

J. A. Howland,

Coal Screen.

No 26,768.

Patented Jan. 10, 1860.

Fig. 1,

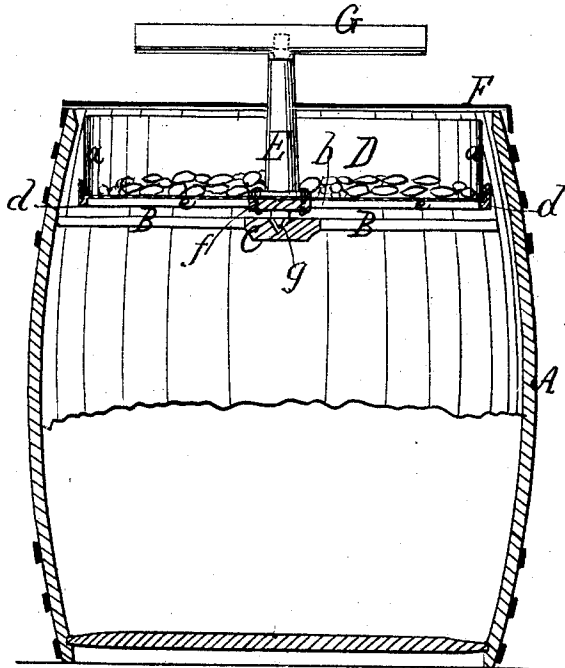
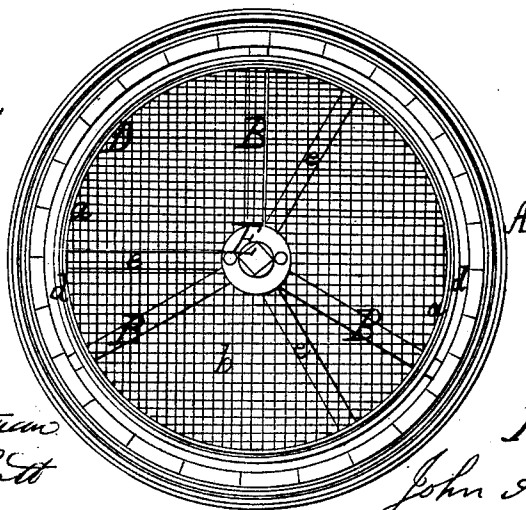


Fig. 2,



Witnesses;

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UNITED STATES PATENT OFFICE.

JOHN A. HOWLAND, OF PROVIDENCE, RHODE ISLAND.

COAL-SIFTER.

Specification of Letters Patent No. 26,768, dated January 10, 1860.

To all whom it may concern:

Be it known that I, JOHN A. HOWLAND, of Providence, in the county of Providence and State of Rhode Island, have invented
5 a new and Improved Coal-Sifter; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification, in
10 which—

Figure 1, represents a vertical central section of this invention, and Fig. 2, is a plan or top view of ditto with the cover of the barrel removed.

15 Similar letters of reference in both figures indicate corresponding parts.

This invention consists in arranging in the interior of the barrel a center which is supported by two or more arms that are
20 attached to the inside of the barrel, and which center serves to support the sieve in such a manner that the latter can be rotated guided by a point below and by the shank passing through a hole in the cover above.

25 To enable those skilled in the art to make and use my invention, I will proceed to describe it.

A represents a barrel that may be constructed of sheet iron or of wood as may be
30 most convenient. Secured to the inside of said barrel are two or more arms B, which unite in a boss C, in the center. These arms together with the boss are cast out of one piece and they are fastened by means of
35 rivets if the barrel is sheet iron or simply by means of nails if the barrel is wood.

40 B, is the sieve which consists of the sheet iron cylinder *a*, over the edge of which the wire netting *b*, is turned and confined by a cast iron rim *d*, which is forced over it and riveted to the outside of the cylinder *a*. From this rim two or more arms *e*, extend to the center plate *f*, and secured to this plate is the shank E, which is placed on the top of

the wire netting and which is provided with a foot to admit of being riveted to the plate *f*. 45

Secured to the under side of the plate *f*, is the center *g*, which fits into a corresponding socket in the boss C. Instead of attaching the point to the plate *f*, it might however be reversed with equal advantage and the point might be attached to the boss C, to work in a socket in the under side of the plate *f*. 50 55

The shank E, extends through the cover F, of the barrel and it is provided with a handle G, that serves to give a rotary or vibratory motion to the sieve. To prevent the cover falling off it is furnished with a flange that projects down over the edge of the barrel as clearly shown in Fig. 1. The handle G, fits nicely on the upper square end of the shank so that the same can be taken off together with the cover of the barrel. If this is done, the sieve is ready to receive the coal, the cover is now placed on and the sieve rotated by means of the handle until the ashes are completely separated from the coal, and after the dust has settled down, the cover is taken off again and the stones and slag can now readily be picked out; access being had to the whole sieve. The sieve with its contents can now easily be taken out and emptied, and it is not necessary to lift more than the sieve itself and its contents in order to pour out the coal. 60 65 70 75

Having thus fully described my invention what I claim as new and desire to secure by Letters Patent, is— 80

The combination with the sieve D, of the center plate *f*, center *g*, boss C, and shank E, as and for the purpose herein shown and described.

JOHN A. HOWLAND.

Witnesses:

SILAS HEMENWAY,
JOSEPH A. SCOTT.