

B. SEARS.
Coal Sifter.

No. 100,331.

Patented March 1, 1870.

Fig 3.

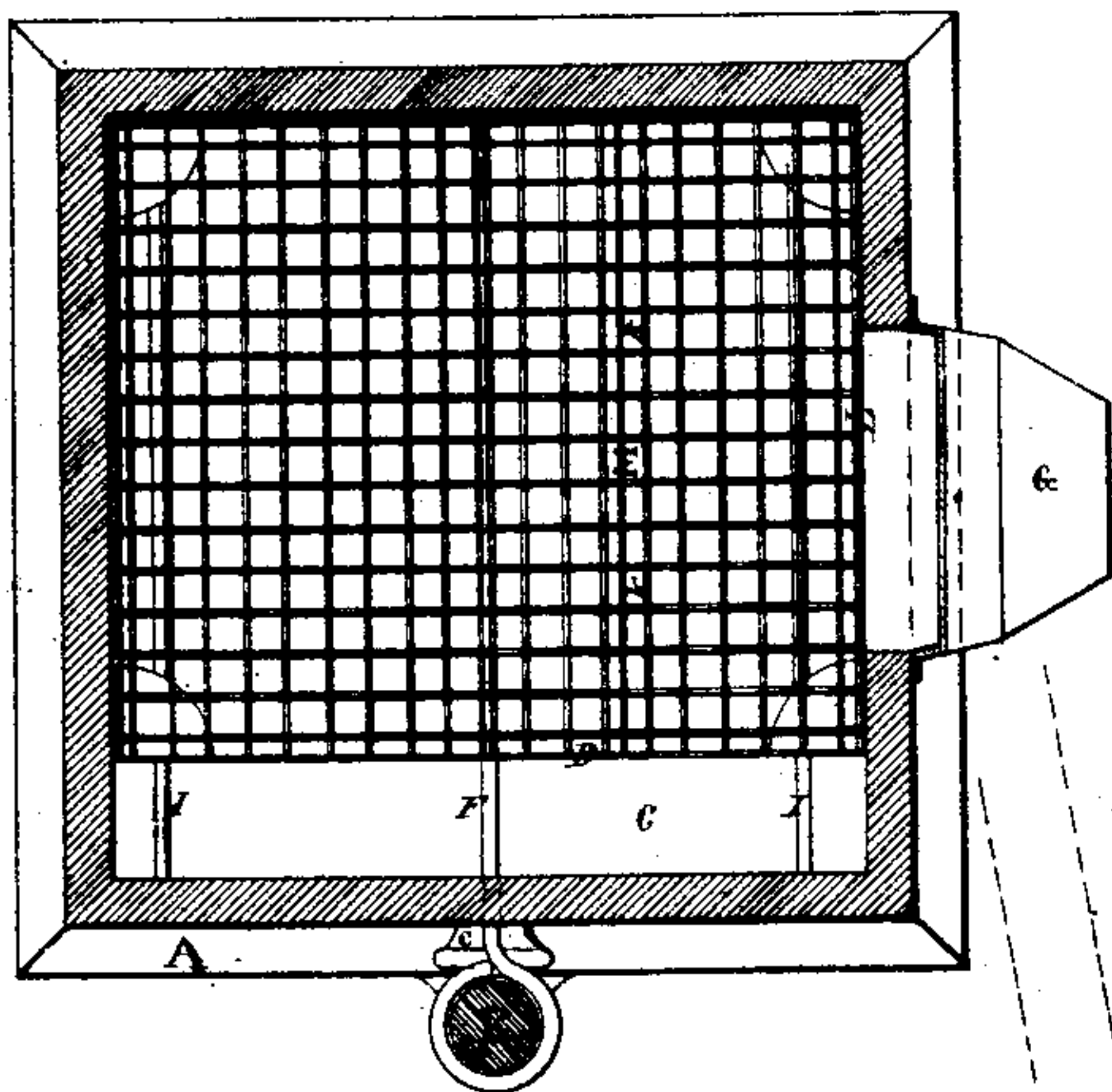


Fig 2.

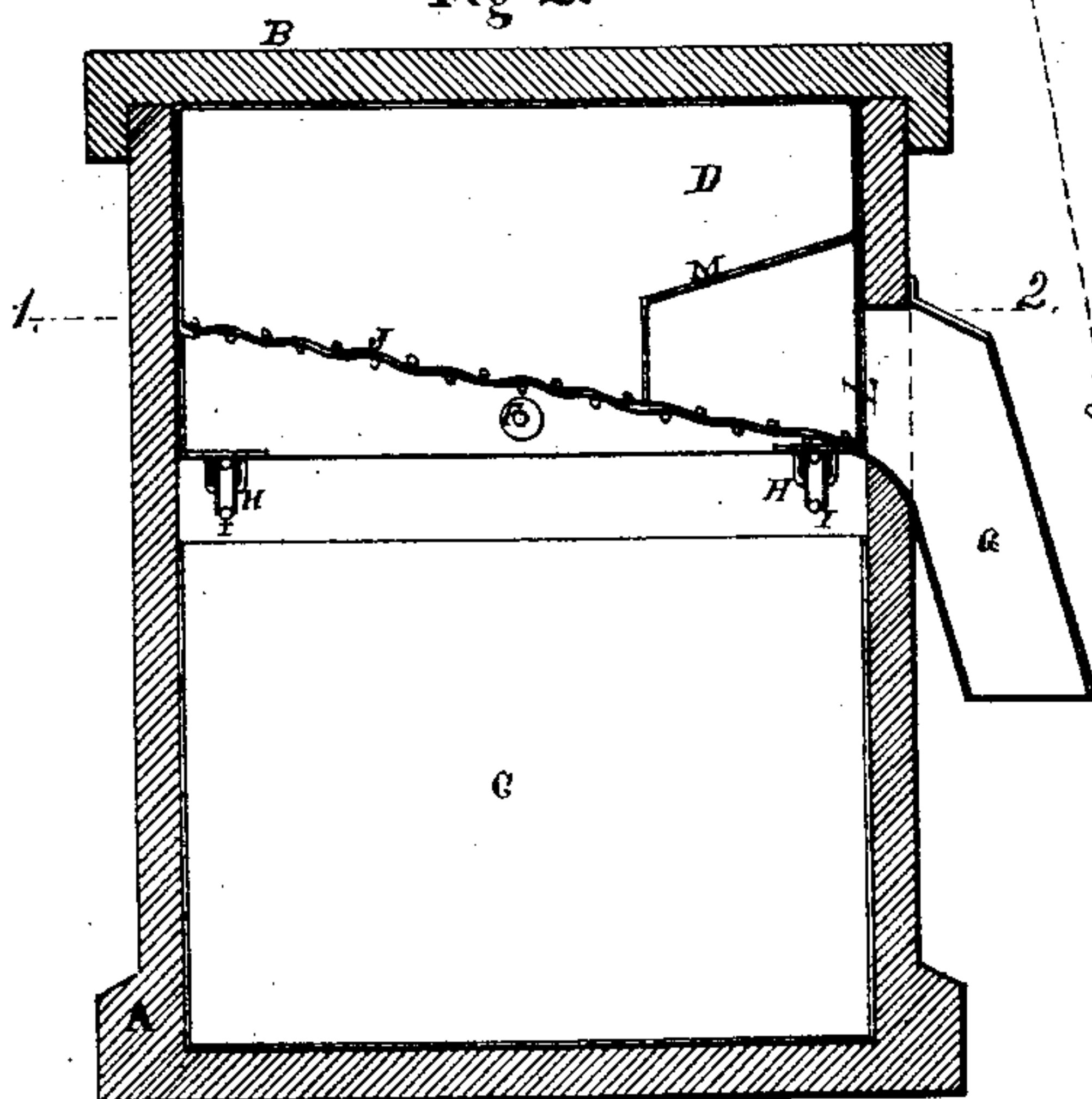


Fig 4.

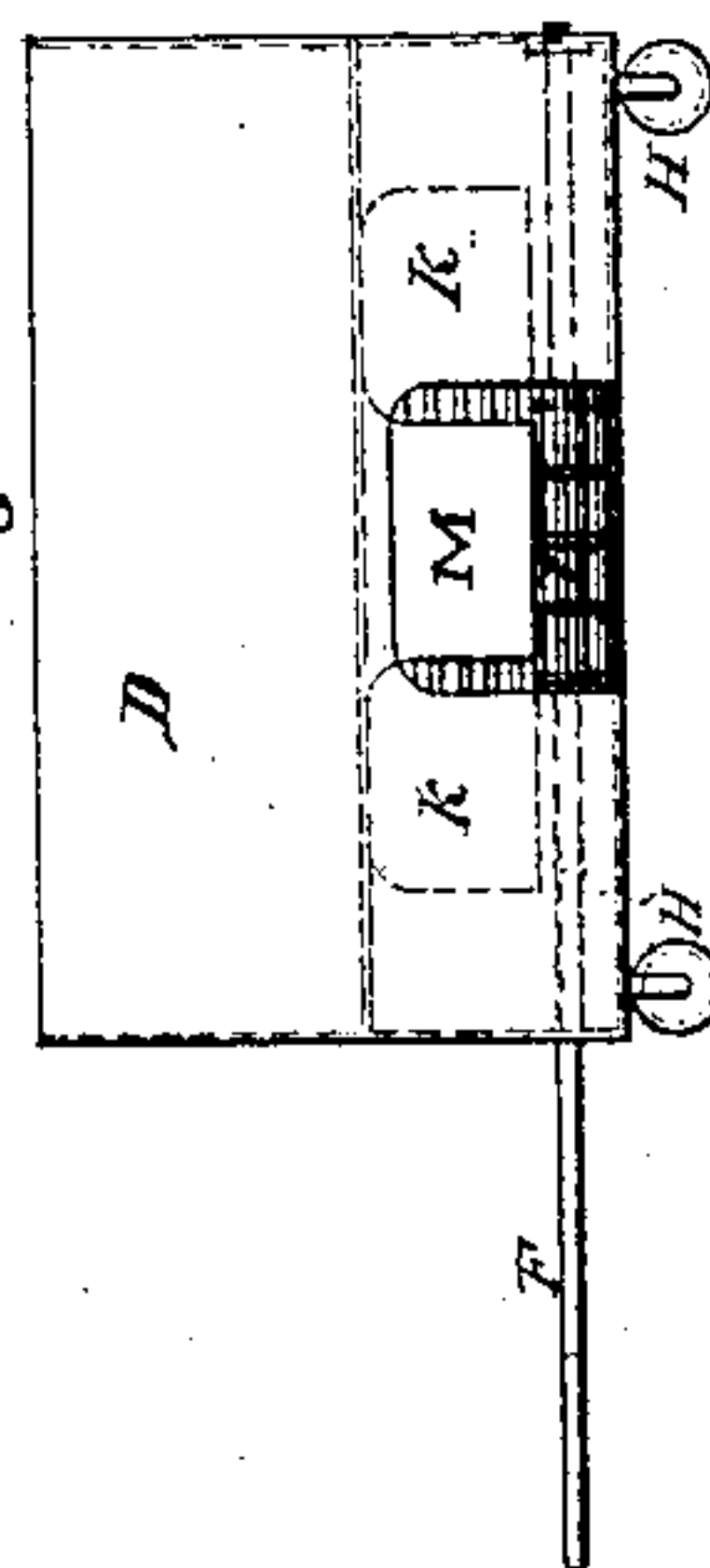
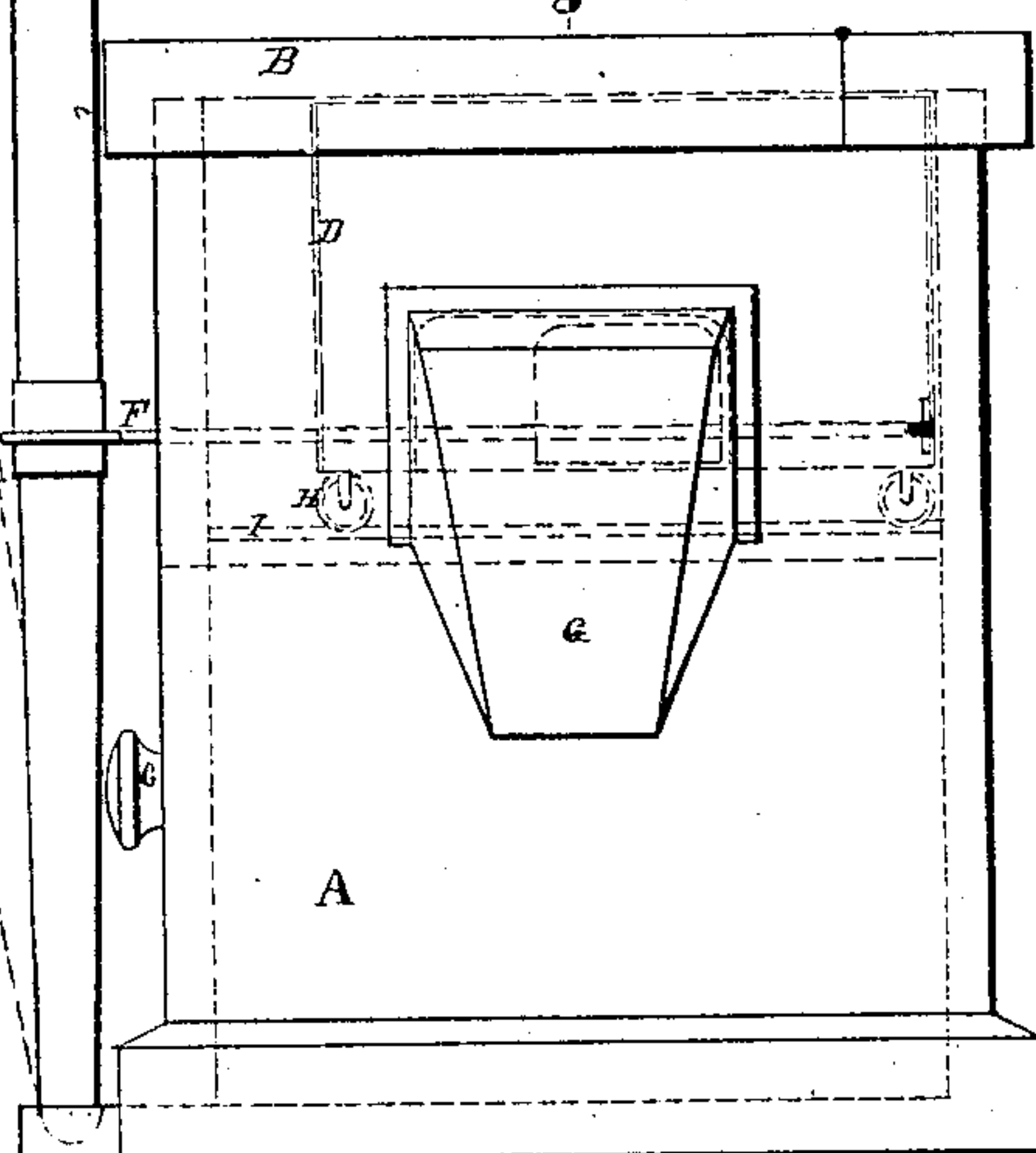


Fig 1.



Witnesses
John Myers
George W. Nelson.

Inventor
Brown Sears.

United States Patent Office.

BROWN SEARS, OF COLD SPRING, NEW YORK.

Letters Patent No. 100,331, dated March 1, 1870.

IMPROVED COAL-SIFTER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, BROWN SEARS, of Cold Spring, in the county of Putnam, and State of New York, have invented a new and improved Coal-Sifter; 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 drawings making a part of this specification.

Figure 1 is a front view.

Figure 2 is a vertical section through the center

Figure 3 is a horizontal section on the line 1 and 2.

Figure 4 is a view of the movable riddle-box.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish a simple, convenient, and effective machine for sifting, without the annoyance of dust; and

It consists in the construction and combination of the various parts of the machine, as hereinafter more fully described.

A is a close box, with a hinged cover, B.

C is a drawer for receiving the dust.

D is a movable box, containing the wire sieve J.

M is a partition in box D, having two openings K K and one opening marked L.

E is a lever for giving motion to the movable riddle-box D.

F is a rod connecting lever E to box D.

G is a spout for the discharge of material that does not pass through the meshes of the sieve.

H are four rollers connected to the bottom of movable box D, or substituted by half-round slides.

I I are two guides or tracks for rollers or slides H to run on.

The mode of operating the machine is as follows :

The cover B is raised, the material is thrown in the movable box D, and then the cover is closed. The handle E is moved back and forward in a rapid manner until all the material that has not passed through the meshes has passed through the openings K K and L, into and through the spout G, into any receptacle that is placed under the spout. The dust and small particles that pass through the meshes fall into the drawer C. The drawer is pulled out and emptied, then replaced for the next operation. No dust or small particles can escape, the box A being completely closed.

The partition M in the movable box D prevents the dust or small particles from passing out of the spout G, for all the material that reaches the spout G must pass through the openings K K and over the intervening meshes before it reaches the opposite side of the partition, and then is compelled to move along until it passes through the opening L into the spout G. In the mean time the dust and small particles fall through the meshes into the box C.

Having thus described my invention,

What I claim as new and original, and desire to secure by Letters Patent, is—

The construction of the movable box D, with its partition M and openings K K, rollers H H and guides I I, in combination with the closed box A and drawer C, as shown and described.

The above specification of my invention signed by me this 29th day of November, 1869.

BROWN SEARS.

Witnesses:

C. H. FERRIS,

JOHN MYERS.