No. 813,060. PATENTED FEB. 20, 1906.

G. D. ROWELL.

LIFTER FOR LIFTING HOLLOW BLOCKS.

APPLICATION FILED SEPT. 27, 1905.

Fig. 1.

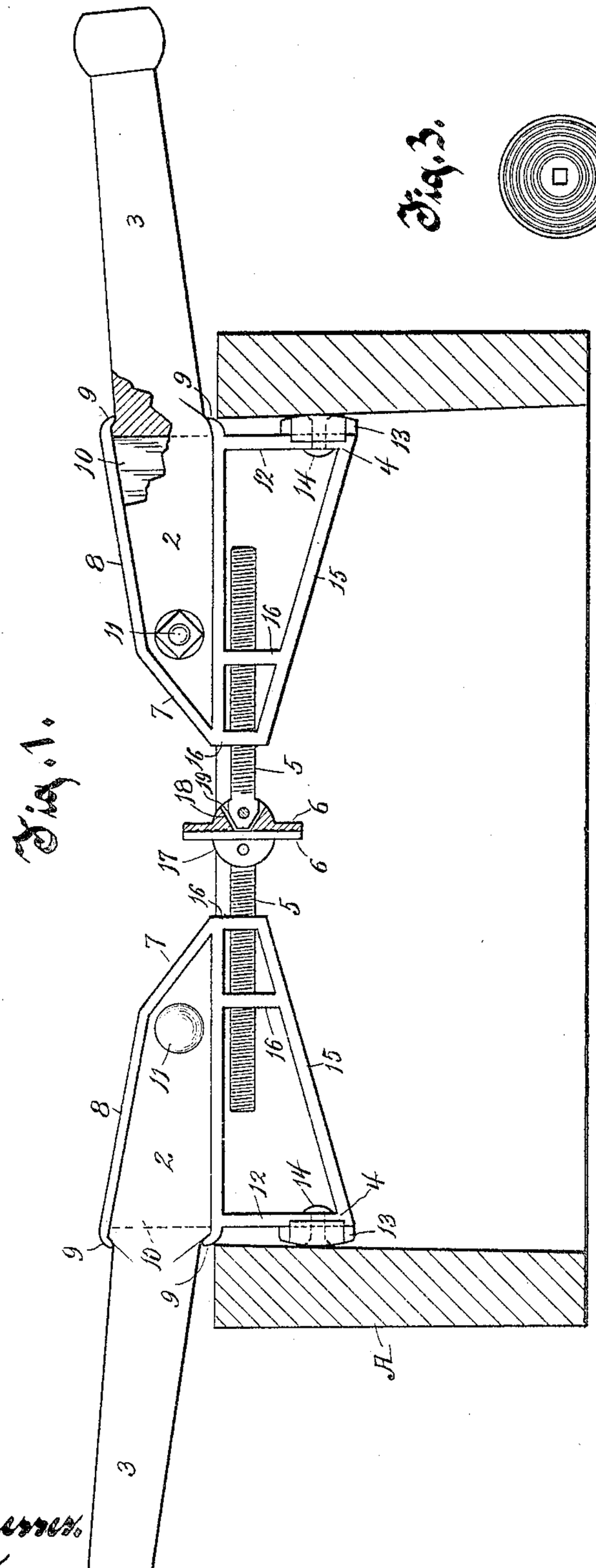



Fig. 3.




Fig. 2.

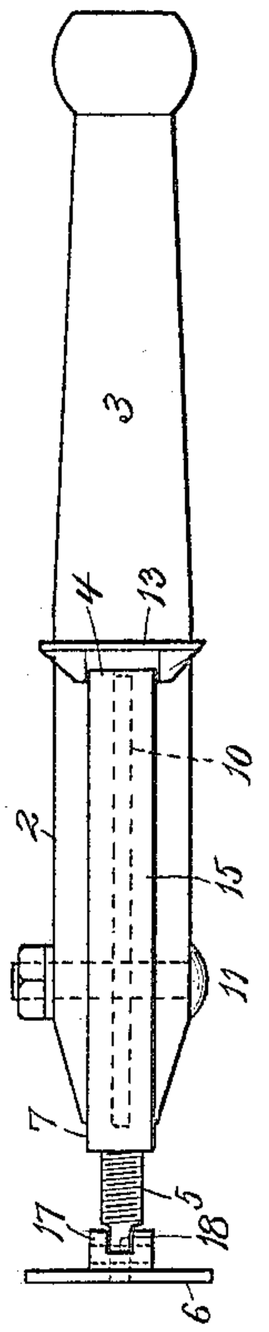
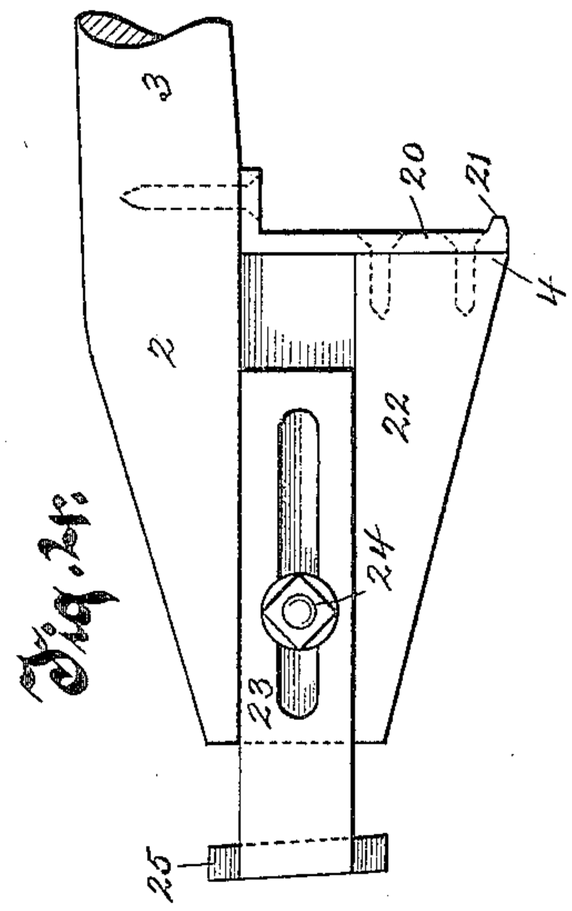



Fig. 4.




Witnesses.
C. H. Keeney.
Alma A. Klug.

Inventor.
Guilford D. Rowell
By Benedict Thrasell
Attorneys.

# UNITED STATES PATENT OFFICE.

GUILFORD D. ROWELL, OF APPLETON, WISCONSIN, ASSIGNOR OF ONE-HALF TO DUDLEY G. ROWELL, OF APPLETON, WISCONSIN.

## LIFTER FOR LIFTING HOLLOW BLOCKS.

No. 813,060. Specification of Letters Patent. Patented Feb. 20, 1906.

Application filed September 27, 1905. Serial No. 280,267.

*To all whom it may concern:*

Be it known that I, GUILFORD D. ROWELL, residing in Appleton, in the county of Outagamie and State of Wisconsin, have invented new and useful Improvements in Lifters for Lifting Hollow Blocks, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

My invention is an improvement in lifters that are employed for lifting, especially by hand, those blocks that are hollow, having either a recess in or an opening through the block, in which recess or opening the engaging portion of the lifter is placed for contact with and hold on the walls of the recess or opening.

The invention consists of the device, its parts, and combinations of parts, as herein described and claimed, or the equivalents thereof.

In the drawings, Figure 1 represents a hollow block in section with two of my improved lifters, one in section in parts, in position as employed for lifting the block, in those cases where the block is so large as to require the use of two lifters instead of one. Fig. 2 is a bottom plan of one of the lifters. Fig. 3 is a front view of the gripping head or plate; and Fig. 4 is a side elevation of a slightly-different form of lifter, the handle being broken off for convenience of illustration.

In the drawings, A represents a hollow block of concrete or other heavy material. My improved lifter (shown therewith) includes a handle 3, advisably of wood, the front tang end 2 of which is adapted to be secured to and form a part of the larger or body part of the lifter, from which body the handle projects in the direction of its length. The body of the lifter is expanded laterally and is offset from the handle and in the form of lifter shown in Figs. 1 and 2 consists, essentially, of a metal frame 7. This frame, for securing it firmly and enduringly to the handle, has an elongated approximately U-shaped flange or bar 8, provided with a web 10 between and connecting the legs of this U-shaped flange or bar 8, and the tang portion 2 of the handle, which is provided with a slot therefor, straddles the web 10 and enters between the legs of the U-shaped bar, fitting thereto, and the rear ends of these legs are bent and turned inwardly at 9 against little ledges or shoulders on the handle, whereby the handle is held in place to the body or frame. Also a bolt 11 through the handle and the interposed web is additional means of securing the handle in the frame or body. At its rear end the body offsets laterally from the handle and the laterally-extending member 12 thereof forms a shoulder 4, on the outer surface of which shoulder a bearing-plate 13 is provided, which is secured in position by a bolt 14 through it and through the member 12. For strengthening this shoulder and the frame there is advisably employed a side member or leg 15, extending from the outer extremity of the member 12 to the front end of the frame or body and connected at and near the front to the flange or bar 8 of the frame by transverse members 16 16. Mounted in the front end of this frame or body there is a neck 5 movable endwise from and into the body in the direction of its length, the neck being advisably screw-threaded and turning by its thread through the transverse members 16. On the front end of this neck 5 there is a head 6, which advisably is plate-like in form and flat on its outer face. This head is pivoted on the neck conveniently by means of ears 17 on the rear surface of the head, between which ears the neck enters and to which it is secured by a transverse pivot-pin. This head 6 serves as a bearing complementary to the plate 13 on the shoulder 4. The head 6 can also be used as a lever-handle for turning the threaded neck in its bearings in the frame for adjusting it endwise therein.

The plate-head 6 is advisably roughened on its face, the corrugations illustrated in Fig. 3 being a convenient form of such roughening. The front end of the neck 5 is so formed and pivoted in the ears 17 that the head is permitted to tilt slightly, so that the face of the head can adapt itself to the surface of the wall of the block or to another head, but cannot tilt sufficiently to get out of position for convenient application to the block. The complementary shoulders 18 and 19 on the ears 17 and on the neck 5 are adapted to permit of this tilting adjustment without getting out of position for work. Advisably the frame 7, including the U-shaped bar 8, with its terminals 9, the web 10, the

shoulder member 12, the leg 15, and the transverse member 16, is made integral and as a malleable-iron casting.

In the form of device shown in Fig. 4 the wood handle is expanded laterally, forming the offsetting body with its shoulder 4, the face of the shoulder being advisably reinforced by a strap 20, secured with screws thereto and to the handle, the strap having a projecting bearing or holding device 21, corresponding to the holding-plate 13 of the forms shown in Fig. 1. In this form of lifter shown in Fig. 4, having the wood offsetting body portion 22, there is a longitudinal recess, in which an elongated plate 23 is slidable endwise, being held in place by a bolt 24, fixed in the offset 22 and extending through an elongated slot therefor in the plate, thus forming an adjustable extensible neck corresponding to the adjustable neck 5 of the form of lifter shown in Fig. 1. On the front end of this plate 23 a head 25 is provided, adapted to bear against an inner wall of the block in opposition and complementary to the holding device 21.

In using my improved lifter the user thereof adjusts the head to such extent either from or toward the shoulder that the shoulder and head of one lifter will just enter the recess in a block or the blocks to be lifted, and the head and shoulder of the lifter are then let down into the recess or opening in the block, somewhat in the manner shown in Fig. 1, and thereupon by raising on the handle 3 the lifter will be tilted so that the face of the head and the opposing shoulder will respectively engage the opposite walls of the recess, and thereby hold the lifter to the block with such force that the block can be lifted thereby. When the block is of larger size and the recess or opening is sufficiently large, two lifters may be employed, which, being dropped into the recess or opening in the block in the manner shown in Fig. 1, the users of the lifters can then lift on the handles 3, and thereby the lifters, the heads bearing against each other, will be so tilted as to engage the block and hold it so that it can be lifted in this manner.

The important feature of my improved device is that the head or front end of the lifter is made adjustable, so that the seizing portion of the lifter can be made extensible to adapt it for use with blocks having recesses of various sizes, whereby a single lifter or a single pair of lifters are adapted for use with a great variety of blocks. This could not be accomplished if there were no such adjustment of the seizing parts of the lifter, as blocks have recesses of various sizes, and a large number of lifters of varying sizes would be required to accommodate such different forms of blocks.

What I claim as my invention is—

1. A lifter for hollow articles, comprising an elongated and laterally-expanded body with a handle extending therefrom in the direction of its length and with a shoulder at its rear end presenting a bearing rearwardly, and a head mounted on the body adjustable in the direction of its length toward and from the plane of bearing of the shoulder.

2. A lifter for hollow blocks, comprising a body, a handle projecting from the body at its rear end in the direction of its length, a laterally-extending shoulder on the body near its rear end, a head mounted on a screw-threaded neck adjustable by its thread in the body from and toward the shoulder.

3. In a lifter for hollow blocks, a wood handle, a metal-frame body fitted on and secured to the wood handle and having a laterally-projecting shoulder and screw-bearings for a neck, a screw-threaded neck turning into the bearings in the frame, and a head mounted tiltably on the front end of the screw.

4. In combination with the body of a lifter having a shoulder, a screw-threaded neck adjustable endwise in the front end of the body, a plate-head fitted on the front end of the neck rotatable with the neck, and means on the neck and head preventing more than limited oscillation of the head on the neck.

5. As a part of a lifter for hollow articles, a metal frame comprising a generally U-shaped marginal elongated bar, a medial and connecting web, a laterally-projecting shoulder, a leg connecting the outer end of the shoulder and the distant front end of the U-shaped bar, a screw-threaded neck turning into the frame, and a head on the front end of the neck.

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

GUILFORD D. ROWELL.

Witnesses:
GEO. H. PEERENBOOM,
C. S. DICKINSON.