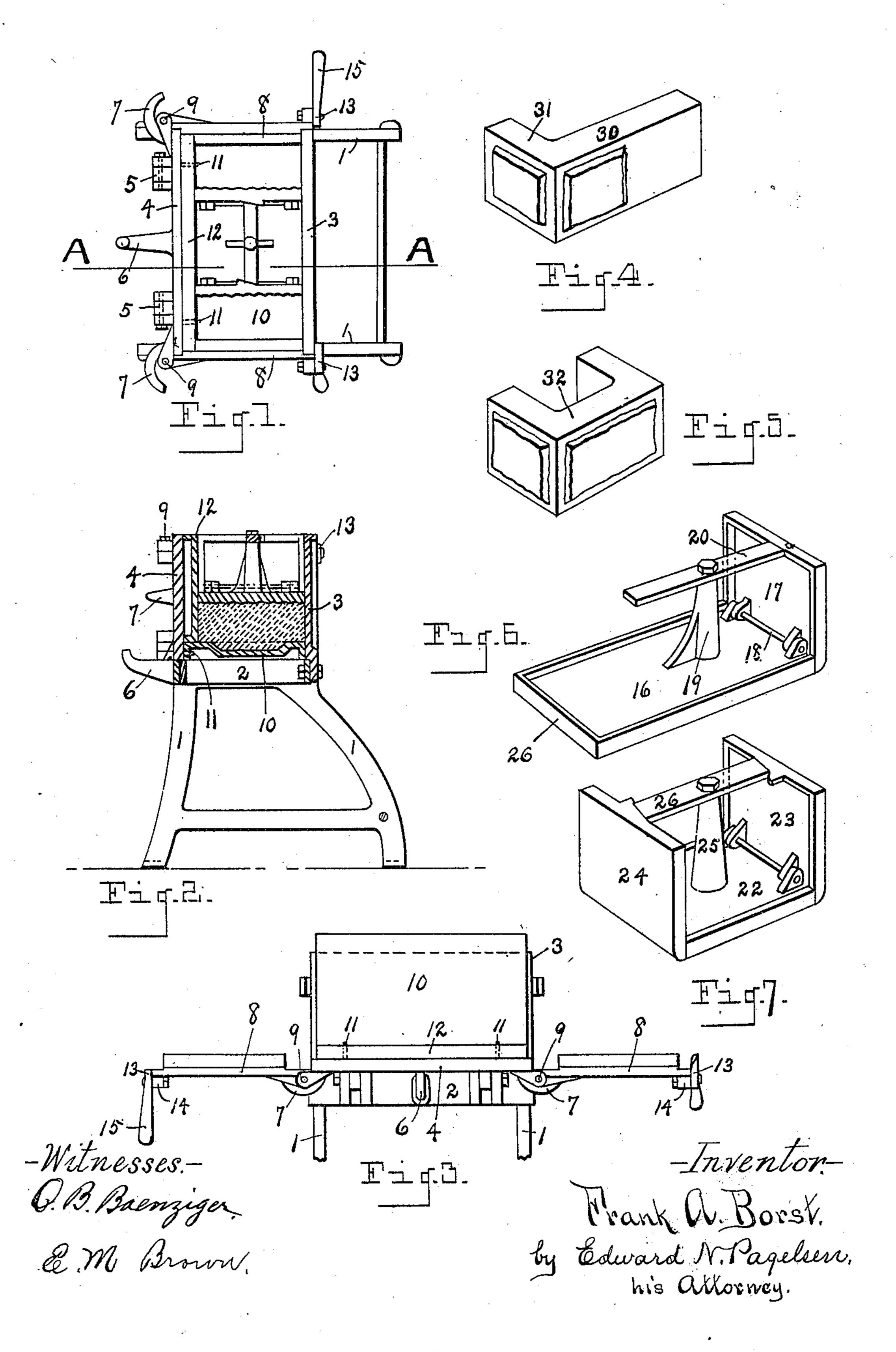
F. A. BORST.
BUILDING BLOCK MOLD CORE.
APPLICATION FILED AUG. 20, 1906.



UNITED STATES PATENT OFFICE.

FRANK A. BORST, OF SOUTH BEND, INDIANA, ASSIGNOR TO IDEAL CONCRETE MACHINERY COMPANY, OF SOUTH BEND, INDIANA, A CORPORATION OF INDIANA.

BUILDING-BLOCK-MOLD CORE.

No. 837,662.

Specification of Letters Patent.

Patented Dec. 4, 1906.

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To all whom it may concern:

Be it known that I, Frank A. Borst, a citizen of the United States, and a resident of South Bend, in the county of St. Joseph 5 and State of Indiana, have invented a new and Improved Building-Block-Mold Core, of which the following is a specification.

My invention relates to molds for the forming of concrete building-blocks, par-10 ticularly blocks that may be employed for the forming of chimneys, flues, and corners; and the object of my improvement is to provide cores for block-molding machines that shall be strong and easily withdrawn and 15 that can be cheaply constructed.

My invention consists of members hinged together and means to hold the members at a predetermined angle to each other.

It consists more particularly in three of 20 such members hinged together, a post formed on the middle member, and a brace pivoted on said post and adapted to engage the two outer members to hold them in position.

In the drawings, Figure 1 is a plan of a 25 block-molding machine with a collapsible core, such as shown in Fig. 7. Fig. 2 is a vertical cross-section on the line A A of Fig. 1. Fig. 3 is a front view of the block-molding machine in its discharging position. 30 Figs. 4 and 5 are views of blocks molded on this machine with the aid of the collapsible cores shown in Figs. 6 and 7, respectively.

Similar reference characters refer to like parts throughout the several views.

In the drawings, 1 represents the legs, and 2 the top of the frame, of a concrete-block machine. To the rear of the frame is secured the back plate 3 of the mold proper. The front plate 4 is hinged to the frame at 5 40 and when swung forward to discharging position rests on the arm 6, extending forward from the frame. This front plate has arms or horns 7 formed on it, which arms are adapted when the mold is open to support 45 the end doors or plates 8, which are hinged to the front plate 4 at 9. A face-plate 10, normally resting on the frame, is mounted on | the pins 11, secured to the front plate, and a pallet 12 rests against the front plate and on | Fig. 7 in a manner similar to that just de-50 the face-plate. The mold is locked together I scribed.

by means of the cams 13, pivoted on the lugs 14 on the end plates, which cams engage back of the back plate, as shown in Fig. 1.

When the block has been molded, the camhandles 15 are raised and the front plate 55 swung down to horizontal position, as shown in Fig. 3, together with the pallet 12. The bottom plate is carried up to vertical position by means of the pins 11 and the end plates 8 permitted to drop down to the posi- 60 tion shown in Fig. 3. The pallet, and with it the molded block, is now carried away and a new pallet substituted and the mold again closed.

For the construction of chimneys and flues 65 it is often desirable to mold blocks of the form shown in Figs. 4 and 5. To do this, cores, such as shown in Figs. 6 and 7, may be employed. The core shown in Fig. 6 is formed of the leaves or members 16 and 17, 70 hinged together on the rod 18. A post 19, formed on the member 16, carries a pivoted brace or bar 20, which contacts with the outer edge of the leaf 17, and thus holds it at the proper angle. The inner edges of these 75 members contact in such a manner as to prevent movement beyond an angle of about ninety degrees.

The core shown in Fig. 7 has the three members 22, 23, and 24. The brace 26 on 80 the post 25 on the middle member contacts with the free edges of the outer leaves to prevent them from moving inward, the beveled end of the brace having a strong wedging action on the leaves 23 and 24.

When it is desired to mold a block 30, such as shown in Fig. 4, the mold is filled and leveled to the proper depth. The core of Fig. 6 is then placed on the concrete with the edge of the leaf 16 against an end plate 8. 9c The member 17 is then swung out and locked by means of the brace 20, when the space between this member 17 and its adjacent door is rammed full of concrete to form the part 31. The brace 20 is then swung out of the 95 way, the member 17 swung in, and the core is lifted out of the mold. The blocks 32, Fig. 5, are molded by employing the core of

Having now explained my improvements, what I claim as my invention, and desire to

secure by Letters Patent, is—

1. A core for concrete - block machines 5 comprising members hinged together and adapted to have their adjacent ends contact when the members form a right angle, a post attached to one of said members, and a brace pivoted on said post and adapted to engage to the free end of another member and lock the same in position.

2. A core for concrete-block machines comprising three members, hinged together and adapted to have adjacent ends contact 15 when the adjacent members form substan-

tially right angles, a post on the middle member, and a brace pivoted on said post and adapted to engage the free ends of the other members to lock the same in position.

3. A core for concrete - block machines 20 comprising a main member, a leaf hinged thereto, and a brace to hold said leaf at a predetermined angle to the main member.

In testimony whereof I have signed my name in the presence of two subscribing wit- 25

FRANK A. BORST.

Witnesses:

G. B. HOPKINS, G. A. AYRAULT.