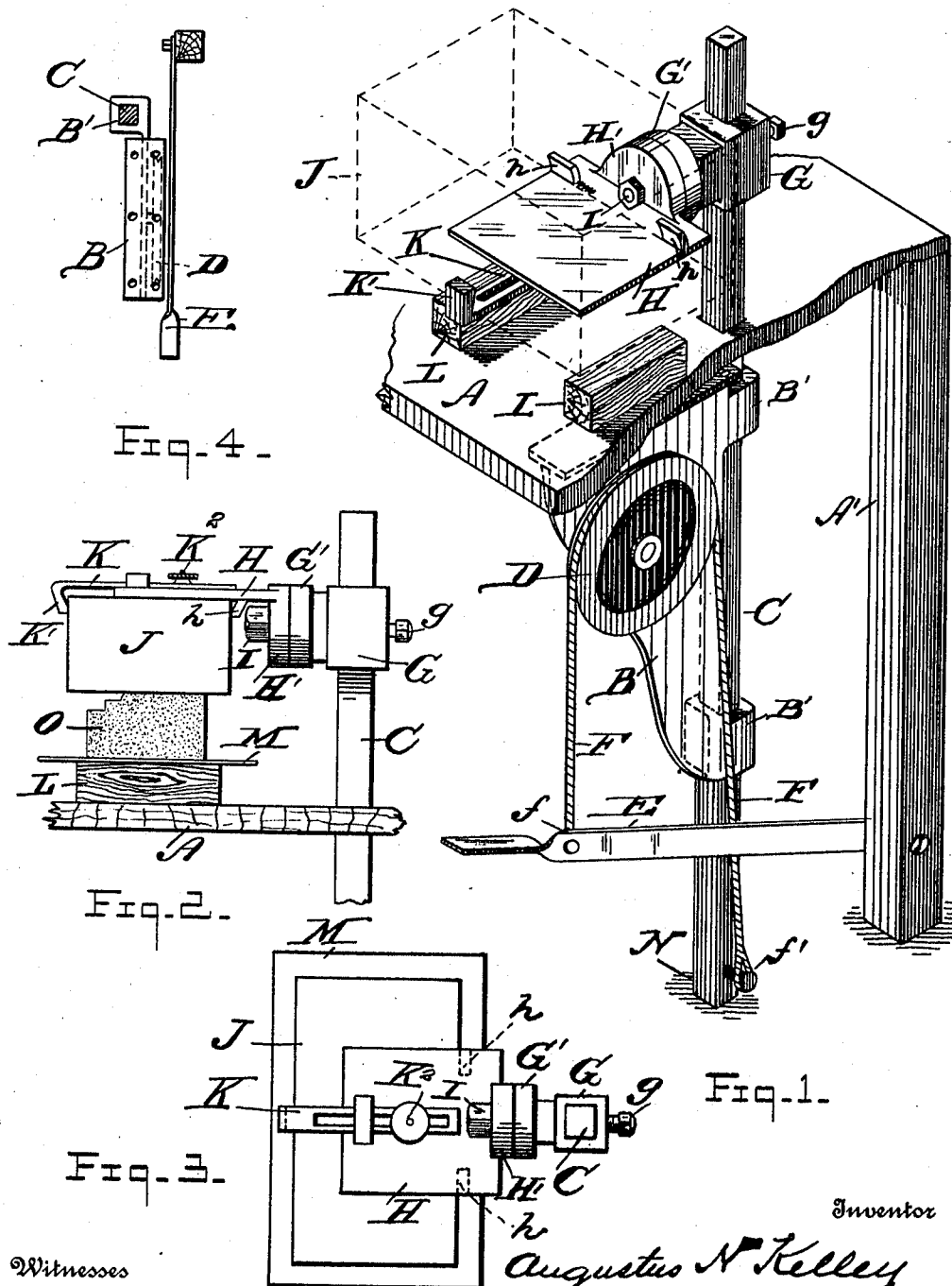


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CORE AND MOLD MAKING MACHINE.
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CORE AND MOLD MAKING MACHINE.

1,003,755.

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To all whom it may concern:

Be it known that I, AUGUSTUS N. KELLEY, citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Core and Mold Making Machines, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improvement in machines for making cores, shown in the accompanying drawings and more particularly pointed out in the following specification and claims.

The object of my invention is to provide a machine of the bench type adapted for making cores or small molds, by the use of which the sand may be tamped in the core box,—the box then reversed and subsequently lifted, leaving the core upon a facing plate (placed over the core box before reversing it) whereby it may be removed from the machine.

Other advantages and improvements will hereafter appear.

In the drawings accompanying this specification:—Figure 1 is a perspective view of the device showing a fragmentary portion of the bench on which it is installed. Fig. 2 is a fragmentary elevation showing the core box in the act of being raised leaving the core upon its facing plate. Fig. 3 is a plan view of the device in the position shown in Fig. 2. Fig. 4 is a detail plan view with the bench top removed.

Referring now to the letters of reference placed upon the drawings:—A is a bench, and A' one of its supporting legs.

B is a depending bracket bolted or otherwise secured to the underside of the bench;—said bracket being formed with sockets or guides B' to receive the reciprocating bar C which is preferably rectangular in cross-section to provide against rotation.

D is a sheave journaled on the bracket B, and E is a foot lever pivoted to the leg A'.

F is a cable which passes around the sheave D, its ends *f* and *f'* being respectively engaged to the foot lever E and to the reciprocating bar C.

G is a casting sleeved on the reciprocating bar C, secured thereto by the bolt *g*. The

casting is provided with a projecting arm on the end of which is formed a disk-shaped head G'.

H is a plate for supporting the core box provided at one end with an upstanding flange H', rotatably engaged to the disk-shaped head G', by the bolt I.

h, h, denote lugs preferably integral with the plate H against which the core box J is forced when mounted thereon.

K is an adjustable clamping bar to secure the core box to the plate H. It operates in conjunction with the lugs *h* on the plate H, having at one end a hook K' adapted to engage the wall of the core box, the bar being slotted for the passage of the bolt K² (in turn provided with a thumb-nut) projecting from the plate H.

L, L, indicate blocks mounted on the bench top to receive the impact of the core box when jolted and to support the facing plate M, placed over the core box when the latter is in position shown in Fig. 1 of the drawings.

Having indicated the several parts by reference letters, the operation of the device will be readily understood.

The core box represented by dotted lines in Fig. 1, is placed upon the supporting plate H and is securely clamped thereto by the bar K and bolt K². The core box is then placed in position and the sand delivered thereto, it is then tamped by raising and releasing the reciprocating bar C through successive operations of the foot lever. Upon releasing the lever, the bar C is permitted to drop, which upon striking the floor N produces a jolting of the box, thereby ramming the sand. The jolting may be accomplished by the plate H striking the blocks L, L, as previously indicated. Upon the completion of the core or mold, the facing plate M is placed over the box; the operator thereupon manually reverses the core box by causing the plate H to rotate on the bolt I,—the operator preferably holding the plate in contact with the box while the latter is reversed—it may, however, be clamped thereto if preferred. I find in making small pattern that it is not necessary to clamp the plate to the box as the operation may be much more rapidly accomplished by holding it in position. The plate and core box being now upon the blocks L, L, the operator depresses the foot lever E which action lifts the box from the

plate M, leaving the core or mold O resting thereon. It may then be removed and upon returning the core box to its initial position, the operation just described is repeated.

By making the casting G movable upon the bar C, the core box platform may be adjusted to accommodate the size or requirements of the box.

Having thus described my invention, what I claim is:—

1. In a machine of the character described, a reciprocating bar, means for supporting and guiding the bar, a rotatable core box platform adjustably secured to the bar, a foot lever, a sheave journaled in the frame of the machine, and a cable passing around the sheave engaged to the lever and to the reciprocating bar.

2. In a machine of the character described, a reciprocating bar, means for guiding the bar, a slidable element adapted for engagement to the bar, a platform pivoted to the slidable element, means carried by the platform for securing a core box thereon, a foot lever, a sheave journaled in the frame of the

machine, and a cable encircling the sheave and engaged with the foot lever and reciprocating bar.

3. In a machine of the character described, a bench, a bracket attached thereto, a reciprocating bar arranged in said bracket, means for reciprocating the same, a platform adjustably secured to the bar adapted for manual rotation, and clamping means on said platform for securing a core box thereon.

4. In a machine of the character described, a bracket attached thereto, a reciprocating bar arranged in said bracket, means for reciprocating the same, a suitable adjustable casting secured to the bar adapted to support a platform, a platform rotatably engaged with the casting, and means for securing a core box to the platform.

In testimony whereof, I sign this specification in the presence of two witnesses.

AUGUSTUS N. KELLEY.

Witnesses:

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CHAS. W. GUSTAVUS.