

J. F. RICE.

APPARATUS FOR REMOVING COKE FROM RETORTS.

No. 182,132.

Patented Sept. 12, 1876.

Fig. 1.

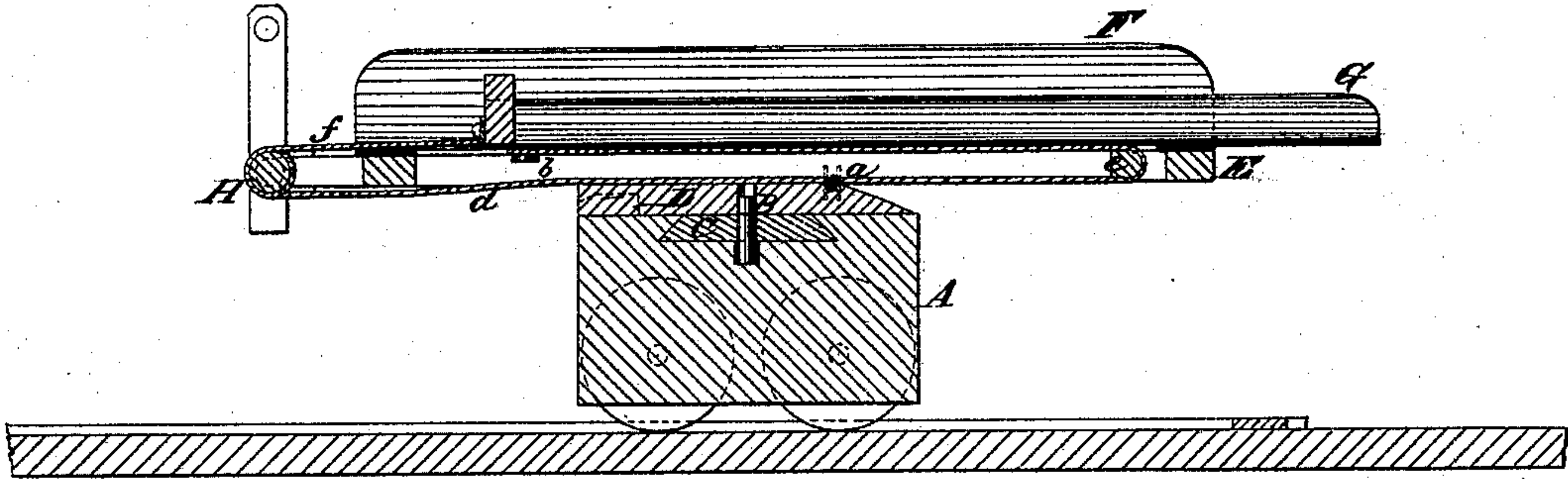


Fig. 3.

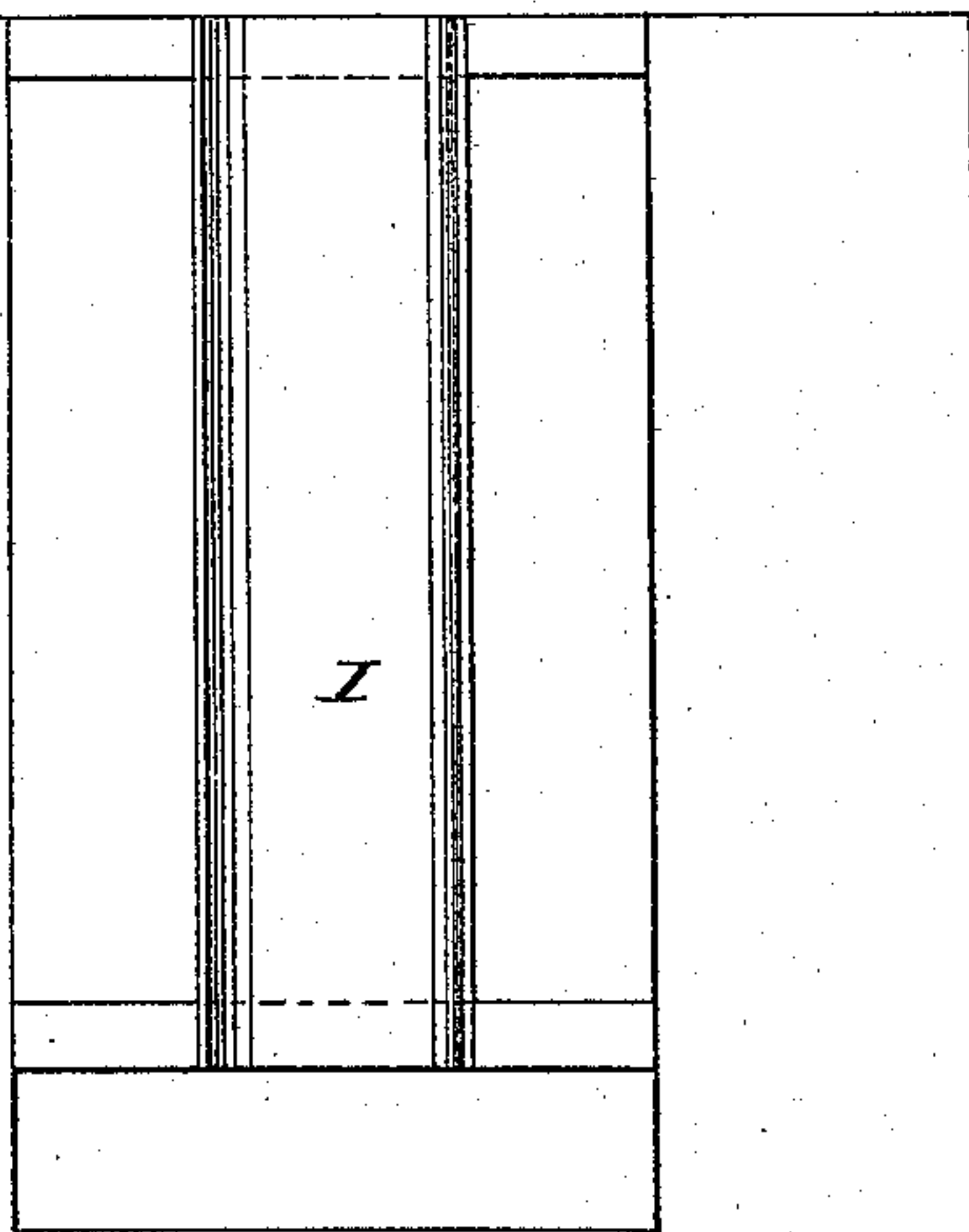
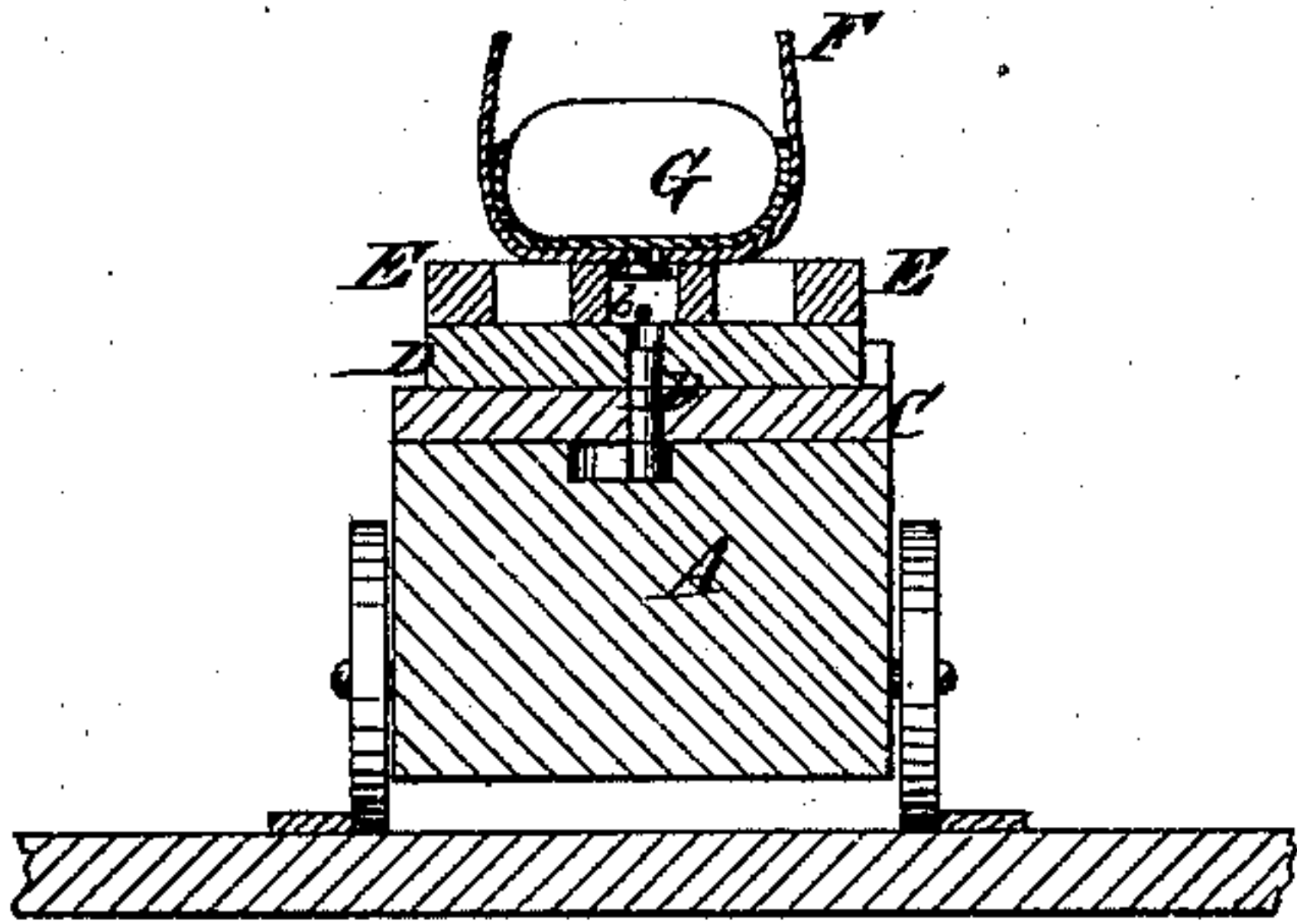
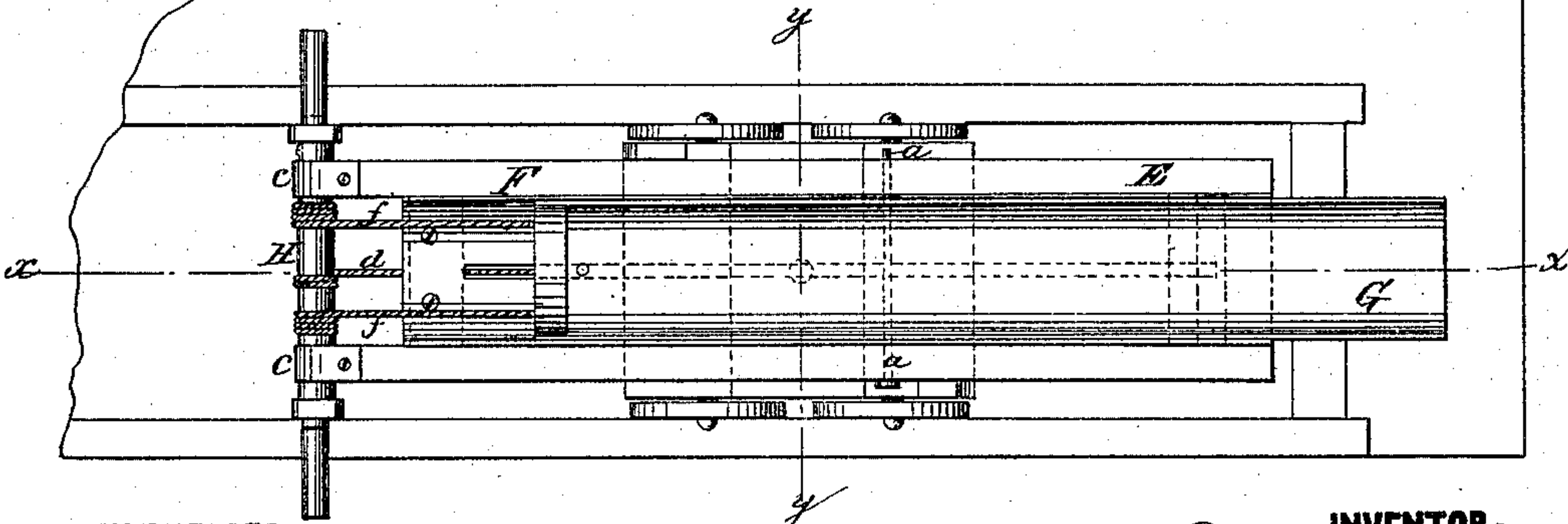


Fig. 2.



WITNESSES:

H. Rydquist
John Goethals

INVENTOR:

J. F. Rice
BY *Wm. H. Rice*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOEL F. RICE, OF LOUISIANA, MISSOURI.

IMPROVEMENT IN APPARATUS FOR REMOVING COKE FROM RETORTS.

Specification forming part of Letters Patent No. **182,132**, dated September 12, 1876; application filed August 7, 1876.

To all whom it may concern:

Be it known that I, JOEL F. RICE, of Louisiana, in the county of Pike and State of Missouri, have invented a new and Improved Apparatus for Removing Coke from Retorts, of which the following is a specification:

Figure 1 is a longitudinal section on line *x* in Fig. 2. Fig. 2 is a plan view. Fig. 3 is a transverse section on line *y y* in Fig. 2.

Similar letters of reference indicate corresponding parts.

My invention consists of a sliding scoop placed on a swiveled support, that is carried by a truck, the scoop being forced into the retort under the coke by a winch, and withdrawn by the same means.

A is a truck, running on a track arranged parallel to the bank of retorts. A pivot, B, is fixed in a support, C, which slides in suitable guides in the top of the truck. D is a bolster-plate, that turns on the pivot B, and to which the frame E is hinged at *a*. An iron trough or slide, F, is attached to the frame E, and an iron scoop, G, is fitted to slide in it. A slot is cut in the bottom of the slide F to receive an eye, *b*. A winch, H, is placed in journal-boxes *c c* at the end of the frame E, and is provided with a chain or wire-rope, *d*, that runs over a pulley, *e*, in the frame E, and is attached to the eye *b*, and it is also provided with chains or wire-ropes *f f*, that are attached

to the rear end of the scoop G. The scoop G is supported by the truck at the proper height to enter the retort I.

The manner of using this apparatus is as follows: It is wheeled in front of the retort to be discharged, and the scoop and supporting-frame are turned on the pivot until the scoop is in line with the retort, and in position to enter it. The slide C is moved until the end of the scoop enters the mouth of the retort, when the winch is turned, drawing on the rope *d*, causing the scoop to pass under the coke in the retort. By reversing the motion of the winch the scoop is withdrawn from the retort, bringing the coke with it. The end of the scoop is freed from the mouth of the retort by drawing the slide C. The scoop is then turned on the hinge *a*, and its contents dumped in front of the retort, or it may be turned parallel to the track and wheeled away.

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

The combination of the scoop G, slide F, hinged frame E, pivoted bolster-plate D, slide C, and truck A, substantially as specified.

JOEL FRANK RICE.

Witnesses:

THOS. L. ANDERSON, Jr.,
HENRY CLAY RICE.