No. 797,121. PATENTED AUG. 15, 1905.

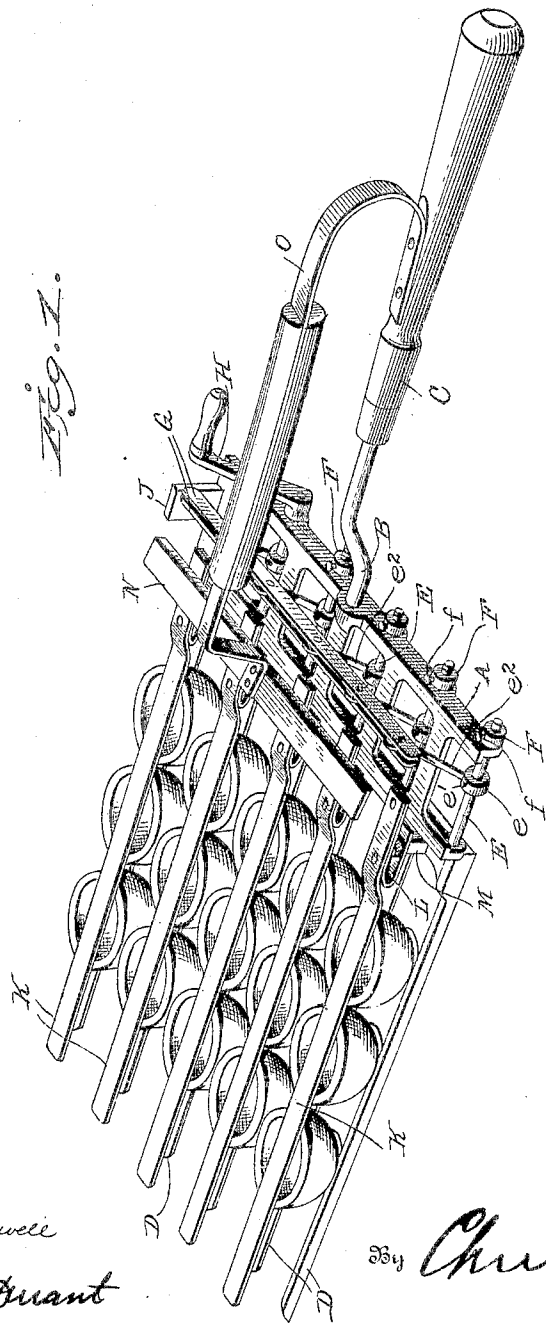
E. KELLER.

TOOL FOR HANDLING SCORIFIERS.

APPLICATION FILED APR. 26, 1905.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 2.

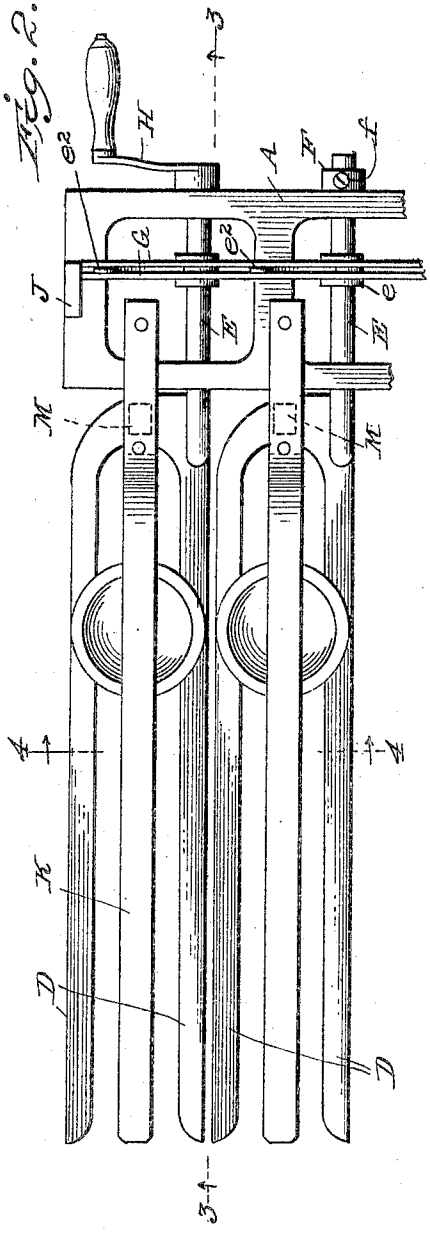


Fig. 3.

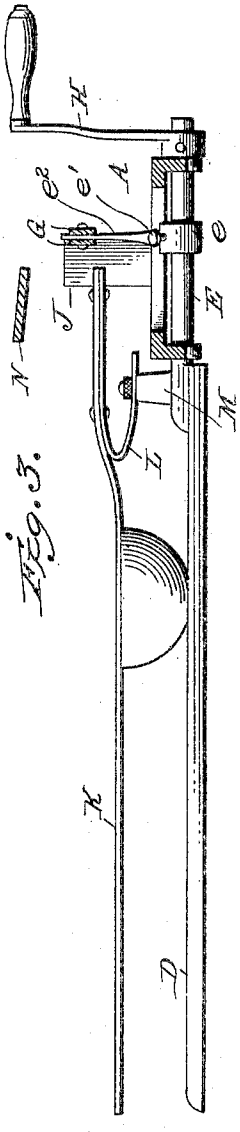


Fig. 4.

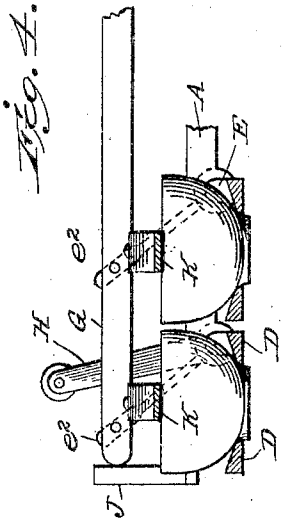
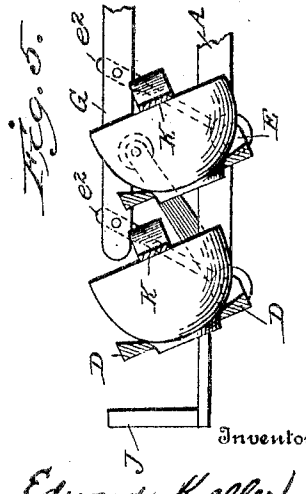


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

EDWARD KELLER, OF BALTIMORE, MARYLAND.

TOOL FOR HANDLING SCORIFIERS.

No. 797,121. Specification of Letters Patent. Patented Aug. 15, 1905.

Application filed April 26, 1905. Serial No. 257,535.

To all whom it may concern:

Be it known that I, EDWARD KELLER, a citizen of the United States, residing in the city of Baltimore, Maryland, have invented certain new and useful Improvements in Tools for Handling Scorifiers; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the letters of reference marked thereon.

This invention relates to an improved device for handling scorifiers especially designed for removing a whole set (usually twenty) of scorifiers from the muffle and pouring their contents simultaneously into the molds or for placing the scorifiers in the muffle.

To this end the invention consists in certain novel details of construction and combinations and arrangements of parts, all as will be now described and the particular features of novelty pointed out in the appended claims.

Referring to the accompanying drawings, wherein is illustrated the preferred embodiment of the invention, Figure 1 is a perspective view of the tool with the scorifiers in place before pouring. Fig. 2 is a top plan view of a portion of the tool. Fig. 3 is a longitudinal sectional view on the line 3 3, Fig. 2. Fig. 4 is a sectional view on the line 4 4, Fig. 2. Fig. 5 is a similar view showing the scorifiers in pouring position.

Similar letters of reference in the several figures indicate the same parts.

In the drawings the letter A indicates a metal frame consisting, preferably, of a single casting and provided with a shank B, fitted with handle C, of wood or some other non-heat-conducting material.

The holders for the scorifiers are carried by the frame A, and in the present instance these holders consist of forks having two prongs or branches D. There are five of such forks, corresponding to the five longitudinal rows of the scorifiers in the muffle, the prongs or branches D being of such length as to hold one row of scorifiers, as shown clearly in Fig. 1. Each of the forks is provided or formed with a shank E, which is journaled in the frame A, preferably at two points, as shown, said forks being held in position by means of collars F, fitted over the shanks E and secured by set-screws *f*. It is desirable that all the forks be turned or tilted simultaneously, and in the present instance this result is attained by the following instrumentalities: Fitted upon each of the shanks E is a collar *e*, which may be held in adjusted positions upon said shank by means of the set-screw *e'*. Formed integral with or secured to said collars *e* are the arms e^2, which at their upper ends are secured to a connecting rod or bar, in the present instance consisting of two plates or bars G, between which the arms e^2 are held. It will thus be seen that if one of the shanks should be turned the other through the described connections would also be turned and the forks tilted. The shank, therefore, of one of the forks, and preferably one of the end ones, is provided with a crank-handle H, by which it may be turned. It will be noted from an inspection of Fig. 2 that the shanks E of the forks are to one side of the longitudinal axis, the shank being in line with one of the prongs of the forks and is the axis of rotation of the forks. By this construction the pouring edge of the scorifiers while being tilted is kept substantially in line with the axis of rotation of the holders, which would not be the case if the holders turned on a central axis.

The center of gravity of the scorifiers, it will be seen, lies to one side of the axis of rotation, and they would therefore when the tool was lifted tilt in that direction. To prevent this, a stop J is provided upon the frame against which the cross-bars G abut, as will be readily understood.

In handling the scorifiers it is necessary that they be held in place upon the forks and be prevented from falling off during the pouring operation. For this purpose spring-pressed fingers or bars K are employed, which press upon the top of the scorifiers. The bars K are preferably sheet-metal strips whose inner ends are secured to springs, which in the present instance consist of a metal band L, bent as shown, one end being secured to the bar K and the other to a post or support M on the forks. In order that the scorifiers may be removed from or placed upon the forks, these spring-pressed fingers must be raised, and this is accomplished by providing a cross-bar N, which is carried by a spring-bar O, fastened at its end to the handle C. The cross-bar N is normally held elevated above the inner ends of the bars K; but when the bars are to be raised the cross-bar N is depressed, so as to press upon and depress the inner ends of the bars, whereby said bars will be raised, as will be readily understood.

The manner of using the device will be

readily understood. When the scorifiers are to be removed from the muffle, the bars K are raised and the forks inserted beneath the scorifiers. The bars K are then permitted to drop upon the scorifiers and the whole set removed from the muffle and carried to the molds. The forks are then turned by turning the crank-handle and the contents of the scorifiers poured simultaneously into the molds during the pouring operation, the frame of the tool resting on the edge of the mold.

Having thus described my invention, what I desire to secure by Letters Patent is—

1. In a device such as described the combination with a frame, holders for supporting the scorifiers at top and bottom respectively, carried by the frame and means for turning the holders to tilt the scorifiers; substantially as described.

2. In a device such as described the combination with a frame, a series of holders for supporting the scorifiers at top and bottom respectively, carried by the frame and means for simultaneously turning the holders to tilt the scorifiers.

3. In a device such as described the combination with the frame of a fork upon which the scorifiers rest journaled in the frame, a finger engaging the top of the scorifiers, carried by the fork, and means for turning the fork to tilt the scorifiers, for the purpose set forth.

4. In a device such as described, the combination with the frame, of a series of forks for holding the scorifiers journaled in said frame, and means for simultaneously turning said forks to tilt the scorifiers, for the purpose set forth.

5. In a device such as described, the combination with the frame, of a series of forks each provided with a shank journaled in said frame, the arms carried by the shanks, the connecting-rod to which said arms are connected, whereby when one of said forks is turned the others will also be turned, as and for the purpose set forth.

6. In a device such as described, the combination with the frame, of a series of forks each provided with a shank journaled in said frame, the arms carried by said shanks, the connecting-rod to which said arms are connected, the crank-arm carried by the shank of one of the forks, whereby by turning said crank all the forks may be turned and the scorifiers tilted, as and for the purpose set forth.

7. In a device such as described, the combination with the frame, of the series of forks connected for simultaneous movement each journaled in said frame to one side of the longitudinal axis of the forks and means for turning said forks, as set forth.

8. In a device such as described, the combination with the frame, of the series of forks, each provided with two prongs, and having a shank extended in line with one of the prongs journaled in the frame, and means for turning said forks.

9. In a device such as described, the combination with the frame, of a series of forks journaled in said frame on an axis to one side of the longitudinal axis of the forks, and connected for simultaneous operation and means for preventing the turning of the forks in one direction; substantially as described.

10. In a device such as described the combination with the frame, the series of forks journaled therein to one side of the longitudinal axis, the arms carried by the forks, the connecting-rod to which said arms are connected, and the stop carried by the frame against which the connecting-rod abuts to prevent the turning of the forks; substantially as described.

11. In a device such as described the combination with the frame, the forks journaled therein, means for rotating said forks, and the retaining-fingers for holding the scorifiers in place; substantially as described.

12. In a device such as described, the combination with the frame, the forks journaled in said frame, means for rotating said forks, and the spring-pressed retaining-fingers for holding the scorifiers in place upon the forks; substantially as described.

13. In a device such as described, the combination with the frame the forks journaled therein, means for rotating said forks, the spring-pressed fingers carried by the forks engaging the scorifiers for holding them in place, and means for raising the fingers from engagement with the scorifiers, as and for the purpose set forth.

EDWARD KELLER.

Witnesses:
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K. W. MCCOMAS.