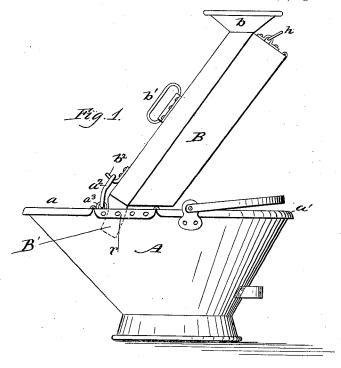
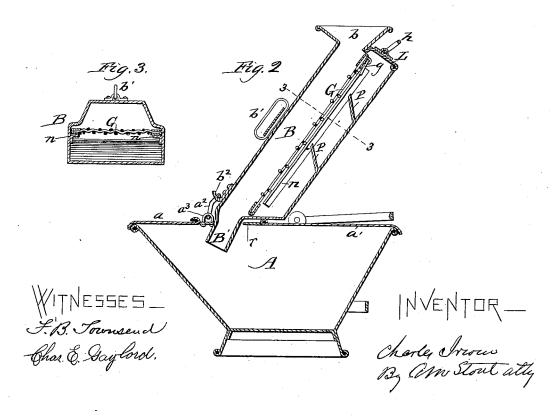
C. IRWIN.

COMBINED COAL SCUTTLE AND ASH SIFTER.

No. 265,230.

Patented Sept. 26, 1882.





UNITED STATES PATENT OFFICE.

CHARLES IRWIN, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-FOURTH TO GRENVILLE G. PIERCE, OF SAME PLACE.

COMBINED COAL-SCUTTLE AND ASH-SIFTER.

SPECIFICATION forming part of Letters Patent No. 265,230, dated September 26, 1882. Application filed May 1, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES IRWIN, of the city of Chicago, county of Cook, and State of Illinois, have invented certain Improvements 5 in Coal-Scuttles and Ash-Sifters Combined, of which the following is a specification.

My invention relates to providing a coalbucket with a cheap, convenient, and efficient ash sifter or separator to be used to separate 10 the ashes of such coal as may be left unconsumed in grates and stoves, or such as shall pass through grates and stoves without burning, in order that such coal may be saved for use instead of being left with the ashes and 15 thrown into the ash-heap.

My said improvement will be fully described hereinafter with reference to the accompany-

ing drawings, in which-

Figure 1 represents a perspective view of a 20 coal bucket suitably constructed for use in connection with my improved ash-separator, and of a separator in proper position for use mounted upon the bucket; Fig. 2, a longitudinal vertical section of the same as shown in 25 Fig. 1; and Fig. 3, a cross vertical section of the separator alone, taken in the plane indicated by broken lines 3 3 in Fig. 2.

A indicates the bucket; B, the body or shell of the separator; B', its spout, through which 30 the pieces of unburnt coal find their way into the bucket, a suitable opening into the same being provided, as shown. The under portion of the lower end of the body of the separator, as shown, rests upon a portion, r, of the cover of the bucket, which is made fast thereon, so that the body will stand at an inclination to the cover, and in order to secure it in that position the front side is provided with a hook, b^2 , the permanent portion of the cover with a ring or link, a^2 , and staple a^3 , and the ring is slipped over the point of the hook b^2 , and is slipped off the same when the body B is to be removed.

b' is a handle to be used in removing the 45 body B, and b is an enlargement of the same for a hopper, into which mingled coal and ashes are poured so that they will slide down the incline into the bucket.

G is a sifter or sieve of wire-gauze, which is 50 interposed about midway between the upper side and the lower side or bottom of the shell | hold the separator in position when in use and

B, and each of its two sides rests upon the cleats n, fastened to the side of the shell.

P P indicate thin plates extending across the bottom of the separator, and at an acute 55 angle with the same, so that they stand nearly vertically on the same, and they serve the purpose of arresting the ashes which pass through the meshes of the sieve and preventing their falling down to the bottom end of the sepa- 60 rator. Now, when the mingled ashes and bits of coal are poured into the hopper b and slide down the incline of the sieve, the ashes pass through it, as the bits and blocks of coal roll more or less, and are arrested by the plates P 65 P, and are there prevented from filling up the lower end of the shell and blocking up the sieve, while the bits of coal roll and slide upon the sieve into the bucket through spout B'. When the space under the sieve shall have be- 7 > come pretty well filled the whole body B may be removed and the hinged door L turned back by the ring h and reversed, or the upper end turned downward, and emptied of the ashes.

It will be observed that the cover of the 75 bucket consists of three parts-the central portion, r, which is not removable, and contains the opening for the spout B, the front section, a, which turns upon a hinge and opens for the coal to be turned out, and the rear sec- 80 tion, a', which also turns and opens upon a hinge to allow the fresh coal to be poured or shoveled into the bucket, so that when the two hinged sections of the cover are down, and the door in the upper end of the shell also down, 85 the ashes cannot escape in the form of dust, and hence the operation of separating the ashes is, comparatively speaking, a cleanly one.

When the work is done the separator may be lifted out of its seat in the cover and laid 90 away in readiness for future use.

What I claim as new, and desire to secure

by Letters Patent, is—
1. The bucket A, having the middle section, r, of the cover made fast thereon and provided 95 with a suitable opening for the spout B', and its front and rear sections a and a' hinged thereto, substantially as shown and described.

2. The separator B, in combination with the permanent section r of the cover, provided 100 with staple a^3 , link a^2 , and hook b^2 , adapted to

allow of its removal when not in use, substantially as described.

3. In combination with the shell of the separator B, having an ash-tight bottom, inclined as described, the vertical plates P, fastened upon said bottom, and the sieve G, the said plates being adapted to arrest the ashes and detain them and keep the sieve free of them along its whole length to the lower end, substantially as described.

4. The combination of the separator B, having spont B', with the bucket A, provided with a suitable opening for the spout B', substantially as described.

CHARLES IRWIN.

Attest:

GRENVILLE G. PIERCE, ABEL BOND.