

(No Model.)

A. B. DAY.  
MOLD FOR CASTING SASH WEIGHTS.

No. 535,575.

Patented Mar. 12, 1895.

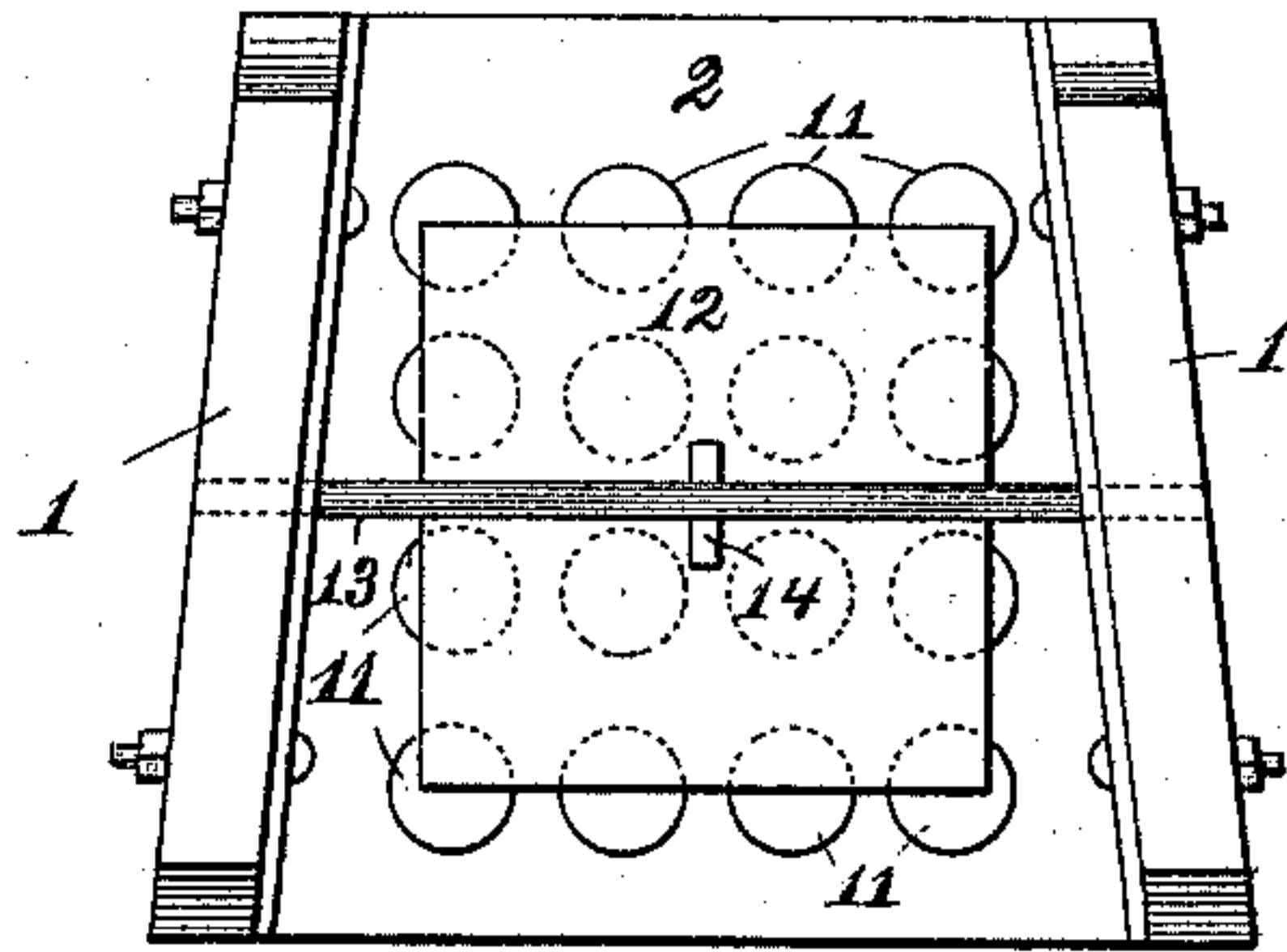


Fig. 1

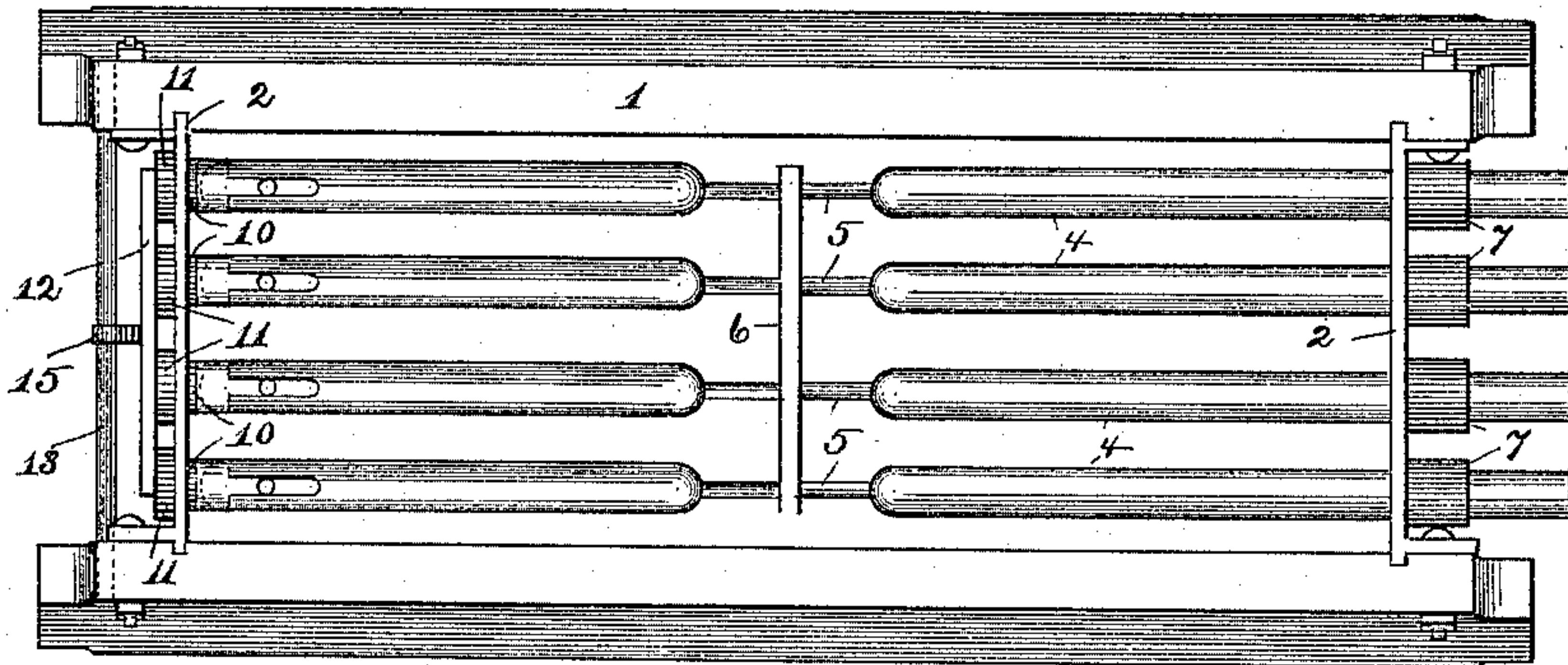


Fig. 2

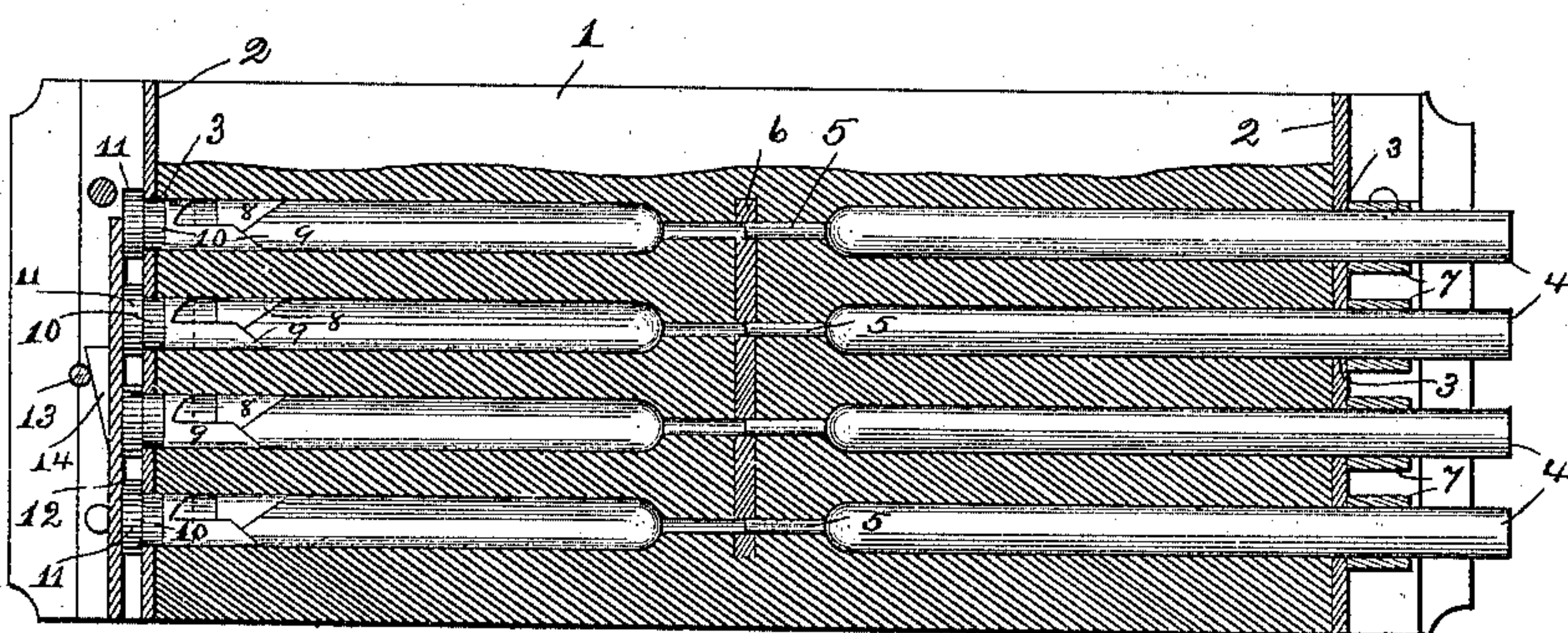


Fig. 3

Witnesses

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# UNITED STATES PATENT OFFICE.

ALFRED B. DAY, OF KNOXVILLE, TENNESSEE.

## MOLD FOR CASTING SASH-WEIGHTS.

SPECIFICATION forming part of Letters Patent No. 535,575, dated March 12, 1895.

—Application filed December 19, 1893. Serial No. 494,036. (No model.)

*To all whom it may concern:*

Be it known that I, ALFRED B. DAY, of Knoxville, county of Knox, State of Tennessee, have invented certain new and useful  
5 Improvements in Molds for Casting Sash-Weights, of which the following is a specification, reference being had to the accompanying drawings.

The object of my invention is to produce  
10 an improved mold for casting at the same time a plurality of sash weights and so arranged that the flask, after the molds have been filled, can be lifted from the sand, thereby avoiding the tedious and laborious operation of with-  
15 drawing the weights one at a time, or in successive layers.

In the accompanying drawings: Figure 1 is an end elevation of my mold with the chills in position. Fig. 2 is a top plan view of a  
20 mold partially filled and showing the chills in position at one end and the patterns in position at the other. Fig. 3 is a central longitudinal vertical section, showing the patterns and chills in elevation and the remaining  
25 parts in section.

Referring to the figures on the drawings: 1 indicates the sides of my flask and 2 the end pieces. The end pieces are slightly tapered on two sides so that the side pieces which are  
30 united thereto are inclined, thereby leaving the lower end of the flask flared and permitting the ready removal thereof from the sand after the metal has been cast.

The side pieces and end pieces may be made  
35 of suitable material, as for example metal or wood. The end pieces are perforated at suitable intervals, as indicated at 3, to admit, in the first place, the patterns and afterward the chills by which they are closed previous to  
40 the casting.

4 indicates a pattern of required length and dimensions to form a sash weight of a desired weight. It is provided with an extension 5 adapted to reach a gate 6. It is also  
45 provided with a collar 7, or other stop suitably fastened to the end of the pattern and adapted to limit the inward movement of the pattern.

8 and 9 indicate chills adapted to be set  
50 into the end of the recess prepared by the

pattern, and of a configuration suitable to form the eye of the weight. The chill 8 is first set in place, and afterward the chill 9, the latter being inserted beyond the end gate so that the flask may be withdrawn without  
55 being impeded by the chill.

10 indicates stoppers, (they may be called,) or auxiliary chills having flanged heads 11. They are designed to be inserted into the opening in the end gate against the chills 9  
60 and to complete them without being fastened to them so as to prevent the lifting of the flask.

12 indicates a chill plate designed to be placed against the heads of the auxiliary  
65 chills and to hold them firmly in place against the weight of metal in the molds.

For securing the plate firmly in place, a transverse rod 13 may be employed and a wedge 14. In place of the wedge, a pivot cam  
70 15, as shown in Fig. 2, may be employed. The rods 13 may also be employed to hold the parts of the flask securely against the end pieces, but additional means may also be employed.  
75

In practice, the flask being properly set and a sufficient quantity of sand being placed in the bottom or flared end thereof, the first row of patterns and gate are inserted. The sand is then tamped down around them and the  
80 operation is repeated until the entire flask is filled. The patterns and gate are then withdrawn, the chills are inserted in position in the manner above described and the chill plate is put in place and securely fastened. After the  
85 cast is made the flask may be lifted from the sand, provision being made therefor in the flaring shape of the flask and in the peculiar form of chills. When the flask is removed the sand may be quickly and conveniently  
90 broken from the casting, thereby materially shortening the labor which would be required to remove the casting a layer at a time.

What I claim is—

1. The combination with a flared flask hav-  
95 ing numerously perforated end pieces, of a plurality of separate independent chills in the apertures, a chill plate adapted to lock or release the chills simultaneously, a rotary transverse rod behind said plate and inter-  
100

mediate mechanism secured upon said rod for urging the plate laterally and retaining it in position, substantially as specified.

2. The combination with a flared flask having  
5 ing numerous perforated end pieces, of separate independent chills in the apertures, a chill plate adapted to simultaneously support the chills and mechanism for adjusting the

chill plate laterally, substantially as specified.

10

In testimony of all which I have hereunto subscribed my name.

ALFRED B. DAY.

Witnesses:

J. E. FAIR,

J. W. HISCOCK.