

E. B. SHEETS.
MOLDING MACHINE.
APPLICATION FILED MAR. 18, 1909.

976,752.

Patented Nov. 22, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

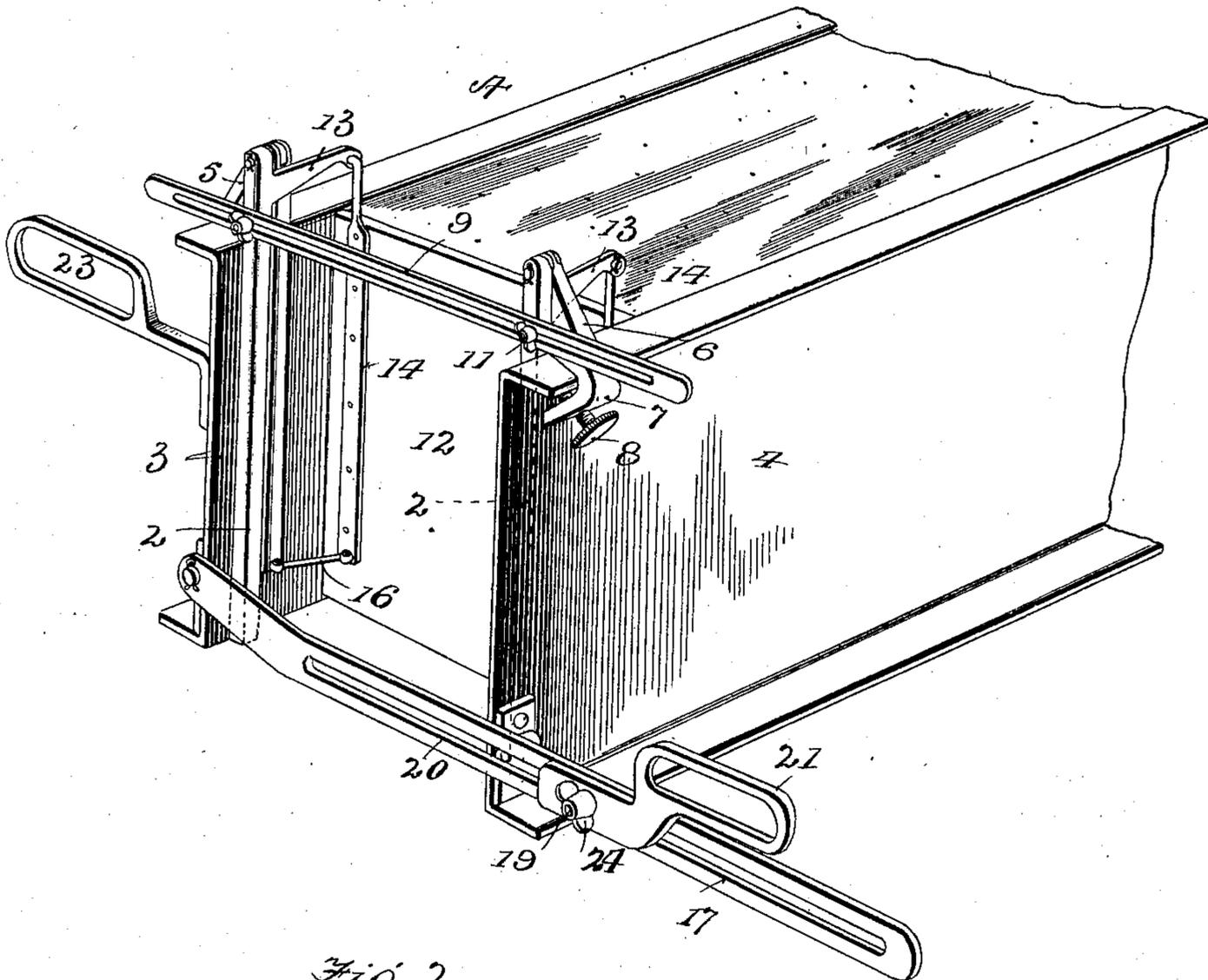
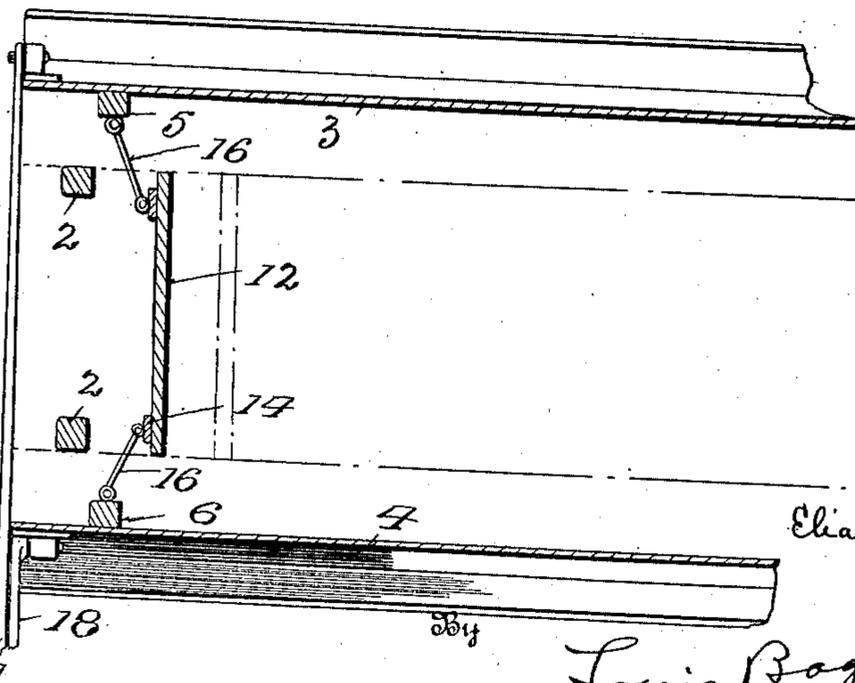


Fig. 2.



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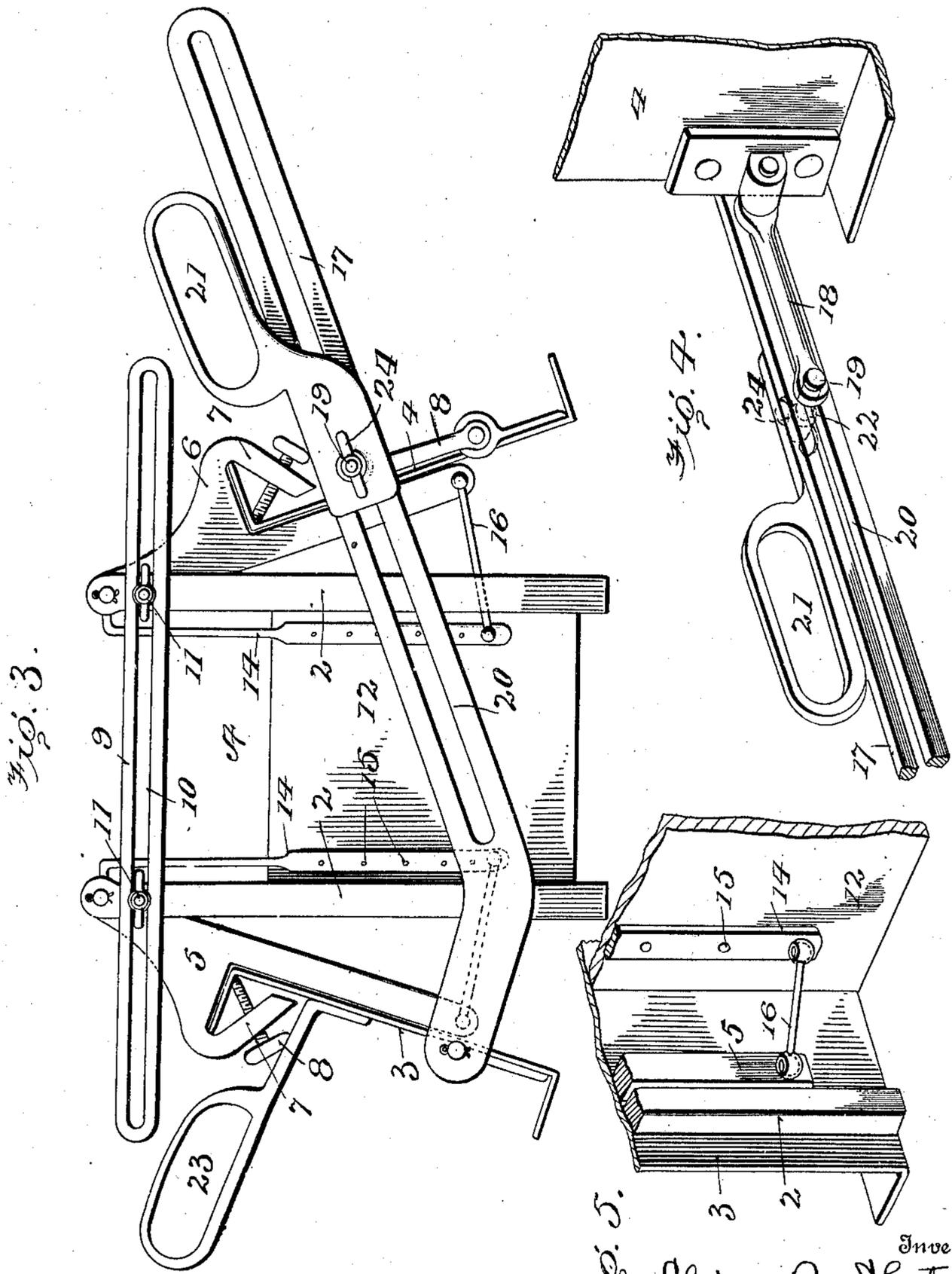
Louis Baggett & Co
Attorneys

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Witnesses
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Fig. 5.
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UNITED STATES PATENT OFFICE.

ELIAS B. SHEETS, OF TERRE HAUTE, INDIANA.

MOLDING-MACHINE.

976,752.

Specification of Letters Patent. Patented Nov. 22, 1910.

Application filed March 18, 1909. Serial No. 484,094.

To all whom it may concern:

Be it known that I, ELIAS B. SHEETS, a citizen of the United States, residing at Terre Haute, in the county of Vigo and State of Indiana, have invented certain new and useful Improvements in Molding-Machines, of which the following is a specification.

My invention relates to an improvement in molding machines, and the object is to provide a mold the sides and ends of which may be moved out of contact with the molded article after the article has been formed in the mold.

A further object is in the provision for enlarging or adjusting the mold to the size desired.

The invention consists of certain novel features of construction and combinations of parts which will be hereinafter described and pointed out in the claims.

In the accompanying drawings—Figure 1 is a perspective view; Fig. 2 is an end view showing the mold with the sides and one end swung outwardly or away from the article in the mold; Fig. 3 is a view disclosing the position taken by the end of the mold when swung away from the article; Fig. 4 is a detail view showing the link connection between the lever and one of the sides of the mold, and Fig. 5 is a detail showing the connection between the end and sides.

A represents the mold. Uprights, 2, are formed at both ends of the mold and pivotally supported on the uprights are the sides, 3 and 4, by clamps, 5 and 6. The clamps are pivoted to the upper ends of the uprights and the sides, 3 and 4, are held in jaws, 7, of the clamps by thumb screws, 8. Connecting the upper ends of the standards or uprights, 2, for holding them in proper position is a bar, 9, which is provided with an elongated slot, 10, and thumb screws 11 are adapted to pass through elongated slot, 10, and into the uprights, 2, for connecting the uprights and bar together. The uprights are capable of different adjustments by the thumb screws, 11, which can be loosened, permitting the sides to be moved either apart or together and then again clamped or connected to the bar, 9, whereby they are held in proper position. The ends, 12, of the molds are pivotally supported on arms, 13, 13, on the uprights. The arms, 13, ex-

tend inwardly or practically parallel with the sides, 3 and 4, and the ends, 12, are pivotally connected to the arms by links, 14, which links are removably connected to the ends by screws or bolts, 15. The lower portion of the ends are connected to the lower ends of the clamps 5 and 6 by rods, 16, which have a swiveled connection with both the links, 14, and the clamps 5 and 6. Levers 17 are pivotally connected to the sides, 3, at each end of the mold. Links, 18, are pivotally connected to the sides, 4, and are held or connected to the levers, 17, by bolts, 19, passing through the elongated slots, 20, in the levers, 17. A handle, 21, is mounted on the lever, 17, and the bolt, 19, passes through an opening, 22, formed in the handle, and the links and handles are held upon the levers by the bolts, 19 and nuts, 24 received on the end of the bolts.

When the mold is adjusted the levers, 17, must be adjusted with respect to the sides, 3 and 4, which is accomplished by the bolts, 19, being shifted along the slots, 20, of the levers. Handles, 23, are connected to the sides, 3, at each end thereof. When it is desired to move or swing the sides and end away from the article molded, one or both of the levers 17, can be operated by grasping the handles, 21, forcing the lever practically transversely of the mold, which will cause the side, 3, to move and the side, 4, to move by the link connection between the lever and side. The link will take a position practically parallel with the side, 4, when the side is swung outwardly or away from the mold, and when the sides are in closed position the link will stand in an inclined position from the side to the lever. As the sides 3 and 4 move outward, the rods, 16 which have a swiveled connection between the sides and ends of the mold, are drawn, causing the ends to swing outward in an opposite direction to the movement of the sides and away from the molded article.

The clamps 5 and 6 are capable of sliding along the sides whereby the size of the mold can be regulated to suit the requirements. The ends 12, which are connected to the uprights and to which the clamps are also connected, will be moved toward each other for adjusting the size or length of the mold. By this means and the fact that the ends 12 can be made of different sizes and that the uprights can be moved either toward or away

from each other transversely of the mold, as well as longitudinally, the mold can be made of any size to suit any requirement.

From the foregoing it will be seen that I have provided a mold which can be adjusted to any width desired, and that by simply substituting new end plates a mold of any width can be provided.

It is evident that more or less slight changes might be made in the form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I do not wish to be limited to the exact construction herein set forth, but:

Having fully described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a molding machine, the combination with uprights, means for adjustably connecting the uprights together, of clamps pivotally connected to the uprights, sides connected to the clamps, ends pivotally mounted on the uprights, means connecting the ends and sides together, and levers connected to the sides for swinging the sides and ends out of engagement with the molded article.

2. In a molding machine, the combination with uprights, of sides and ends hinged thereto, a lever hinged to one side, a link extending from the other side to the lever, whereby the lifting of the lever will swing the sides outwardly, and the lowering of the lever to its normal position will return

the sides to their normal position and lock them by swinging the link past the dead center, and rods connecting the sides and ends together, whereby the ends are swung simultaneously with the sides.

3. In a molding machine, the combination with uprights, and means for adjustably connecting them together, of sides and ends hinged to the uprights, and means connected with the sides and ends for simultaneously swinging them in one direction or the other, said means comprising a lever connected directly to one side, a link connecting the lever to the other side, and rods extending from the sides to the ends.

4. In a molding machine, the combination with uprights, slotted bars, and bolts extending through the slots of these bars to the uprights for adjustably connecting the uprights together, of sides and ends hinged to the uprights, a slotted lever hinged to one of the sides, a link pivoted to the other side, a handle, and a bolt passing through one end of the link, the slot in the lever and one end of the handle, whereby the link and handle are adjustably connected with the lever.

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

ELIAS B. SHEETS.

Witnesses:

WILLIAM J. HILLIS,
HERBERT S. HARRIOTT.