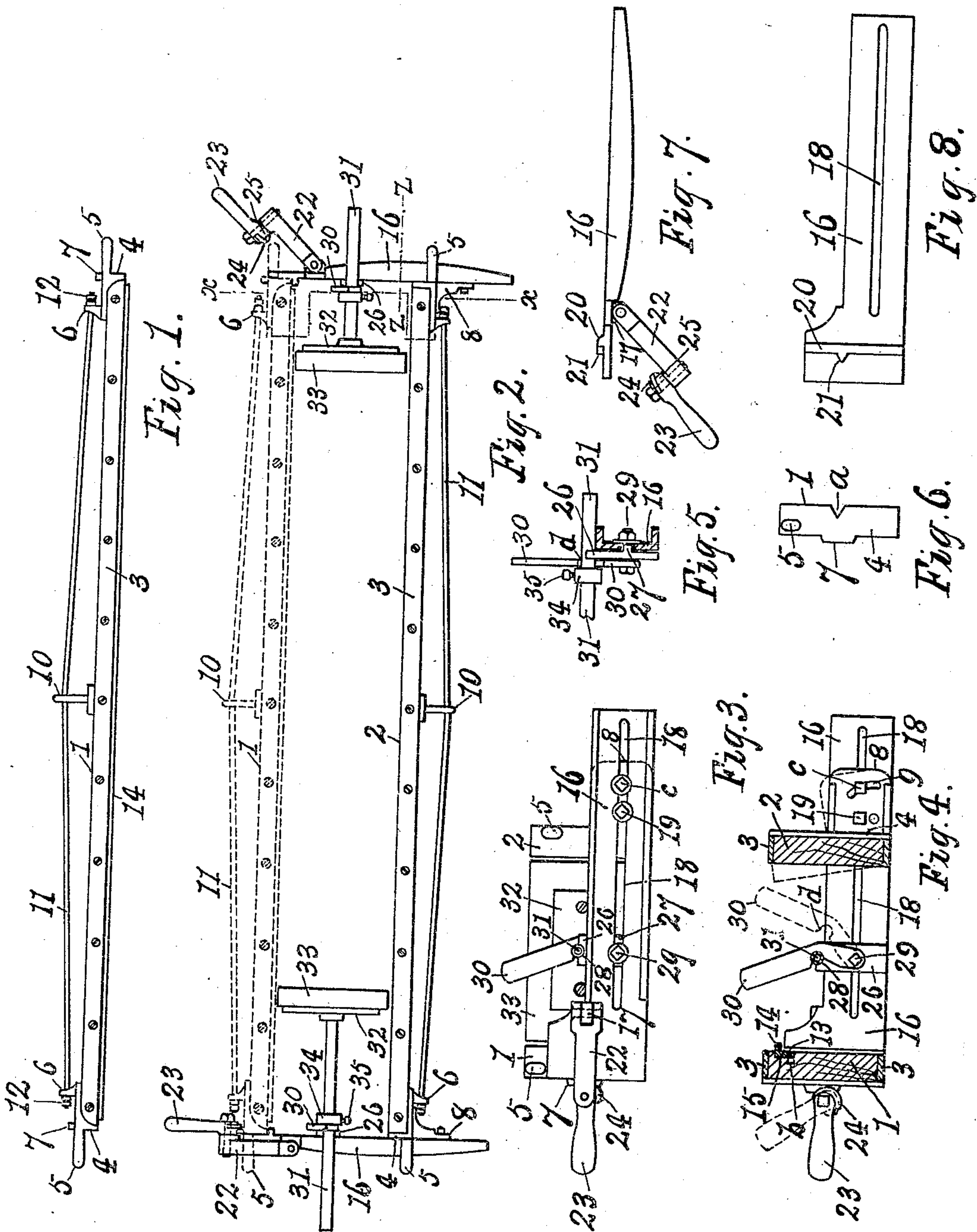


H. POCK.  
ADJUSTABLE CONCRETE MOLD.  
APPLICATION FILED OCT. 12, 1908.

955,282.

Patented Apr. 19, 1910.



Witnesses  
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# UNITED STATES PATENT OFFICE.

HENRY POCOCK, OF LONDON, ONTARIO, CANADA.

## ADJUSTABLE CONCRETE-MOLD.

955,282.

Specification of Letters Patent.

Patented Apr. 19, 1910.

Application filed October 12, 1908. Serial No. 457,445.

*To all whom it may concern:*

Be it known that I, HENRY POCOCK, a subject of the King of Great Britain, and a resident of the city of London, in the county of Middlesex, in the Province of Ontario, Canada, have invented a new and useful Adjustable Concrete-Mold, of which the following is a specification.

The object of this invention is to provide a device for molding sills, lintels, caps, steps, blocks or other cement or concrete products of any rectangular, ornamental or fancy shape or pattern, one that may be readily, easily and instantly adjusted to make a wide range of cement or concrete products varying in length and width, or to remove the mold from said cement or concrete product, one that may be instantly adapted to form one of the faces inclined if desired, one that will not spring or bend with the heavy tamping of cement or concrete products of considerable width or length, one that can be used on the ground, on a pallet or on any flat surface, one that is light and easy to handle so that it can be used on a wall during construction, one that has a reversible beaded strip secured in a recess in one side of the mold, the bead of which may project into the mold to form recesses in window sills, heads or copings, or that may be reversed and the bead project into the recess so that the face of the side of the mold to which the strip is secured will cast a plain or flat face, a mold that will be light, and easy to handle and operate, and one that will be simple, strong, durable in construction, inexpensive to manufacture, and efficient in practical use. And it consists of the improved construction and novel combination of parts of the same as will be hereinafter first fully set forth and described and then pointed out in the claims, reference being had to the accompanying drawings forming part of this specification, wherein:

Figure 1 is a plan view of the removable side of the mold. Fig. 2 is a plan view of an adjustable mold embodying my invention. In this view the removable side is shown in dotted lines. Fig. 3 is an end view of Fig. 2. Fig. 4 is a detail cross sectional view on the line *x, x*, of Fig. 2. Fig. 5 is a detail sectional view on the line *z, z*, of Fig. 2. Fig. 6 is a detail end view of the removable side shown in Fig. 1. Fig. 7 is a plan view, and Fig. 8 an inside view of one of the cross

bars which connects and holds the sides of the mold and adapts it to be adjusted to make cement or concrete products varying in width.

In the accompanying drawings: the numerals 1 and 2 indicate the longitudinal sides of the mold which for lightness are formed of wood or other suitable material, and to the upper and lower faces of each of the longitudinal sides 1 and 2, strips of steel or other metal 3 are secured, and to each of the ends of said longitudinal sides 1 and 2 the end irons 4 are secured which end irons extend over each end and a short distance along on the outer face of each of said longitudinal sides 1 and 2, to prevent the wearing of said sides and to render the mold strong and durable; and said plates 3 and end irons 4 are rigidly and firmly secured to said longitudinal sides 1 and 2 by screws or other suitable securing means. And said end irons 4 at the opposite ends of each of said longitudinal sides 1 and 2 are each provided with a handle 5 for convenience in removing the detachable or removable side 1, or the mold from the freshly molded cement or concrete product or to move the mold from one place to another, and each of said end irons 4 is also provided with a lug 6; and the end irons 4 on the removable longitudinal side 1 are each provided with a locking flange 7 and with a tapered notch, *a*.

8 indicates a lateral extension from the end irons 4 at each end of the longitudinal side 2 of the mold, and 9 a segmental slot or opening formed through said lateral extensions 8 as shown in Fig. 4, for the purpose which will be hereinafter set forth.

10 indicates a bracket secured about midway between the ends of and to the outer face of each of the longitudinal sides 1 and 2, and 11 truss rods which engage with said brackets 10 and their ends extend through holes in the lugs 6 secured to the end irons 4, and nuts 12 engage with the screw threaded ends of said truss rods 11, by turning which on said truss rods the latter are braced and tightened, this strengthens and rigidly and firmly braces and holds the longitudinal sides 1 and 2 in line or true, and avoids and completely prevents any possibility of said longitudinal sides 1 and 2, from springing or bowing outward midway between their ends or from getting out of shape particularly



larly when heavy tamping is necessary as in the case of cement or concrete products of considerable length or width.

13 indicates a strip of metal or other suitable material provided with a bead 14, and in the inner face of the longitudinal side 1 of said mold a longitudinal groove 15 is formed to which the body of the strip 13 is fitted, and *b*, is a deeper section of said recess 15 to receive the bead 14 of said strip 13, and said strip 13 may be adjusted in such a manner that the bead 14 will be inserted in the inner recessed portion, *b*, of the groove 15, in which case the outer face of said strip 13 will be flush with the inner face of the longitudinal side 1 of the mold, or said strip 13 may be reversed so that the bead 14 would project into the mold and thus form, when the cement or concrete is tamped in said mold a corresponding groove in the adjacent face of the cement or concrete product.

16 indicates centering cross bars, one of which is employed at each end of the mold, and each of which cross bars is provided with an outwardly extending lug 17, and with the elongated slot 18; and bolts 19 and, *c*, extend through said elongated slots 18 in said cross bars 16 and through a bolt hole and a segmental slot 9 formed in the lateral extensions 8 of the end irons 4, to rigidly and firmly secure said centering cross bars 16, one to the lateral extension 8 at each end of the longitudinal side 2 of the mold, and said end irons 4 of which said lateral extensions 8 form a part being secured to said longitudinal side 2 of said mold, said centering cross bars 16 are firmly and rigidly secured to and one to each end of said longitudinal side 2.

20 indicates a vertical flange and 21 a lateral tapered extension therefrom which is formed on the inner face of each of the centering cross bars 16, for the purpose which will be hereinafter set forth.

22 indicates laterally swinging arms one of which is pivotally secured to the lug 17 on each of the centering cross bars 16, and 23 locking levers one of which is pivoted to be adjusted vertically on the outer end of each of the swinging arms 22, and said levers 23 are each provided with an inclined flange 24, and with a cam face 25, and said flanges 24 and cam faces 25 of said levers 23 are adapted to engage with the inner sides and front faces, respectively, of the locking flanges 7 on each of the end irons 4 secured at the opposite ends of and to the longitudinal side 1 of the mold.

26 indicates a plate and 27 an elongated flange extending across said plate, which flange 27 is fitted to and inserted in the elongated slot 18 of the centering cross bar 16 and in the upper end of said plate 26 a segmental recess 28 is formed, and one of said

plates 26 is rigidly and firmly secured to each of said centering cross bars 16 by a bolt 29.

30 indicates a locking latch provided with a locking socket, *d*, one of which latches is pivoted on each of the bolts 29 which secure the plates 26 to the centering cross bars 16.

31 indicates a tubular arm rigidly secured to the plate 32 and one of the latter is secured to each end 33 of the mold. 34 indicates a collar one of which is adjustable on each of said tubular arms 31, and 35 a set screw which extends through a screw threaded socket in each of said collars 34 and which engages with said tubular arms 31 to hold said collars at the position to which they may be adjusted on said tubular arms.

The operation is as follows: The cross bars 16 are secured to the opposite ends of the longitudinal side 2 of the mold by the bolts 19 and, *c*, and the width of the cement or concrete product, is regulated when securing said cross bars 16 to said side 2 by regulating the distance between the inner face of the longitudinal side 2 of the mold and the outer faces of the flanges 20, on the cross bars 16, because against the outer faces of these flanges 20 the detachable or removable longitudinal side 1 of the mold rests when placed in proper position; the detachable or removable side 1 of the mold is then adjusted between the cross bars 16 until the inner face of said longitudinal side 1 abuts against the outer faces of the flanges 20, on said cross bars 16, when in this position the tapered lateral extensions of the flanges 20 are inserted in the tapered recesses *a*, in the end irons 4 secured to said longitudinal side, 1, and when said longitudinal side, 1, is placed in position between said cross bars 16 and against said flanges 20, the longitudinal side 1 is held by the flanges 20 from being accidentally adjusted toward the longitudinal side 2, and the tapered lateral extensions 21 of said flanges 20 resting in the tapered recesses, *a*, all possibility of the accidental adjustment of said longitudinal side 1 toward the longitudinal side 2, or vertically in relation to the cross bars 16, is avoided and completely prevented. The arms 22 are then swung against their respective cross bars 16, on which they are pivoted, this brings the levers 23 opposite the outer face of the longitudinal side 1, of the mold, when so adjusted the flanges 24 are on the inner sides of the locking flanges 7, and the cam faces 25 in line with the front faces of said locking flanges. When in this position, by pressing the levers 23 downward the flanges 24 engage with the inner sides and the cam faces 25 with the front faces of said locking flanges 7, and as the levers 23 are brought to a horizontal position, the flanges 24 of said levers 23 firmly bind on the inner sides of said locking flanges 7 which prevents the accidental lateral adjustment of said levers



on said swinging arms 22, and the cam faces 25 are compressed on the front faces of said locking flanges 7, which compresses the inner face of the longitudinal side 1 of the mold against the flanges 20, of the cross bars 16, this avoids and completely prevents any possibility of the accidental adjustment of said longitudinal side 1 outward when tamping the cement or concrete in the mold, or when moving the mold from place to place, or from any cause. Again by slightly loosening the bolts 19 and, *c*, which secure the longitudinal side 2 of the mold to the cross bars 16, and the bolt, *c*, extending through the segmental slot 9, in the lateral extension 8 of the end irons 4 secured to the longitudinal side 2 of the mold, the latter, with the bolt 19 as a pivot, could be adjusted to the inclined or angular position shown by dotted line 2, in Fig. 4, or to any inclined or angle desired, when by tightening said bolts 19 and *c*, a cement or concrete product with an inclined or beveled side would be formed when the cement or concrete was tamped therein.

After the longitudinal sides 1 and 2 of the mold are firmly and rigidly secured to the cross bars 16, a plate 26 provided with an elongated flange 27, shown in Fig. 5, is rigidly secured centrally of or midway between the longitudinal sides 1 and 2 to each of the cross bars 16 by a bolt 29, the elongated flanges 27 being inserted in the elongated slots 18 in said cross bars 16 to prevent said plates 26 from turning; and on each of said bolts 29 a locking latch 30 is pivoted. When so arranged and secured together, by adjusting the locking latches 30 to the position shown by dotted line in Fig. 4, and then placing the ends 33 between the sides 1 and 2, and at the distance from one another, according to the length of the cement or concrete product required, and the tubular arms 31, connected to said ends 33, in the segmental recesses 28 in the upper ends of the plates 26 at each end of the mold, and adjusting the locking latches 30 to the position shown by solid line in Fig. 4, or until the notches, *d*, therein engage with the adjacent tubular arms 31, the latter are firmly and securely held and locked from accidental movement. The collars 34 are then adjusted one on each of said tubular arms 31 until they abut against the adjacent locking latches 30, as shown in Fig. 2, when by tightening the set screws 35 on said tubular arms, said collars are rigidly and firmly secured in place on said tubular arms 31 adjacent to said locking latches 30, as a result said tubular arms 31 and ends 33 secured thereto are further rigidly held and prevented from moving longitudinally when tamping the mold. After the mold is set or adjusted on the floor, on a pallet or any place where it is desired to make the cement

or concrete product by filling the mold with the cement or concrete product, tamping, striking off and then smoothing it off with a trowel, the molding of the cement or concrete product will be completed. The mold may then be removed from the freshly molded cement or concrete product by raising the locking levers 23, and swinging them around on the arms 22 to the end of the mold, then withdrawing the removable or detachable side 1, and throwing the locking latches 30 back from the tubular arms 31, and adjusting the ends 33 of the mold away from the cement or concrete product, this is readily permitted because of the space left between the cross bars 16 and the collars 34 by throwing back said locking latches 30, then remove the longitudinal side 2 together with the cross bars 16 connected thereto, which leaves a perfectly molded cement or concrete product thoroughly bedded together, and formed with clear-cut and sharp edges.

This mold is adapted to make a cement or concrete product of any rectangular, square or oblong shape without any filling in, but cement or concrete products of any ornamental or fancy pattern or shape may be molded by laying in the design and adjusting the mold to fit.

The object of forming the groove or recess in the cement or concrete window sill or cap by the bead 14 on the reversible strip 13, when molding cement or concrete window sills or caps, is to cause the water to drip off at this recess instead of running back on the sill or cap and down on the wall of the building, which it would be very likely to do if this recess or water drip was not formed therein.

Having thus described my invention, I claim:

1. In a mold of the class described, a longitudinal mold side, end cross bars, one secured to each end of said longitudinal mold side, and a vertical flange formed on the inner face of each of said end cross bars, in combination with a removable longitudinal mold side adapted to be placed between and engage with said vertical flanges on said end cross bars, mold ends located between said longitudinal mold sides and said end cross bars, and means for rigidly securing said removable longitudinal mold side at the position to which it may be adjusted in relation to said end cross bars.

2. In a mold of the class described, a longitudinal mold side, end cross bars one secured to each end of said longitudinal mold side, and a vertical flange provided with a lateral extension formed on the inner face of each of said end cross bars, in combination with a removable longitudinal mold side, end irons in each of which a recess is formed and one secured to each end



of said removable longitudinal mold side, and the latter adapted to be placed between and engage with said vertical flanges on said end cross bars, and said lateral extensions  
 5 from said vertical flanges fitted to and adapted to be inserted in said recesses in said end irons, and means for rigidly securing said removable longitudinal mold side at the position to which it may be adjusted in  
 10 relation to said end cross bars.

3. In a mold of the class described, a longitudinal mold side, end irons each provided with a lateral extension and one secured to each end of said longitudinal mold  
 15 side, and end cross bars, each provided with a vertical flange and with an elongated slot, and one secured to each of said lateral extensions from said end irons by means extending through said elongated slots, in combination with a removable longitudinal mold  
 20 side adapted to be placed between and engage with said vertical flanges on said end cross bars, mold ends located between said longitudinal mold sides and said end cross bars, and means for rigidly securing said  
 25 removable longitudinal mold side at the position to which it may be adjusted in relation to said end cross bars.

4. In a mold of the class described, a longitudinal mold side, end irons each provided with a lateral extension in which a segmental slot is formed, and one of said  
 30 end irons secured to each end of said longitudinal mold side, in combination with end cross bars secured to said lateral extensions by means extending through said segmental slots in said lateral extensions of said end  
 35 irons, and a removable longitudinal mold side held in contact with said end cross bars.

5. In a mold of the class described, a longitudinal mold side, end irons each provided with a lateral extension in which a segmental slot is formed, and one of said  
 40 end irons secured to each end of said longitudinal mold side, in combination with end cross bars in which an elongated slot is formed, means extending through said elongated and segmental slots for securing  
 45 said end cross bars to said lateral extensions of said end irons, and a removable longitudinal mold side held in contact with said end cross bars.

6. In a mold of the class described, a longitudinal mold side, end cross bars, each provided with a vertical flange and one secured to each end of said longitudinal mold  
 55 side, a removable longitudinal mold side, provided with locking flanges and adapted to be placed between and engage with said vertical flanges on said end cross bars, and mold ends located between said longitudinal  
 60 mold sides and said end cross bars, in combination with swinging arms one of which is pivotally secured to each of said end cross bars, a lever provided with an inclined

flange and with a cam face pivoted on each of said swinging arms, and said inclined flanges and cam faces on said levers adapted to engage with said locking flanges on said  
 70 removable longitudinal mold side.

7. In a mold of the class described, a longitudinal mold side, end cross bars, one secured to each end of said longitudinal mold side, and a removable longitudinal mold side  
 75 held in place between said end cross bars, in combination with an end plate secured to one of said end cross bars, in which plate a socket is formed, a tubular arm resting in said socket in said end plate, a mold end secured to said tubular arm, and a locking  
 80 latch in which a socket is formed, adapted to bind on and lock said tubular arm in the socket of the end plate secured to said end cross bar.

8. In a mold of the class described, a longitudinal mold side, end cross bars in each of which an elongated slot is formed and one of which is secured to each end of said  
 85 longitudinal mold side, and a removable longitudinal mold side held in contact with said end cross bars, in combination with end plates one secured to each of said end cross bars, a socket formed in and a flange formed on each of said end plates, and said flanges  
 90 on said end plates fitted to and inserted in the adjacent elongated slots in said end cross bars, a tubular arm resting in each of said sockets in said end plates, a mold end secured to each of said tubular arms, and  
 95 locking latches in each of which a socket is formed, adapted to bind on and lock said tubular arms at the position to which they may be adjusted in the sockets of the end plates secured to said end cross bars.

9. In a mold of the class described, a longitudinal mold side, end cross bars one secured to each end of said longitudinal mold side, and a removable longitudinal mold side, in combination with an end plate in  
 105 which a socket is formed, and secured to one of said end cross bars, a tubular arm resting in said socket in said end plate, mold ends one secured to said tubular arm, a locking latch in which a socket is formed secured to  
 110 said end plate, a collar adjustable on said tubular arm, and means for securing said collar at the position to which it may be adjusted on said tubular arm.

10. In a mold of the class described, a longitudinal mold side, end cross bars in each of which an elongated slot is formed, secured to said longitudinal mold side, and a removable longitudinal mold side held in  
 120 place between said end cross bars, in combination with end plates secured to said end cross bars, and a socket formed in and a flange formed on each of said end plates, said flanges on said end plates fitted to and inserted in the elongated slots of the adjacent end cross bars, a tubular arm resting  
 125 130



in the socket of each of said end plates, a mold end secured to each of said tubular arms, locking latches in each of which a socket is formed adapted to bind on and lock said tubular arms at the position to which they may be adjusted in the sockets of the end plates secured to said end cross bars, an adjustable collar on each of said tubular arms and means for locking said collars at the position to which they may be adjusted on said tubular arms.

11. In a mold of the class described, a removable longitudinal mold side in which a groove or recess having an inner recessed portion is formed, in combination with a reversible beaded strip, the bead on which may extend into the mold to form a recess in the molded product, or said bead may be reversed and be inserted in said inner recessed portion of said groove or recess in said removable longitudinal mold side.

12. In a mold of the class described, a longitudinal mold side, end cross bars, one secured to each end of said longitudinal mold side, a removable longitudinal mold side held in place between said end cross bars, end irons secured to each end of said longitudinal mold sides between the end of the latter and said end cross bars, perforated lugs secured to said end irons, brackets secured midway between the ends of and to the outer side of said longitudinal mold sides, truss rods passing over said brackets and through said perforated lugs and means for tightening and holding said truss rods in said lugs, in combination with an end plate secured to one of said end cross bars,

in which plate a socket is formed, a tubular arm resting in said socket in said end plate, a mold end secured to said tubular arm, and a locking latch in which a socket is formed, adapted to bind on and lock said tubular arm in the socket of the end plate secured to said end cross bar.

13. In a mold of the class described, a longitudinal mold side, end cross bars one secured to each end of said longitudinal mold side, a removable longitudinal mold side, end irons secured to each end of said longitudinal mold sides between the end of the latter and said end cross bars, perforated lugs secured to said end irons, brackets secured midway between the ends of and to the outer side of said longitudinal mold sides, truss rods passing over said brackets and through said perforated lugs and means for tightening and holding said truss rods in said lugs, in combination with an end plate in which a socket is formed, and secured to one of said end cross bars, a tubular arm resting in said socket in said end plate, mold ends one secured to said tubular arm, a locking latch in which a socket is formed secured to said end plate, a collar adjustable on said tubular arm, and means for securing said collar at the position to which it may be adjusted on said tubular arm.

In testimony whereof, I have signed in the presence of the two undersigned witnesses.

HENRY POCOCK.

Witnesses:

P. J. EDMUNDS,  
I. S. EDMUNDS.