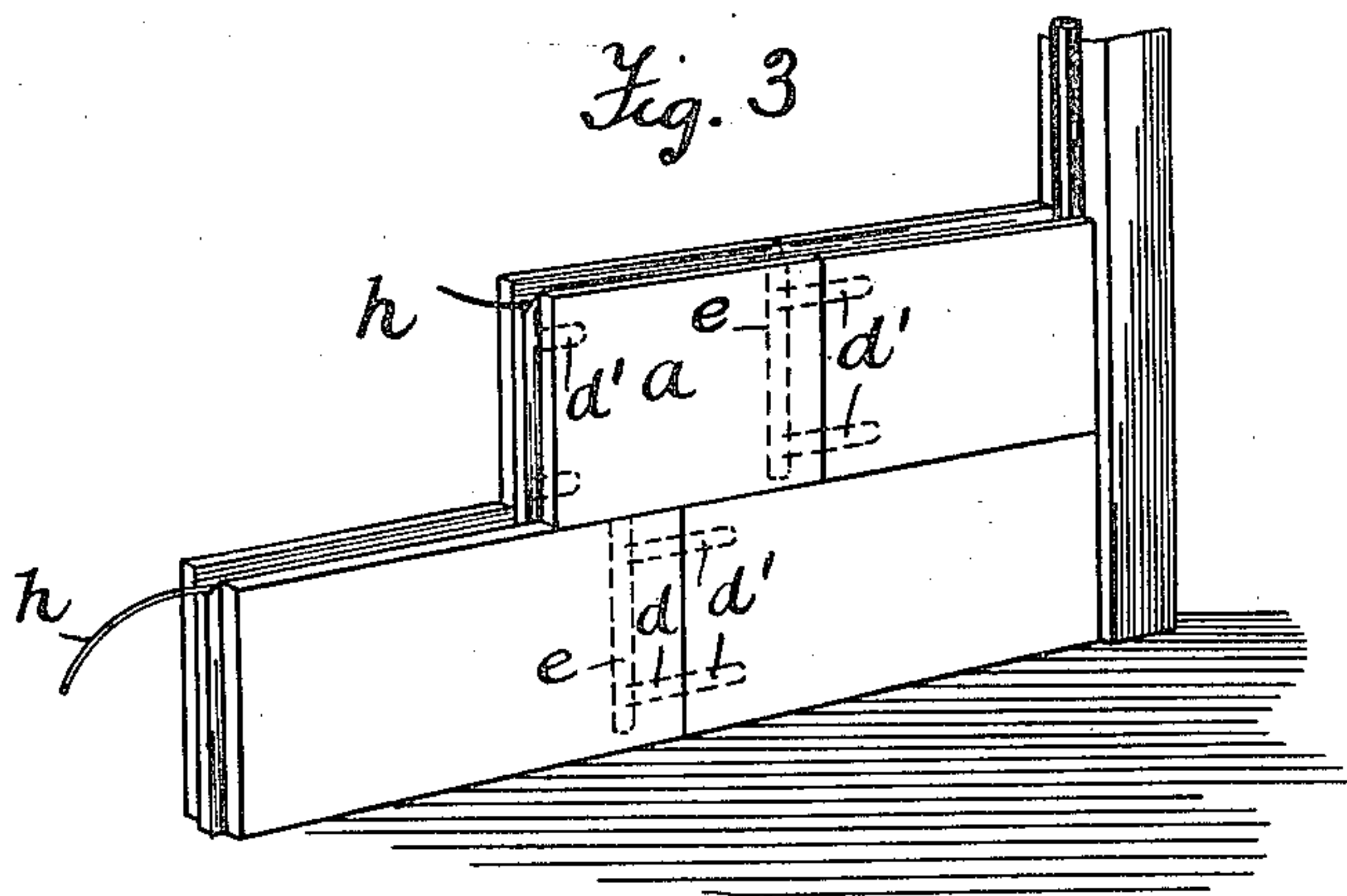
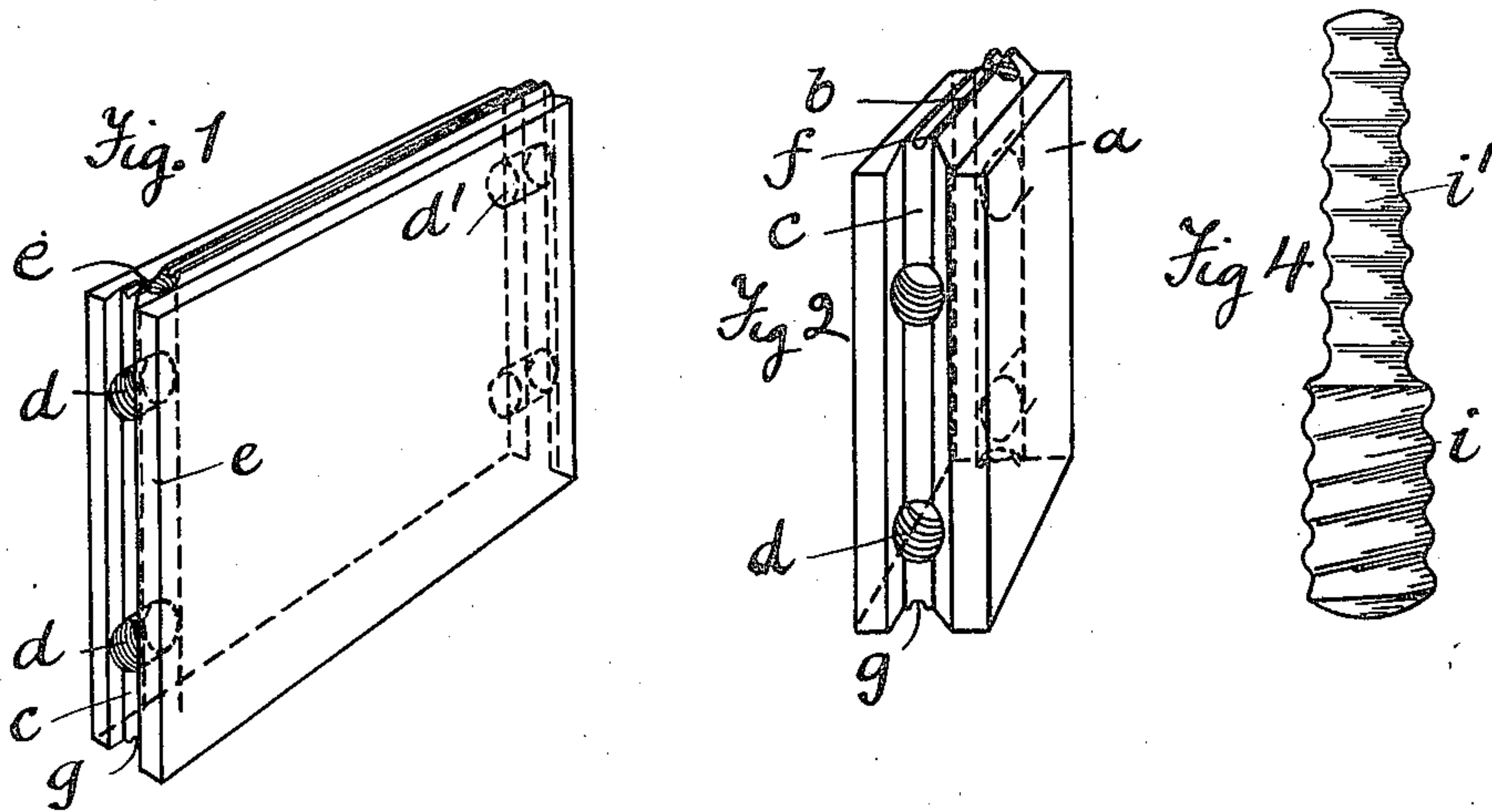
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PATENTED JAN. 21, 1908.

R. MALANÇON.

LOCK JOINT FOR WALL SLABS, BRICKS, TILES, OR THE LIKE.

APPLICATION FILED AUG. 14, 1906.



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ROBERT MALANÇON, OF LONDON, ENGLAND.

LOCK-JOINT FOR WALL-SLABS, BRICKS, TILES, OR THE LIKE.

No. 876,985.

Specification of Letters Patent.

Patented Jan. 21, 1908.

Application filed August 14, 1906. Serial No. 330,616.

To all whom it may concern:

Be it known that I, ROBERT MALANÇON, a citizen of the French Republic, residing at London, England, have invented certain new and useful Improvements in Lock-Joints for Wall-Slabs and the Like, of which the following is a specification.

This invention has reference to sectional fire-resisting or other partition slabs, bricks and the like elements and it consists in a new form of lock joint obtained by connecting adjoining sections or elements together by means of a hardsetting grouting which passes from screwed holes in one section or element to suitably facing holes, also screw threaded, in the juxtaposed section or element. At one side or end of the section these screwed holes are connected together by a transverse hole through which the grouting is supplied. The grouting is then poured in and passes from the transverse hole to the branch holes and their facing holes which form continuations thereof. In a modification the facing hole remote from the transverse hole or passage may be closed by a key or plug which has a narrower projection, serrated or screw threaded and passing into the hole which leads to the transverse passage. The space between this narrower projection and its surrounding wall may then be filled in with grouting and the juxtaposed slabs thus secured together.

The invention is illustrated upon the accompanying drawings in which,—

Figure 1 is a perspective view of one of the slabs, sections or elements. Fig. 2 is a similar view but more nearly an end elevation. Fig. 3 is a perspective view of part of a wall formed of these sections. Fig. 4 is an elevation on a larger scale of a plug or bolt intended to be inserted into facing holes in a modification of the invention. Fig. 5 is a view of juxtaposed slabs in section upon the fillet or tongue, when fitted with the plug according to Fig. 4.

The slab, section or element is composed of any suitable fire-proof, fire-resisting, sound-deadening or other material as desired. The body *a* is provided on two of its adjoining or meeting sides with a tongue or fillet *b* preferably of inverted V shape. On the remaining two adjacent or meeting sides of the body *a* a groove *c* is formed of corresponding shape so that the tongue *b* of the next block or element will fit therein.

At one of the sides of the slab the latter is

furnished with two or more parallel holes *d d* which are screwed with a thread which may be of coarse pitch. The opposite side of the slab is provided with holes *d'* equal in number to and corresponding in position with the holes *d*. The holes *d'* are similarly screw-threaded but while the holes *d d* are connected together by a screw-threaded hole or passage *e* extending from top to bottom of the slab and into which the holes *d d* deliver, the holes *d'* need not be provided with a passage *e*.

The tongue or fillet *b* is shown provided with a small half-round groove *f* and the groove *c* is also shown with a similar half-round groove *g*. A strip of binding wire *h* of white metal or other suitable material, as is well known for this purpose, may be employed if desired. When the slabs have been placed in position, and strengthened or bound if necessary by the aforesaid binding wire, a liquid grouting of plaster, cement or other suitable material is poured down the passage *e* and extends therefrom to the branch holes *d d d' d'* on each side of the joint. When the grouting sets hard the slabs are firmly locked together since the coarse threads around the holes in effect bite into the grouting and prevent any separation of the blocks or slabs. The slab may be otherwise of the ordinary construction and the tongues *b* and grooves *c* may be of any desired shape and section.

The slabs *a* are all of similar construction so that the tongues *b* of any one slab will engage the grooves *c* of juxtaposed slabs in such a way as to leave a flush joint and the holes *d d* face the holes *d' d'*. The arrangement is clearly illustrated in Fig. 3.

In a modification, see Figs. 4 and 5, I may arrange to insert a screwed plug or bolt *i i'* into one of the holes *d'* the projecting end *i'* of the bolt being of narrower section than the plug portion *i* but it is also screwed with a coarse pitch thread or serrated. The projecting part is then passed into the facing hole *d* when the blocks are juxtaposed, see Fig. 5, and the space between such narrowed bolt *i'* and the hole be filled with grouting as in the previous example. In lieu of the holes *d* and *d'* and passage *e* being screw-threaded they may be otherwise finished in any suitable way so as not to present a smooth or uniform bore for the grouting which must enter the threads, serrations or the like around the holes and passage.

Having thus described my invention what I claim as such and desire to secure by Letters Patent, is:—

1. A slab, tile or brick element of the
5 type described, comprising engaging means upon its edges whereby it may be fitted flush with juxtaposed elements, said element having holes in corresponding positions at each of two opposite ends thereof, and a
10 passage extending downwards into said element near one end through which grouting may be fed to said holes, to unite said element with the adjacent elements of the same course, said passage stopping short of the
15 base of said element, to prevent contact of said grouting with elements of the underlying course.

2. In a slab, brick or tile for the purposes described, having a plurality of holes at one
20 end of the slab body and correspondingly

aligned holes at the opposite end thereof, said holes extending inwardly of the slab in the plane thereof, a transverse passage extending from the top towards the bottom of the slab and meeting the inner ends of the holes 25 at one end of the slab, in combination with a bolt designed to couple the ends of adjacent blocks, said bolt being fitted into one end of one block and having a reduced portion adapted to extend into the orifice at 30 the opposite end of the adjacent block, said reduced portion leaving a space for the access of grouting from the transverse passage.

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

ROBERT MALANÇON.

Witnesses:

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