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MOLD FOR FORMING STEPS

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Fig. 1.

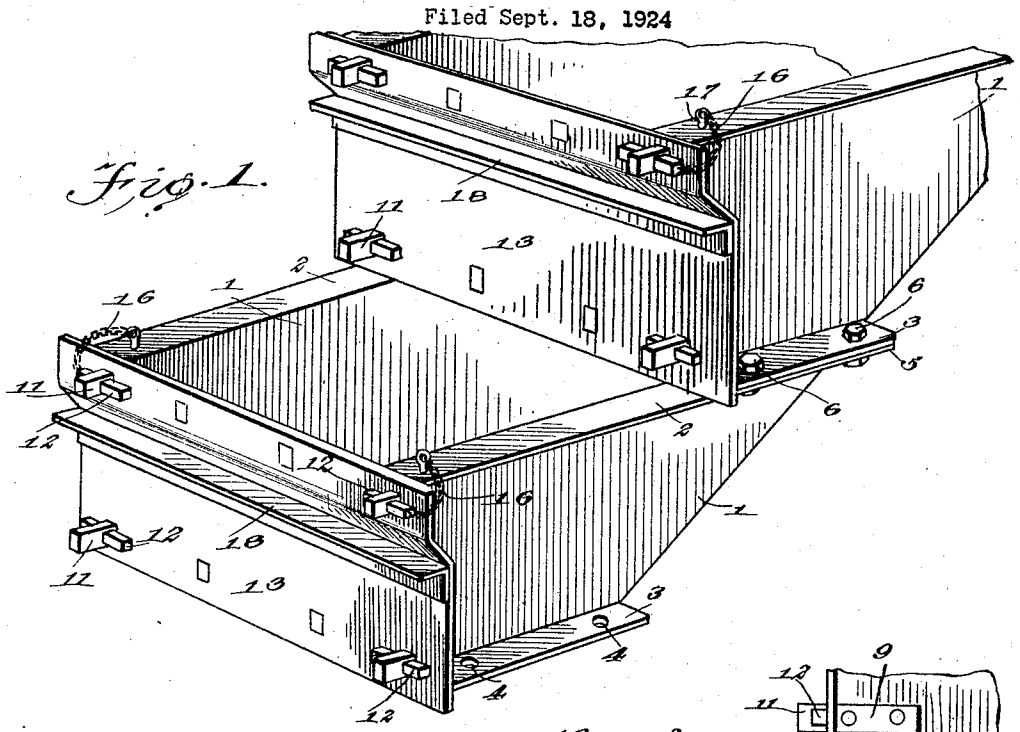


Fig. 2.

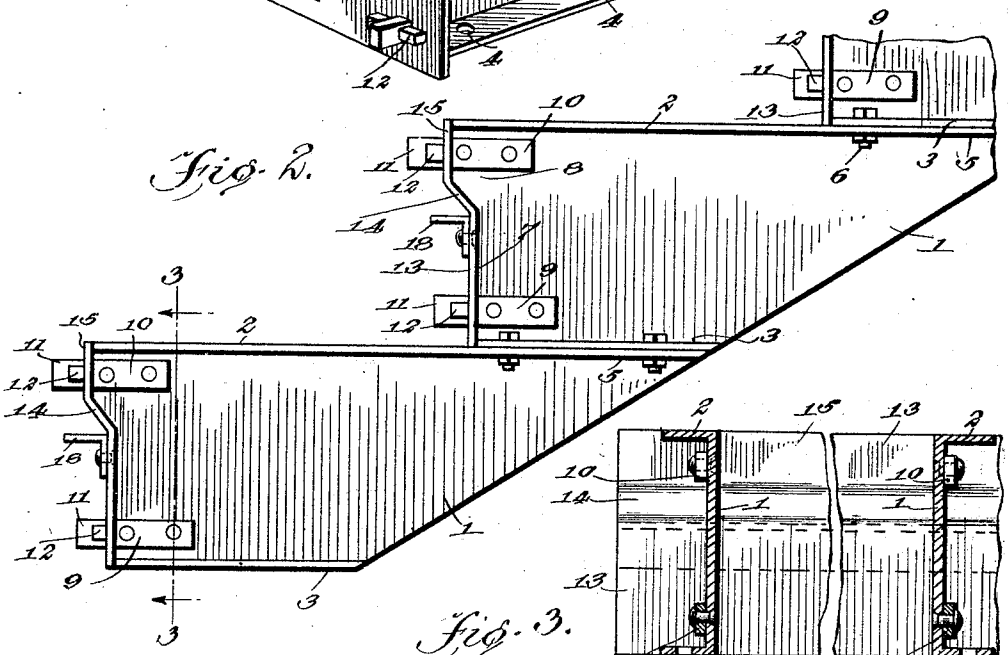


Fig. 3.

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UNITED STATES PATENT OFFICE.

CHARLES AUSTIN THRASHER, OF WORCESTER, MASSACHUSETTS, AND CLARENCE RADIOUS OWEN, OF GREENVILLE, SOUTH CAROLINA.

MOLD FOR FORMING STEPS.

Application filed September 18, 1924. Serial No. 738,490.

To all whom it may concern:

Be it known that we, CHARLES AUSTIN THRASHER, a citizen of the United States, and a resident of Worcester, in the county of Worcester and State of Massachusetts, and CLARENCE RADIOUS OWEN, a citizen of the United States, and a resident of Greenville, in the county of Greenville and State of South Carolina, have invented certain new and useful Improvements in Molds for Forming Steps, of which the following is a specification.

This invention relates to molds for forming steps and has for its object the provision of a device which is of such knock-down construction that the same may be readily assembled or disassembled when desired.

A further object of the invention is the provision of a device which is simple in construction with the parts being so formed that they may be readily coordinated and placed in operative position to provide a mold whereby any length of concrete steps may be readily provided.

This invention will be best understood from a consideration of the following detailed description, in view of the accompanying drawing forming a part of the specification; nevertheless it is to be understood that the invention is not confined to the disclosure, being susceptible of such changes and modifications which shall define no material departure from the salient features of the invention as expressed in the appended claims.

In the drawing:

Figure 1 is a view in perspective of an assembled mold for forming concrete steps.

Figure 2 is a side view of the same.

Figure 3 is a transverse vertical section of the mold taken along the line 3—3 of Figure 2.

Referring more particularly to the drawings, side plates 1 are provided having upper and lower horizontal flanges 2 and 3. The flanges 3 are provided with perforations 4 adapted to aline with perforations in the rear end portion 5 of the horizontal flange 2 and adapted to receive bolts 6 for locking the rear portion 5 of the flange 2 to a flange 3 of a superimposed side plate 1. These plates are placed in vertical alinement but as shown in Figures 1 and 2 are offset from each other.

The forward ends of the side plates 1 have a straight vertical section 7 and a forward extension 8. Spaced cleats or lugs 9 and 10 are riveted to the outer surface of the side plates 1 and project forwardly as shown at 11 beyond the vertical edges of said side plates. The projections 11 of the cleats are perforated through which are passed pins 12 engaging the outer face of a riser plate 13 whereby said plates are locked to the forward ends of the side plates. The riser plate near its upper end is bent outwardly, as shown at 14, and then upwardly at 15, to conform to the shape of the projection 8 of the side plates 1. This formation provides for the projecting end of the tread of the steps after the forming of the steps in the concrete molds.

The riser plates are provided with perforations to receive the projecting ends 11 of the cleats 9 and 10. Pins 12 having a chain 16 connected thereto, the other end of the chain being connected to a pin 17 adapted to be inserted within a perforation in the horizontal flanges 2 of the side plates to prevent loss of the pin from the side plates.

Beneath the offset portion 14 of the riser 13 is secured a reinforcing angle iron 18.

In assembling the device it is only necessary to position the side plates 1 and position the riser plate 13 so that the projecting ends of the cleats are inserted through the openings in the said riser plates. The pins 12 are then inserted through the perforations in the cleats 9 and 10 whereby the riser plate is locked to the forward end of the side plates. In view of the perforation on the flanges 2 and 3 of the side plates the position of the superimposed side plates are readily determined when these perforations are alined. Bolts 6 are inserted through the perforations for locking the superimposed side plates 1 to the lower side plates. The corresponding riser plate 13 is locked to the forward ends of the side plates as has been explained. Any number of the sections of the side plates and riser plates can be superimposed upon each other until the required number have been assembled for the purpose.

What we claim is:

1. A mold for forming steps comprising pairs of spaced side plates having horizontal flanges at their upper and lower ends, lugs projecting forwardly of said side members, riser plates provided with perforations

adapted to receive said lugs, means cooperating with said lugs for locking the riser plates to the outer ends of the side plates, said riser plates having an offset portion adjacent their upper ends, the forward ends of the side plates having projections adapted to fit into the offset portions of the riser plates, the flanges of the side plates at one riser being adapted to be bolted to the flanges of adjacent side plates at different horizontal levels.

2. A mold for forming steps comprising pairs of spaced side plates having horizontal flanges at their upper and lower ends, lugs projecting forwardly of said side members, riser plates provided with perforations adapted to receive said lugs, and means cooperating with the lugs for locking the riser plates to the outer ends of the side plates, said side plates being sheared off at an angle at their rear free edges whereby the lower ends of the plates are of less length than their upper edges.

3. A mold for forming steps comprising pairs of spaced side plates having horizontal flanges at their upper and lower ends, lugs projecting forwardly of said side members, riser plates provided with perforations adapted to receive said lugs, said lugs being provided with perforations, and pins insertable through said perforations and engageable with the riser plates for locking said plates to the outer ends of the side plates, said riser plates having an offset portion adjacent their upper ends, the forward ends of the side plates having projections adapted to fit into the offset portions of the riser plates, the flanges of the side plates at one riser being adapted to be bolted to the flanges of adjacent side plates at different horizontal levels.

4. A mold for forming steps comprising pairs of spaced side plates having horizontal flanges at their upper and lower ends, lugs projecting forwardly of said side members, riser plates provided with perforations adapted to receive said lugs, and means for cooperating with the lugs for locking the riser plates to the outer ends of the side plates, and an angle iron secured to the riser plates below the perforation in said plate for reinforcing said plate, said side plates being sheared off at an angle at their rear free edges whereby the lower ends of the plates are of less length than their upper edges.

5. A mold for forming steps comprising pairs of side plates having top and bottom flanges, the rear edge of the plates being inclined at an angle to the vertical, said flanges being provided with perforations, the perforations of the bottom flanges of a pair of superimposed side plates being adapted to be alined with the perforations in the top flanges of a pair of side plates located at a lower horizontal level whereby the superimposed side plates are predeterminedly positioned with the front vertical edge of the superimposed side plates being located in a different vertical plane and to the rear of the front edge of the lower side plates, and riser plates removably secured to the front edges of pairs of the side plates.

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