S. W. STUART.

Improvement in Coal Sifters.

No. 125,348. Patented April 2, 1872.

Fig. 1.

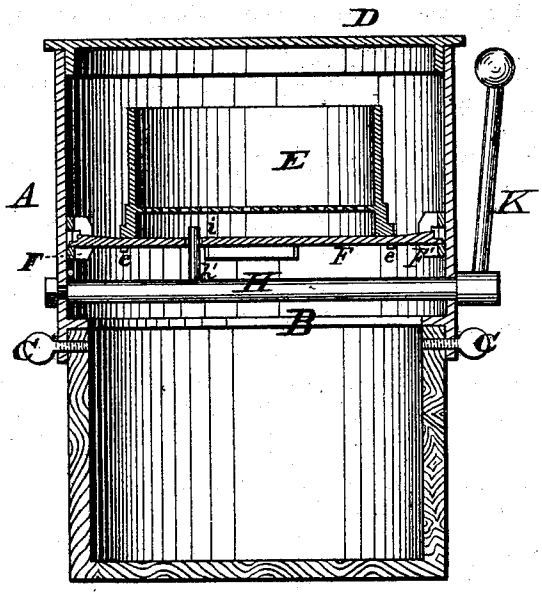
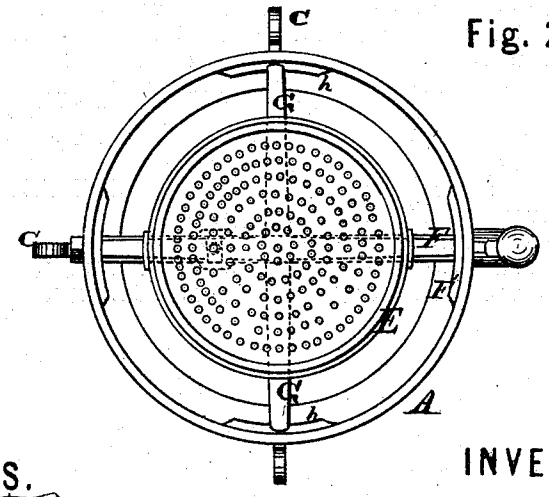


Fig. 2.



WITNESSES.
E. A. Bates
G. E. Upham

INVENTOR.
S. W. Stuart
Chipman Hosmer & Co.
Attys.

UNITED STATES PATENT OFFICE.

STEPHEN W. STUART, OF RICHMOND, MAINE.

IMPROVEMENT IN COAL-SIFTERS.

Specification forming part of Letters Patent No. 125,348, dated April 2, 1872.

To all whom it may concern:

Be it known that I, STEPHEN W. STUART, of Richmond, in the county of Sagadahoc and State of Maine, have invented a new and valuable Improvement in Coal-Sifters; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a vertical central section of my invention. Fig. 2 is a plan view of the same with cover removed.

My invention has relation to coal-sifters; and consists in the construction and novel arrangement of devices used in connection with a sifting-screen for the purpose of agitating the latter.

Referring to the drawing, A represents a cylindrical case adapted to rest on the edge of a barrel, tub, or other vessel. B represents an internal flange, by means of which said case is supported. C are thumb-screws for securing the case to the vessel. D designates a cover to prevent the dust from rising from the screen. E represents a cylindrical screen or sieve, provided at its lower edge with two notched lugs, *e*, which rest on and fit closely a horizontal bar, F, which traverses the center of the case, and has its ends supported by means of slotted plates F′. From the sides of the bar F, at right angles thereto, arms G project, and are supported at their ends by means of cleats *h* secured to the inner side of the case A. These arms assist in supporting the sieve. H denotes a shaft passing through the center of the case A from side to side, and journaled thereto. *h′* represents a finger projecting upward from this shaft, and entering a slot, *i*, cut transversely in the bar F to one side of its center. K indicates a handle secured to one end of the shaft H, and used to operate it. When the shaft is made to rock a reciprocating rotary motion is given to the sieve through the arms F G, which slide on their bearings. Sufficient agitation is thereby produced to thoroughly screen the coal contained in the sieve. A reciprocating lateral movement may be given to the sieve by providing the shaft H with two fingers entering separate slots on opposite sides of the center of the bar F, and by shortening and resting the arms G on hoops or other supports which will allow them sufficient longitudinal play. In order to reduce friction, rollers may be fitted to the ends of the arms F G.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination and arrangement in a coal-sifter of the flanged case A, rock-shaft H, finger *h′*, slotted bar F, arms G, cleats *h* F′, and sieve E, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

STEPHEN W. STUART.

Witnesses:

J. W. SPAULDING,

DANIEL CLARKE.