

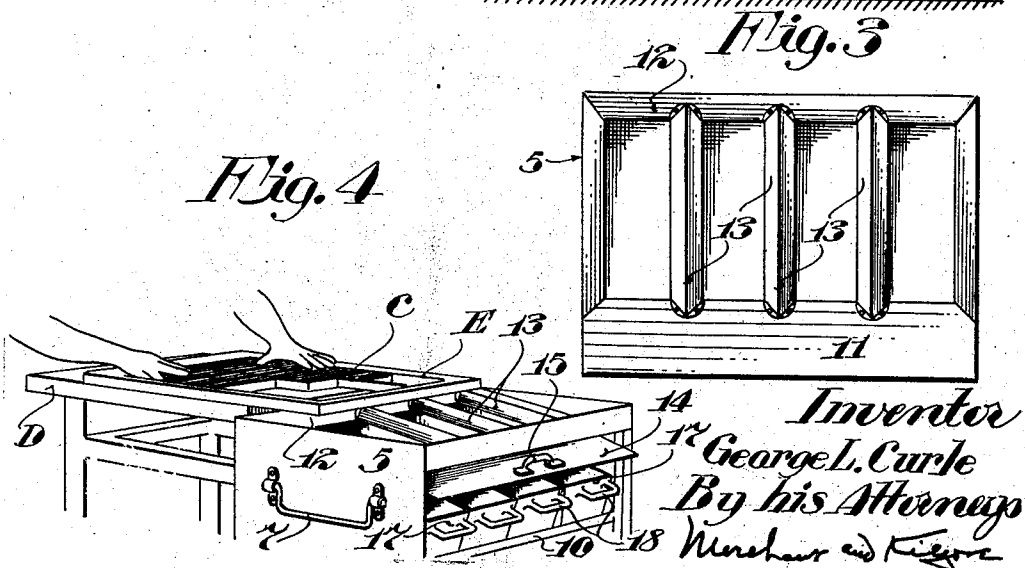
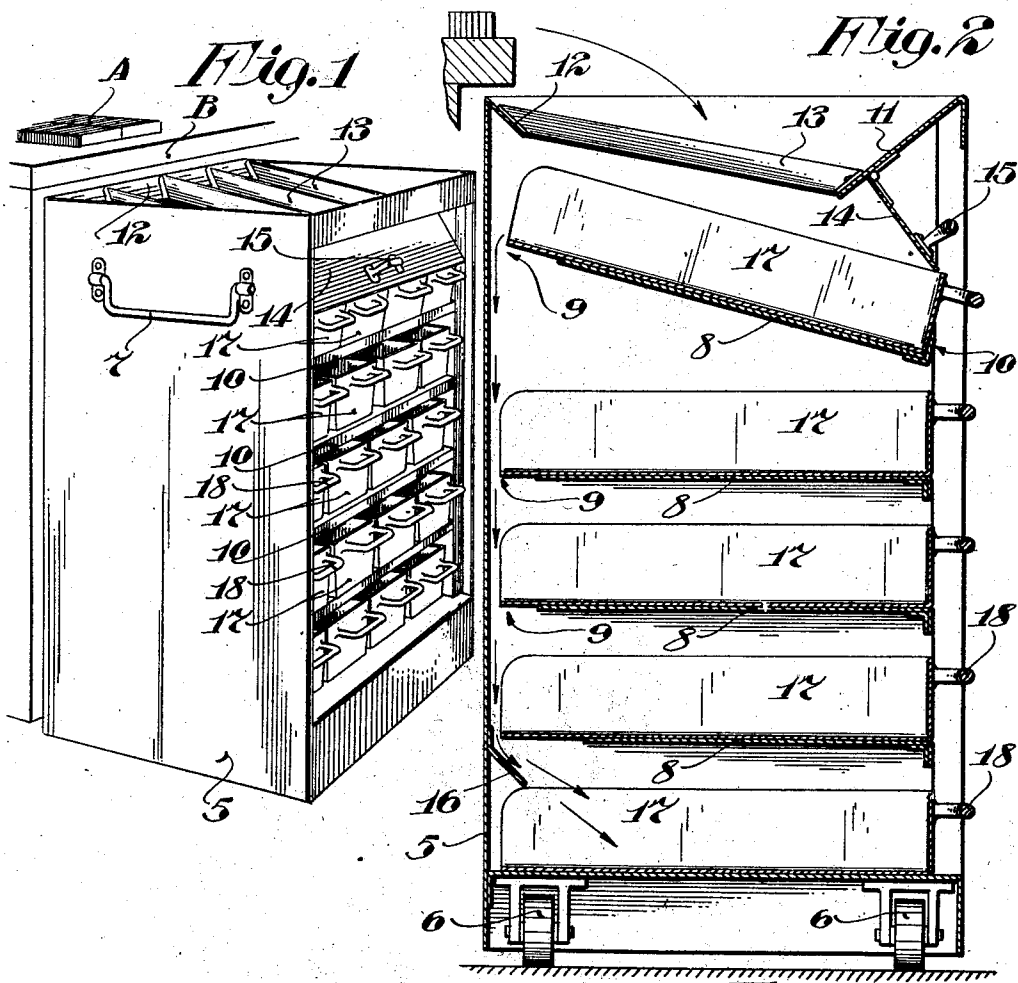
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PORTABLE SCOOP RACK

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# UNITED STATES PATENT OFFICE

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## PORTABLE SCOOP RACK

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My present invention has for its object to provide a simple and highly efficient portable scoop rack intended for general use but especially well adapted for use in printing shops, composing rooms and the like in collecting and holding broken up type forms commonly called "killouts" to be refed into the auxiliary melting pot of a linotype machine or a melting furnace and formed into bars to be fed into the main melting pot of a linotype machine not equipped with an auxiliary melting pot.

This rack is designed to be moved from place to place to receive a killout from a make-up truck or killout stone and in its preferred form holds a plurality of scoops, certain of which are arranged to collect and hold a killout, others of which are held in storage either filled or empty and still others are arranged to receive and hold the spill or overflow from the scoops being filled or from the full scoops as they are moved in the rack.

To the above end, generally stated, the invention consists of the novel devices and combinations of devices hereinafter described and defined in the claims.

In the accompanying drawings, which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings:

Fig. 1 is a perspective view of the portable scoop rack positioned to receive a killout from a killout stone;

Fig. 2 is a view in central vertical section of the parts shown in Fig. 1, on an enlarged scale;

Fig. 3 is a plan of the rack as shown in Fig. 1; and

Fig. 4 is a fragmentary perspective view showing the rack positioned to receive a killout from a make-up truck.

The portable scoop rack includes a sheet metal shell supported on wheels 6 and having an open top and front. Attached to each side of the shell 5 is a handle 7 by which the rack may be moved. Secured within the shell 5 above the bottom thereof are four vertically spaced shelves 8. These shelves 8 are flat and the three lowermost thereof extend in substantially true horizontal positions while

the uppermost shelf 8 is upwardly and rearwardly inclined. All of the shelves 8 are terminated short of the back of the shell 5 to leave a vertical passageway therebetween. At the front longitudinal edge of the uppermost shelf 8 is an upstanding stop flange 10 and in the top of said shell 5 are front and rear deflecting flanges 11 and 12, respectively. These flanges 11 and 12 are in hopper-like arrangement and the former thereof is relatively wide while the latter is relatively narrow so that their lower longitudinal edge portions extend in a plane substantially parallel to the inclined uppermost shelf 8.

Four divider bars 13 extend from the front to the rear of the shell 5 and are rigidly secured at their ends to the deflecting flanges 11 and 12 near their lower longitudinal edge portions and divide the open hopper top of the shell 5 into four equally spaced passageways. These divider bars 13 in cross section are in the form of inverted V's. A gravity closed door 14 is hinged at its upper longitudinal edge portion to the under side of the deflecting flange 11 and is provided with a handle 15 by which it may be raised or lowered.

At the lower end of the passageway 9 is a deflecting flange 16 secured to the back of the shell 5 with its upper edge substantially in the plane of the lower most shelf 8 and extending therefrom between said lower shelf and the bottom of the shell 5.

Removably mounted on the bottom of the shell 5 and on each shelf 8 are four scoops 17 with just sufficient clearance therebetween to permit the same to slide freely into or out of the rack. Each scoop 17 is relatively long and narrow and has an open top and rear end and on the front end thereof is a handle 18.

It is important to note that the divider bars 13 overlie the joints or spaces between the scoops 17 on the upper shelf 8 and deflect materials dumped into the open top of the rack into the four uppermost scoops 17 and prevent said materials from falling therebetween. The stop flange 10 holds the inclined scoop 17 in position on the upper shelf 8 and prevents the same from sliding forward thereon. The door 14 at its free longitudinal

edge normally rests on the sides of the uppermost scoop 17 at their front ends and prevents materials discharged into said scoops from rolling or sliding out the front ends thereof.

When the scoops 17 are properly positioned on the shelves 8 their rear ends terminate short of the back of the shell 5 and do not entirely obstruct or close the passageway 9. Any spill or overflow of materials from the scoops 17 into the passageway 9 will, during its precipitation, strike the deflecting flange 16 and be directed thereby into the row of scoops 17 on the bottom of the shell 5, as indicated by arrows in Fig. 2. When the scoops 17 on the top shelf 8 are full they may be interchanged with empty scoops 17 on the other shelves 8 or the contents thereof may be dumped into the auxiliary melting pot of a linotype machine or into a melting furnace.

To collect a killout A form a killout stone B, as shown in Fig. 1, the rack is wheeled into a position in which the front edge portion of said stone overlies the back of the rack so that said killout may be scraped or shoved into the hopper top of the rack where the same is distributed by the bars 13 into the uppermost scoops 17. When it is desirable to collect the entire killout of a type make-up C or any part thereof when resting on a make-up table D, the rack is wheeled into a position in which its back closely engages the edge portion of the top of said table, as shown in Fig. 4. With the rack thus positioned, the entire make-up C or any part thereof may be loosened from the chase E in the well known manner and then said chase slid on the top of the table D into a position in which it overhangs the hopper top of the rack to permit the released type form to be precipitated into said rack and be distributed by the bars 13 into the upper row of the scoops 17.

By the use of the above described rack killouts may be quickly and easily collected and transported to a storage space and the contents in the scoops dumped into an auxiliary melting pot or melting furnace when required. Heretofore, it has been customary to throw killouts in boxes or other receptacles on the floor where there is considerable overflow and spill. This method of handling waste type material results in an accumulation of dust and dirt that is very objectionable in that it produces a great deal of dross at the time said material is being remelted.

By the use of my improved portable scoop rack, linotype slugs and other waste type material may be kept free from dust and dirt. As the uppermost row of scoops 17 are held in a forwardly and downwardly inclined position the materials as they are precipitated therein will slide to the front of said scoop and thereby evenly fill the same.

What I claim is:

1. A rack of the class described compris-

ing a shell having an open hopper top, and a scoop slidably and removably mounted in the shell under the open hopper top thereof.

2. A rack of the class described comprising a shell having an open top, two scoops removably mounted in the shell under the open top thereof, and a divider bar extending through the open top of the shell and overlying the joint between the two scoops.

3. A rack of the class described comprising a shell having an open hopper top, and a scoop slidably and removably mounted in the shell under the open hopper top thereof and held in a rearwardly and upwardly inclined position.

4. A rack of the class described comprising a shell having a hopper-like open top, a scoop removably mounted in the shell under the open top thereof and held in a rearwardly and upwardly inclined position, the front end portion of the scoop being outward of said open top, and a gravity-closed door hinged to the shell and normally covering the front end portion of the scoop.

5. A rack of the class described comprising a shell having a hopper-like open top, two scoops removably mounted in the shell under the open top thereof and held in a rearwardly and upwardly inclined position, a divider bar in the open top of the shell extending substantially parallel to the scoops and overlying the joint therebetween, the front end portions of the scoops being outward of said open top, and a gravity-held door hinged to the shell and normally extending in a forwardly and downwardly inclined position and covering the front end portions of the scoops.

6. A rack of the class described comprising a shell having an open top, upper, lower and intermediate scoops removably mounted in the shell with the former under the open top thereof, said upper and intermediate scoops being spaced from the back of the shell to leave a passageway therebetween, and a deflector arranged to direct materials precipitated through said passageway into the lower scoop.

7. A rack of the class described comprising a shell having a hopper-like open top, upper, lower and intermediate rows of scoops removably mounted in the shell, the upper row of scoops being in upwardly and rearwardly inclined positions with their front end portions extending outward of said open top, a divider bar extending through the open top of the shell and overlying the joint between the scoops in the upper row, a gravity-closed door hinged to the shell and normally extending in a forwardly and downwardly inclined position and covering the front end portions of the upper row of scoops.

8. A rack of the class described comprising a portable wheel-supported shell having a hopper-like open top, vertically spaced

shelves in the shell spaced from the back thereof to leave a passageway therebetween, the uppermost of said shelves being under the open top of the shell and in a rearwardly and upwardly inclined position, a row of scoops on each shelf and on the bottom of the shell, divider bars extending through the open top of the shell and overlying the joints between adjacent scoops on the upper shelf, a deflector arranged to direct materials precipitated through said passageway into the scoops on the bottom of the shell, the front end portions of the scoops on the upper shelf being outward of said open top, and a gravity-closed door hinged to the shell and normally extending in a forwardly and downwardly inclined position and covering the front end portions of the scoops on the upper shelf.

9. A rack of the class described comprising a shell having a hopper-like open top, a scoop removably mounted in the shell under the open top thereof, the front portion of the scoop being outward of said open top, and a displaceable door normally covering the front end portion of the scoop.

10. A rack of the class described comprising a shell having a hopper-like open top, two scoops removably mounted in the shell under the open top thereof, a divider bar in the open top of the shell and overlying the joint between the two scoops, the front end portions of the scoops being outward of said open top, and a displaceable door normally covering the front end portions of the scoops.

11. A rack of the class described comprising a shell having an open top, upper and lower scoops removably mounted in the shell, the former under the open top thereof, said upper scoop being positioned in the shell to leave a passageway at the back thereof through which materials will be precipitated into the lower scoop.

12. A rack of the class described comprising a shell having an open top, upper, lower and intermediate scoops removably mounted in the shell, said upper and intermediate scoops being spaced from the back of the shell to leave a passageway therebetween, and a deflector arranged to direct materials precipitated through said passageway into the lower scoop.

In testimony whereof I affix my signature.  
GEORGE L. CURLE.

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