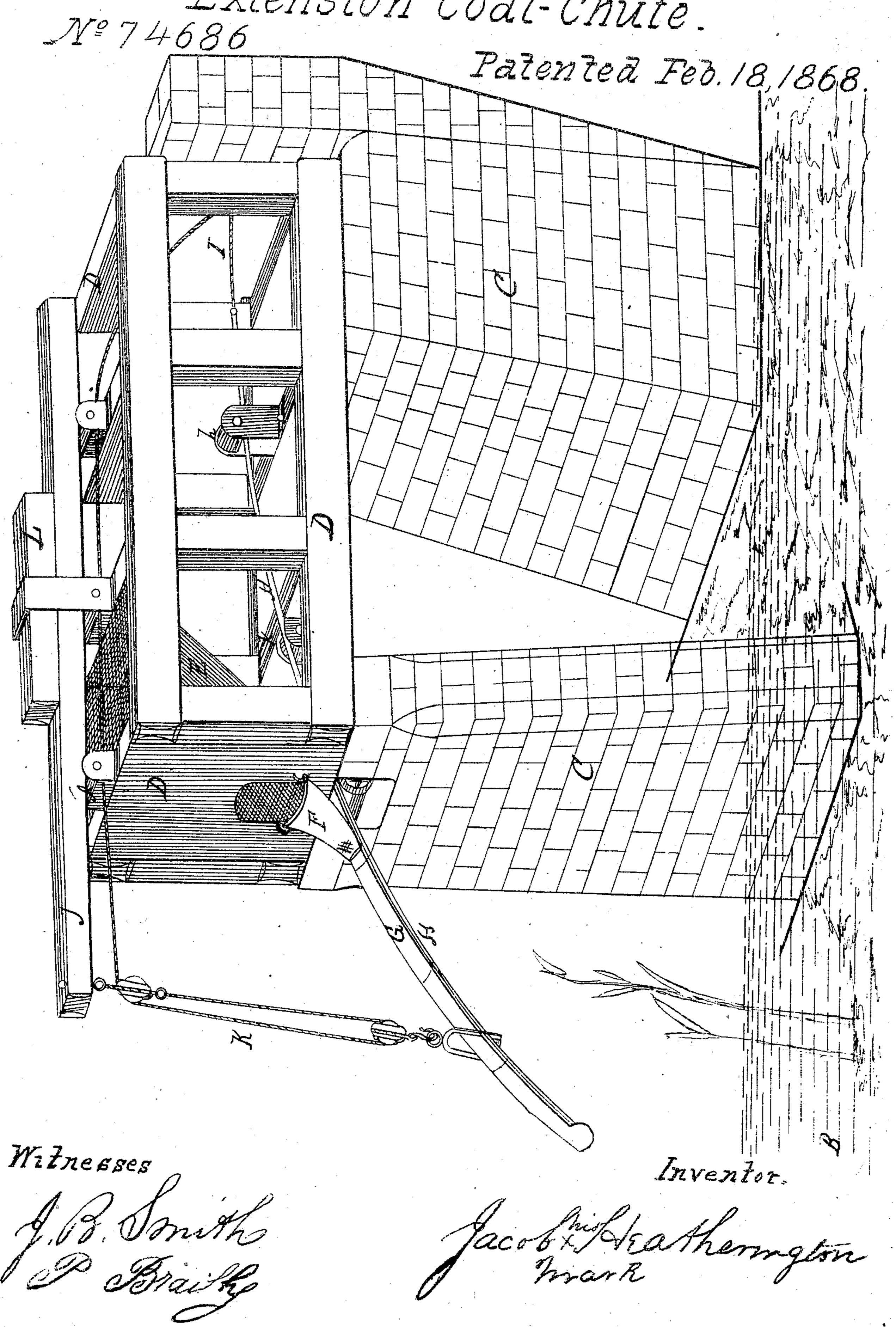
J. Heatherington. Extension Coal-Chute.



## Anited States Patent Effice.

## JACOB HEATHERINGTON, OF BELLAIR, OHIO.

Letters Patent No. 74,686, Jated February 18, 1868.

## IMPROVED EXTENSION COAL-CHUTE.

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, Jacob Heatherington, of Bellair, in the county of Belmont, and State of Ohio, have invented a new and improved Extension Coal-Chute; and I do hereby declare the following to be a full, clear, and exact description of the same, sufficient to enable those skilled in the art to which my invention appertains to make use of it, reference being had to the accompanying drawing, forming part of this specification, in which the drawing is a perspective view of my invention.

This invention relates to coal-chutes which are used on the banks of rivers and at wharves, for discharging coal from cars into steamboats and other vessels, and consists in making them extendible in order that they may be adjusted to vessels in different positions and at different distances from the shore.

In the drawings, A represents the bank of the river, and B represents the position of the vessel which is to take in the coal. Upon the bank one or more stout piers C C are erected, supporting a strong wooden horizontal frame, D. The coal is discharged from the cars into a bunker or hopper, E, at the outer end of the frame, from the lower end of which it is fed to the vessel, as fast as it can be stowed, through a short fixed funnel, F, and a long sliding chute, G. The funnel F is permanently attached to the hopper, and merely conducts the coal from the latter to the sliding chute. The sliding chute is formed of sections, which may be taken apart so as to make the chute longer or shorter. It has attached to it a long rod or plank, H, running on rollers, hh, and operated by a rope, I, by which it can be run out from or drawn into the frame D, as far as the position of the vessel may render necessary. Directly above it a sliding beam, J, operated in the same manner as the plank or rod H, is stationed, the outer end of which supports the outer end of the chute G by means of a tackle and fall, K, connecting the beam and the chute at one or more points, as shown in the drawing. This beam runs back and forth on rollers, rr, and may be securely fixed in any position by means of a key, L, or other suitable device.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—
The combination of the extension plank or rod H, chute G, rollers h h, r r, and extension-beam J, the whole constructed and operating substantially as and for the purpose specified

JACOB × HEATHERINGTON.

Witnesses:

J. B. SMITH,

P. BRAILLY.