

M. CARROLL.
MOLD.

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991,606.

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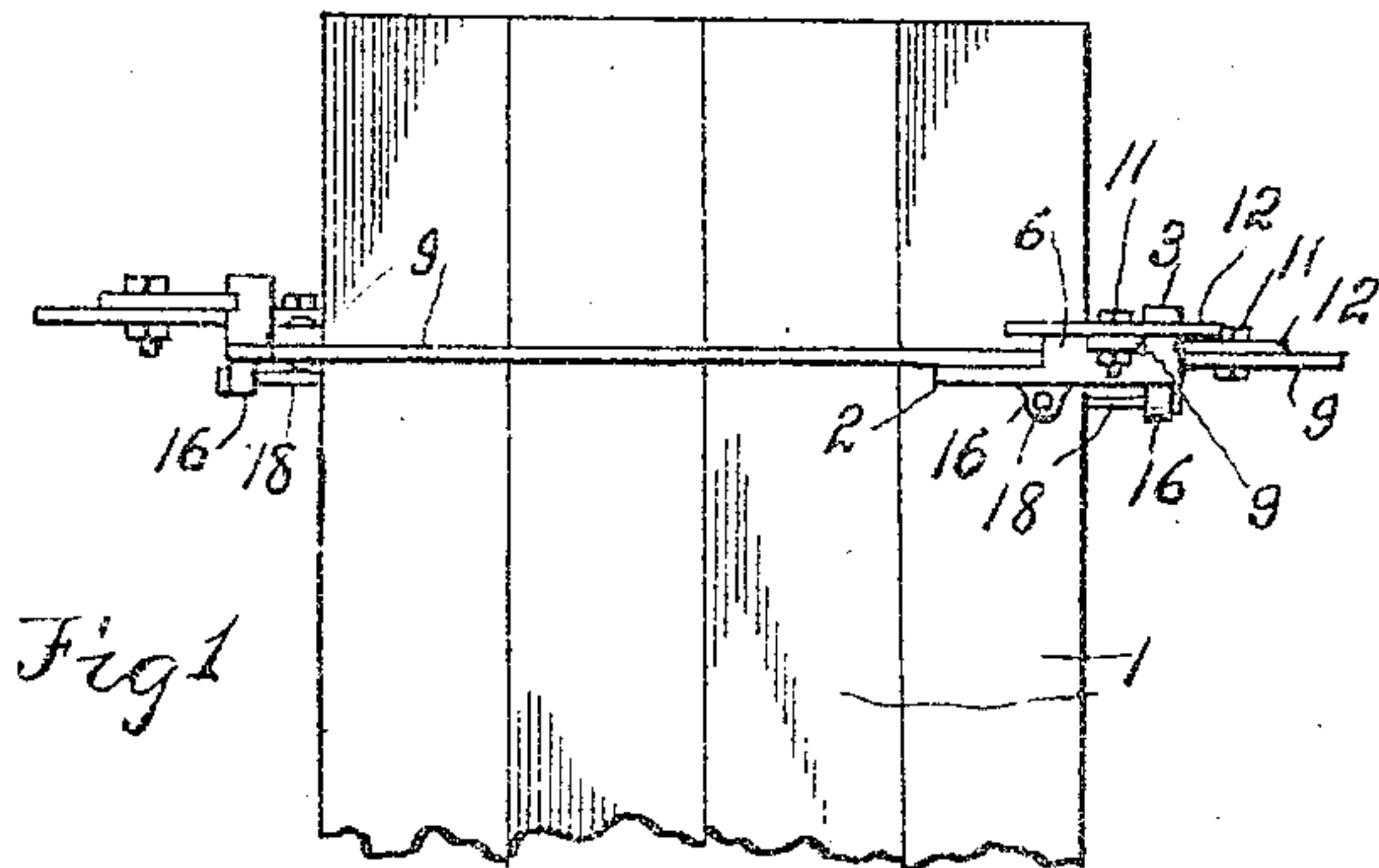


Fig 1

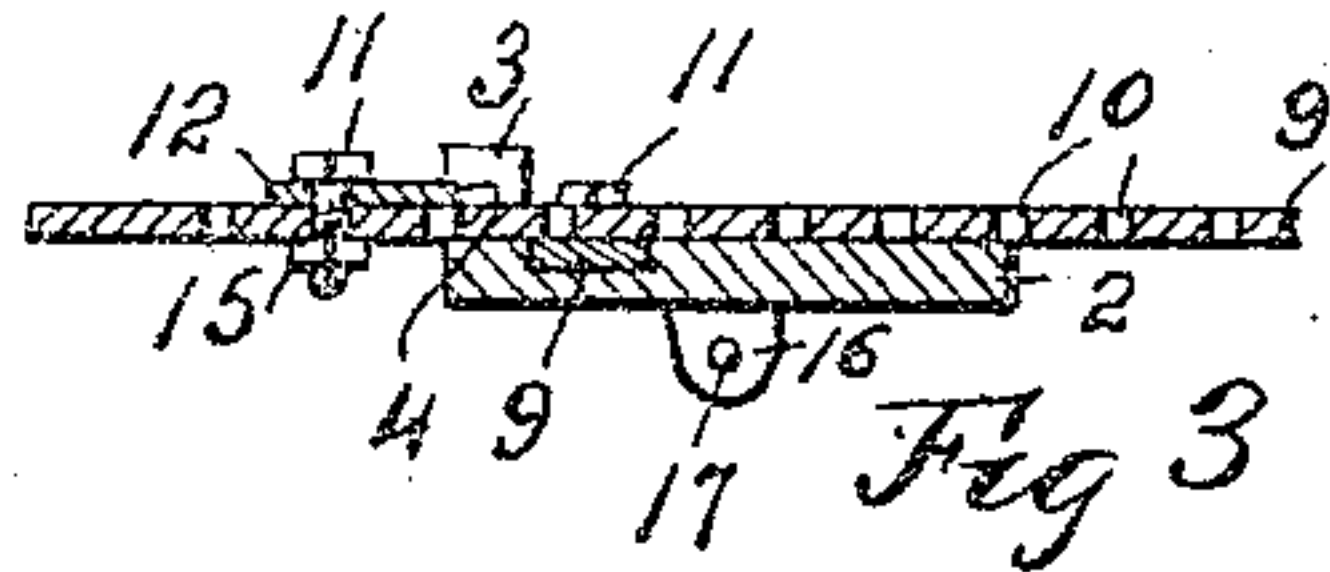


Fig 3

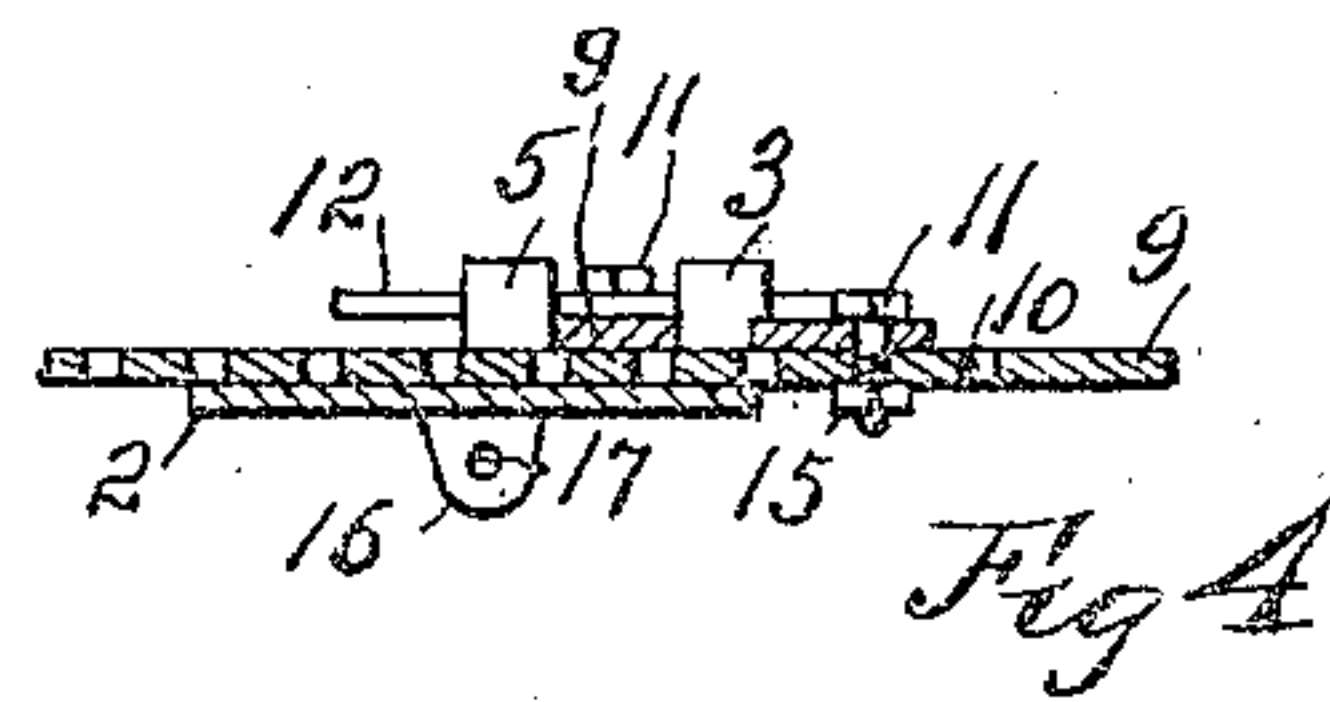


Fig 4

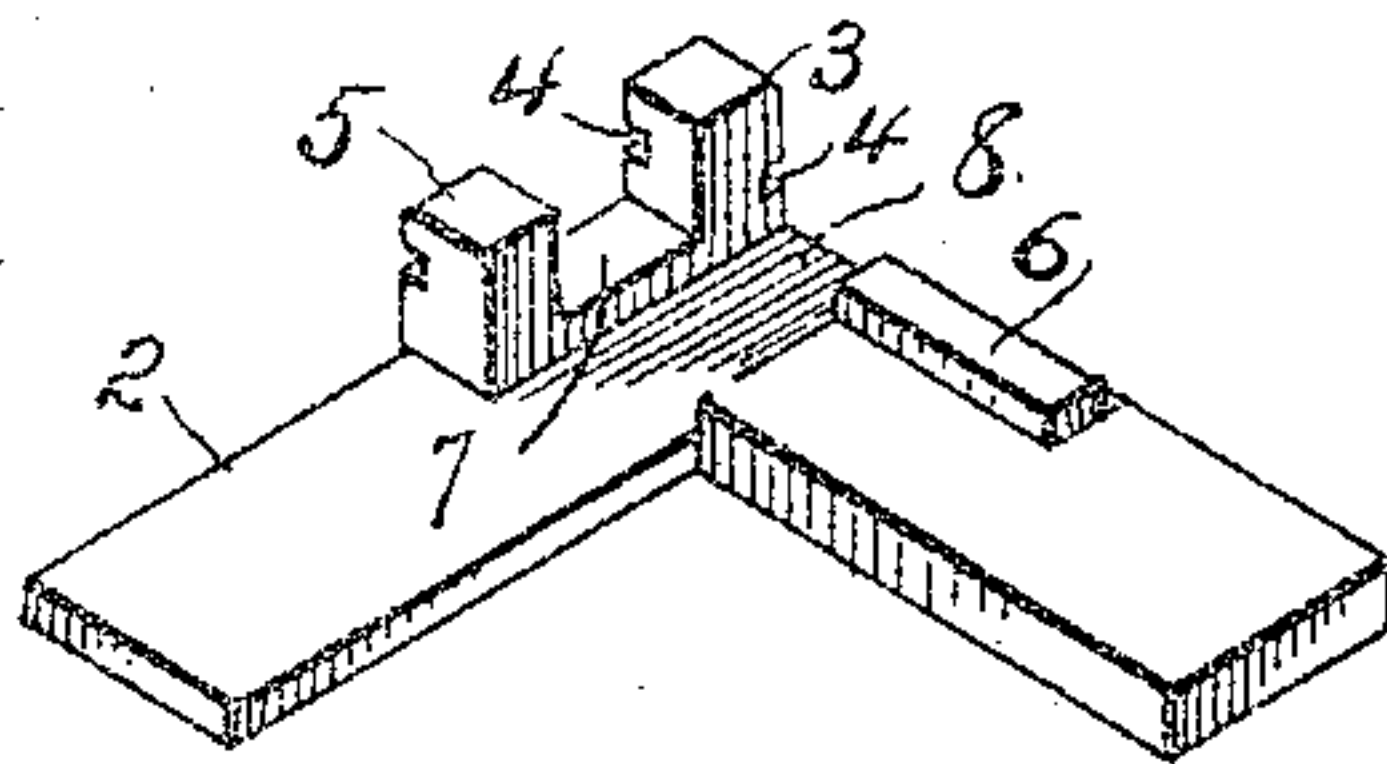


Fig 5

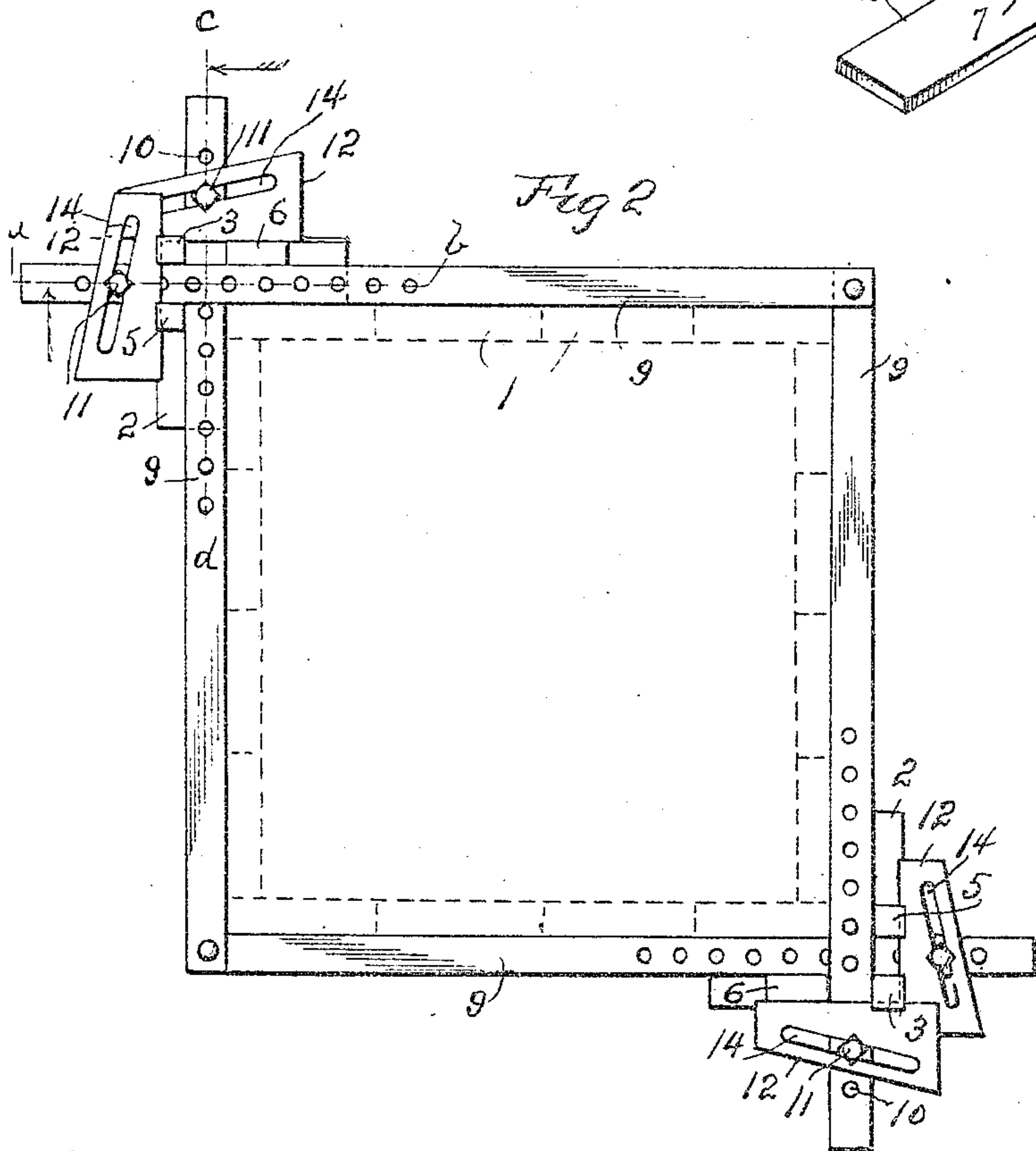


Fig 2

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MARTIN CARROLL, OF KANSAS CITY, MISSOURI.

MOLD.

991,606.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, MARTIN CARROLL, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Molds, of which the following is a specification.

My invention relates to molds.

It relates particularly to a clamping mechanism by which the members of a mold may be releasably held together, and is particularly adapted for use in connection with molds for making concrete columns.

The novel features of my invention are hereinafter more fully described and claimed.

In the accompanying drawings illustrative of the preferred form of my invention, Figure 1 is an elevation, showing the clamping mechanism mounted on a column mold. Fig. 2 is a plan view, the mold members being shown in dotted lines. Fig. 3 is a vertical section on the dotted line *a-b* of Fig. 2. Fig. 4 is a vertical section on the dotted line *c-d* of Fig. 2. Fig. 5 is a perspective view of one of the corner blocks.

Similar reference characters denote similar parts.

1 denotes the mold members comprising vertical planks disposed edge to edge to form a mold rectangular in cross section. Two right angled clamping blocks 2 are provided. The two blocks are alike so that a description of one will suffice for each. Each block 2 is provided on its upper side with a projection 3, preferably of rectangular form and having preferably in its two outer sides recesses 4 disposed horizontally at right angles to each other. The block 2 may also have two projections 5 and 6 which are separated from the projection 3 by two grooves 7 and 8 disposed at right angles to each other and adapted to have lie therein horizontal clamping bars 9 which are pivoted respectively to two similar clamping bars 9 which are adapted to lie in the grooves 7 and 8 of the other block 2.

Each bar 9 is provided with a longitudinal row of holes 10 adapted to receive therein vertical bolts 11 which serve as abutments against which may bear respectively four wedges 12, each comprising a flat horizontal plate, preferably provided with an obliquely disposed slot 14 through which extends the adjacent bolt 11 the head of which serves to hold the wedge against the adja-

cent bar 9. The other ends of the bolts 11 may have mounted on them nuts 15 which bear against the under sides of the bars 9. The inner straight edges of the wedges 12 are adapted for insertion in the recesses 4 of the projections 3, thereby holding the wedges and the bars 9 against vertical movement relative to the blocks 2. Each block 2 may have one or more downwardly extending projections 16 having horizontal holes 17 therethrough for the insertion of nails 18, or similar devices, adapted to be driven into the mold members 1 for detachably temporarily supporting the blocks 2 until the wedges 12 have been tightened. The projections 5 and 6 serve to support the inner edges of the wedges 12 in the same manner in which the projections 3 support said wedges.

In operating my invention, the mold members 1 having been assembled in the proper vertical positions, the blocks 2 are mounted thereon at diagonally opposite corners of the mold to which they are secured by nails 18 extending through the projections 16 into the members 1. The clamping bars 9 are then made to respectively embrace the four sides of the mold, and are mounted in the grooves 7 and 8 between the projections 3 and the mold members 1, the two bars of one pair crossing the two members of the other pair at right angles. The wedges 12 are then mounted on the tops of the bars 9 and disposed with their edges in the recesses 4. The bolts 11 are then passed through the slots 14 of the wedges and also through the adjacent holes 10. The nuts 15 are then mounted on the bolts 11 below the bars 9, after which the wedges are driven to tighten them against the bolts 11 and projections 3, 5 and 6, thus tightly clamping the mold members 1 together. To remove the clamping bars from the mold, the operation just described is reversed.

My invention may be subjected to many modifications, within the scope of the appended claims, without departing from its spirit.

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

1. In a mold, a device for clamping one side of a mold, a block for clamping the opposite side of the mold, and having a projection having a recess in its outer side, a clamping bar secured to said device and

adapted to extend across the block between the projection and the mold, an abutment adjustable length wise of said clamping bar, and a wedge insertible in said recess and
5 adapted to bear against said block and said abutment.

2. In a mold, a device for clamping one side of a mold, a block for clamping the opposite side of the mold and having a projection provided with a recess in its outer
10 side, a clamping bar secured to the device and adapted to extend across said block between the projection and the mold and having a longitudinal row of holes, a wedge insertible in said recess and having a slot disposed obliquely to the portion disposed in
15 said recess, and a bolt insertible through said slot and through any of said holes.

3. In a mold, a pair of devices for clamping adjacent sides respectively of a rectangular mold, a corner block for clamping the other two sides and having a projection having two recesses disposed at right angles to each other in its two outer sides, two
20 clamping bars secured respectively to said devices and adapted to extend at right angles across each other between the mold and said projection, two wedges for insertion respectively in said recesses, and two abutments for respectively securing the wedges to said bars and respectively adjustable
25 lengthwise of said bars.

4. In a mold, a pair of devices for clamping adjacent sides respectively of a rectangular mold, a corner block for clamping the other two sides and having a projection hav-

ing two recesses in two outer sides, two clamping bars secured to said two devices respectively and adapted to extend at right angles across each other between the projection and the mold and having each a longitudinal row of holes, two wedges adapted to be disposed respectively in said recesses and to bear against said projection, and two
40 bolts respectively insertible in the holes of said two rows and adapted to have the wedges bear against them.

5. In a mold, a pair of devices for clamping adjacent sides respectively of a rectangular mold, a corner block for clamping the other two sides and having a projection having two recesses in its outer adjacent sides, two clamping bars secured respectively to said devices and adapted to extend at right angles across each other between the
55 projection and the mold, the bars having each a longitudinal row of holes, two wedges insertible respectively in said recesses and having each a slot disposed obliquely to the part disposed in said recess, and two bolts
60 insertible respectively through said slots and through the holes in said two bars for securing the wedges to said bars and for supporting said wedges.

In testimony whereof I have signed my name to this specification in presence of two
65 subscribing witnesses.

MARTIN CARROLL.

Witnesses:

E. B. HOUSE,

FLORENCE M. VENDIG.