

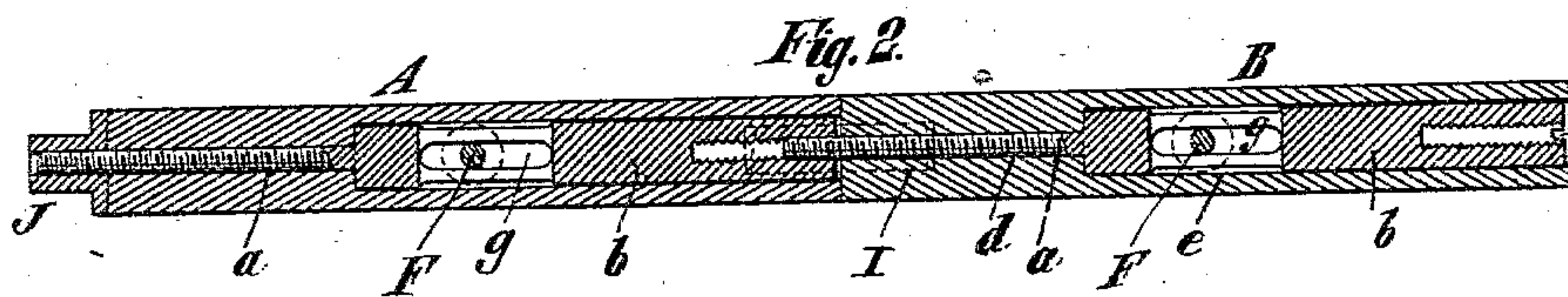
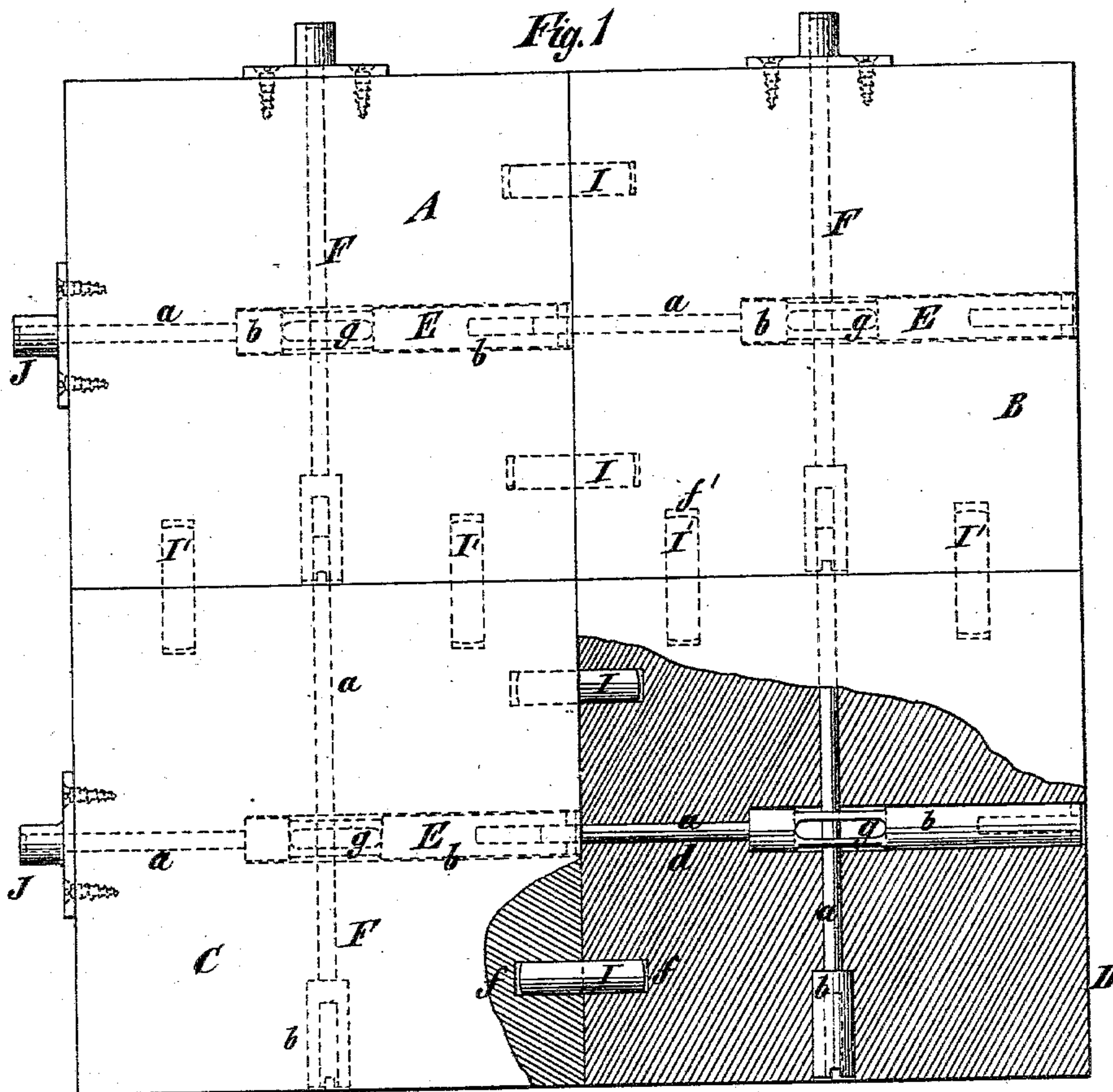
(No Model.)

A. J. B. A. CHATAIN.

FLOORING.

No. 283,375.

Patented Aug. 21, 1883.



Witnesses:

James R. Bowen.
Alfred L. Brown.

Inventor:
Armand J. B. A. Chatain,
by his attorney,
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UNITED STATES PATENT OFFICE.

AMAND J. B. A. CHATAIN, OF NEW YORK, N. Y.

FLOORING.

SPECIFICATION forming part of Letters Patent No. 283,375, dated August 21, 1883.

Application filed April 27, 1883. (No model.)

To all whom it may concern:

Be it known that I, AMAND J. B. A. CHATAIN, of New York, in the county of New York and State of New York, have invented a certain new and useful Improvement in Flooring, of which the following is a specification.

This improvement relates to flooring which is composed of slabs of stone, wood, or other material, but more particularly to flooring which is composed of wooden slabs of mosaic-work.

The object of the improvement is to provide a more effective means for securing such slabs together and for maintaining them in their proper relative positions.

In the accompanying drawings, Figure 1 is a top view of a number of slabs and means embodying my improvement for securing them together, certain parts of the slabs being removed or broken away the better to illustrate the means whereby they are secured together; and Fig. 2 is a vertical section of such slabs and a sectional view of the means whereby they are secured together.

Similar letters of reference designate corresponding parts in both figures.

A B C D designate four slabs of stone, wooden mosaic-work, or other material.

E F designate bolts whereby the slabs are secured together. Each of the bolts E consists of a shank, *a*, externally screw-threaded at the end, and a head, *b*, provided at the end with an internally-screw-threaded socket. The socket in the head of each of these bolts is of such a size and its screw-thread of such a pitch that its shank may engage with the head of an adjacent bolt E and its head may engage with the shank of an adjacent bolt E arranged in line with it. In the end of the head of each bolt E is a notch, *c*, capable of receiving a screw-driver. The slabs A B have cavities *d*, suitable for receiving the shanks of the bolts E, and cavities *e*, suitable for receiving the heads of these bolts. These blocks have their bolts E inserted in them, and dowels or dowel-pins I fitted in opposite cavities, *f*, one on each side of the bolts, and by means of a screw-driver inserted in the bolt E of the slab B said bolt is screwed into the bolt E of the slab A. These slabs are thus firmly secured together, and the dowels prevent them from

twisting or warping relatively to each other. Assuming the block A is a block at the edge of the flooring, it will have a screw-threaded socket, J, applied to its edge to receive the shank of the bolt E of that block. The slabs C D are secured together in the same way by bolts E. The heads of the bolts E extend past the middle of the slabs in which they fit, and at about the middle of the slabs are provided with transverse and intersecting slots *g*. By turning the bolts a quarter of the way around, either of the intersecting slots may be arranged in the plane of the top and bottom of the blocks, and hence opposite the edges of the blocks. The notch *c* of each bolt is in line with one of its slots *g*; hence the notch serves as an indicator of the position of these slots and enables the bolt to be turned, while the slots are concealed from view, into such position as to bring one of the slots parallel with the top and bottom of the slab into which the bolt is fitted. One of the slots must occupy such position. The slab A is secured to the slab C and the slab B to the slab D by the bolts F. These bolts F are precisely like the bolts E, except that their heads are very much shorter—so short, indeed, that they do not extend to the middle portion of the slabs in which these bolts fit. These bolts are inserted into the slabs, which they unite, and screwed together in the same manner as the bolts E. Their shanks pass through the slots *g* of the bolts E, and dowels or dowel-pins I are fitted into cavities *f'* to prevent the twisting or warping of the slabs. If the slabs C D are end slabs, they will have applied to their outer edges screw-threaded sockets to receive the ends of the shanks of the bolts F. Slabs thus united will be secured together, so that they will not warp or shrink to any material extent independently of each other. If any shrinkage should occur, it can be readily compensated for by tightening the bolts. Where the slabs are made of wood the bolts should be screwed up so tightly as to slightly compress the fiber of the wood, for then considerable shrinkage can occur without marring the appearance of the flooring.

The bolts E F may be made of malleable iron or other appropriate material. By intersecting and engaging together, the two series

of bolts effectually prevent the warping or setting of the slabs so as to break joints.

What I claim as my invention, and desire to secure by Letters Patent, is—

5 1. The combination, with a number of slabs, of a bolt passing through each slab, and provided with a head fitting in a cavity in its slab, and a shank fitting in the head of a bolt in an adjacent slab, the said bolts being thus
10 engaged with one another, substantially as specified.

2. The combination, with a number of slabs, of two series of bolts extending through the slabs and engaging with one another, substan-
15 tially as specified.

3. The combination, with a number of slabs, of two series of bolts extending through the slabs and engaging with one another, the bolts of one series passing through the bolts of the other series, substantially as specified. 20

4. The combination, with a number of slabs, of two series of bolts extending through the slabs and engaging with one another, and dowels or dowel-pins extending between the slabs, substantially as specified.

AMAND J. B. A. CHATAIN.

Witnesses:

T. J. KEANE,
ED L. MORAN.