

H. Wells,
Coal Screen.
N^o 1450. Patented Dec. 31, 1839.

Fig. 1.

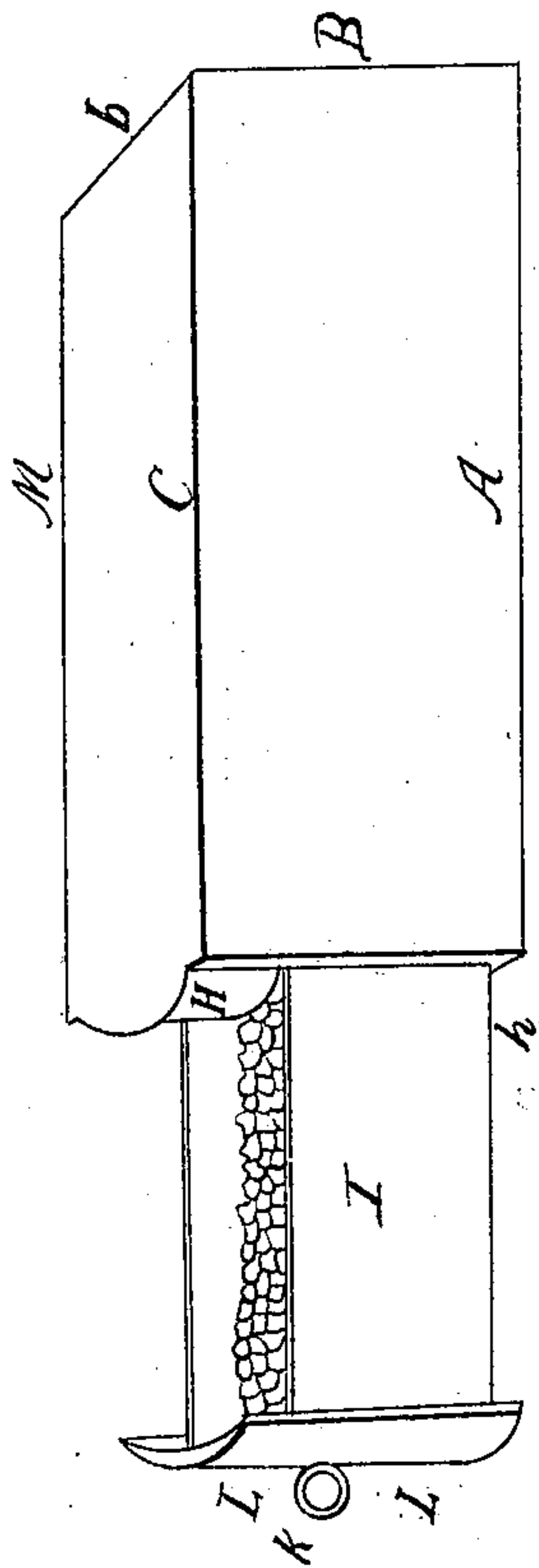
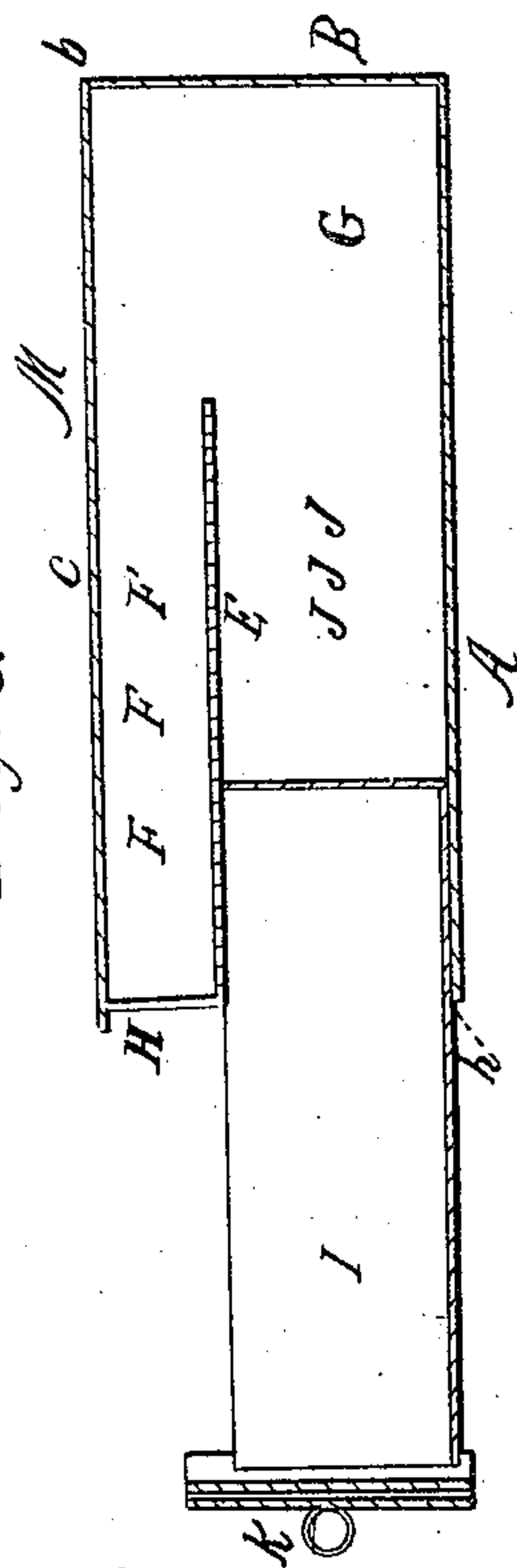


Fig. 2.



UNITED STATES PATENT OFFICE.

HORACE WELLS, OF HARTFORD, CONNECTICUT,

COAL-SIFTER.

Specification of Letters Patent No. 1,450, dated December 31, 1839.

To all whom it may concern:

Be it known that I, HORACE WELLS, of the town and county of Hartford and State of Connecticut, have invented a new and useful
5 Machine for Separating the Ashes from the Coal and Ashes that have Fallen from the Stove or Grate; and I do hereby declare that the following is a full and clear and exact description of the construction and op-
10 eration of the same, reference being had to the annexed drawings, making a part of this specification.

The machine or sifter consists of an oblong box M which is made some inches
15 longer than the stove pan or draw, the bottom of which is represented by the line marked A in the annexed drawings of which—

Figure 1 is a perspective view, and Fig. 2 is
20 a sectional view through the center, the draw being partly inserted in the case.

The top is represented by the letter C, the back part by the line marked B and the fore-part above the stove draw or pan when
25 inserted in the sifter, and above the sieve and below the top marked H. The bottom and top are of equal size; the two sides are also of equal size and of the same width as the length of the end represented by the line
30 marked B.

The sieve which is represented by the line marked E, Fig. 2, is not as long by some inches as the bottom or top, but is of the same width and of an equal length with
35 the stove pan or draw, is made by wires crossing each other, or by making holes through a piece of tin or sheet iron or some other substance and sufficient in number and sufficiently large to let the ashes through,
40 which are with the coal and separates the space marked J J J, which is made to receive the stove pan or draw from the space marked F, F, F, into which the ashes fall when the machine is turned over they are
45 separated from the coal by the sieve E.

G represents the space between the stove pan or draw when it is shut within the sifter and the back part B and into which the

ashes descend when the case stands on the end B. 50

I represents the stove pan or draw partly inserted and K the handle to the same. The whole machine or sifter is made of sheet tin or iron or other substance.

The stove pan or draw marked I is taken
55 from the stove or grate and contains the ashes and coal that have fallen from the stove or grate, and is inserted in the space marked J, J, J; the draw is then to be shut within the sifter. The whole machine is
60 then turned over bottom side up resting on the angle of the case marked i on the floor. The end of the machine H is then elevated so as to form an angle of about 15 or 20 degrees with the horizon. The machine or
65 sifter is then shaken briskly until the ashes are separated from the coal by the sieve E and have fallen into the space F, F, F. The end H is then still further elevated so that the end of the stove pan shall be parallel
70 with the horizon the end B standing on the floor the ashes from the space F F F will thus fall into the space G. The machine or sifter is then turned so as to again stand upon its bottom A. The whole machine is
75 then shaken so as to level the coal in the stove pan I. The stove pan I which contains the coal separated from the ashes can then be withdrawn—turned over and emptied of its contents which will be the coal or cinders
80 completely separated from ashes dust &c. To discharge the ashes from the case which will now be in the space G—the end B must be elevated when the ashes will descend over the bottom A and pass out at the end h. 85

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

The combination of the box M with the draw or ash pan I the whole being constructed and operating in the manner herein de- 90 scribed.

H. WELLS.

Witnesses:

NATHAN JOHNSON,
ELIJAH KNOX.