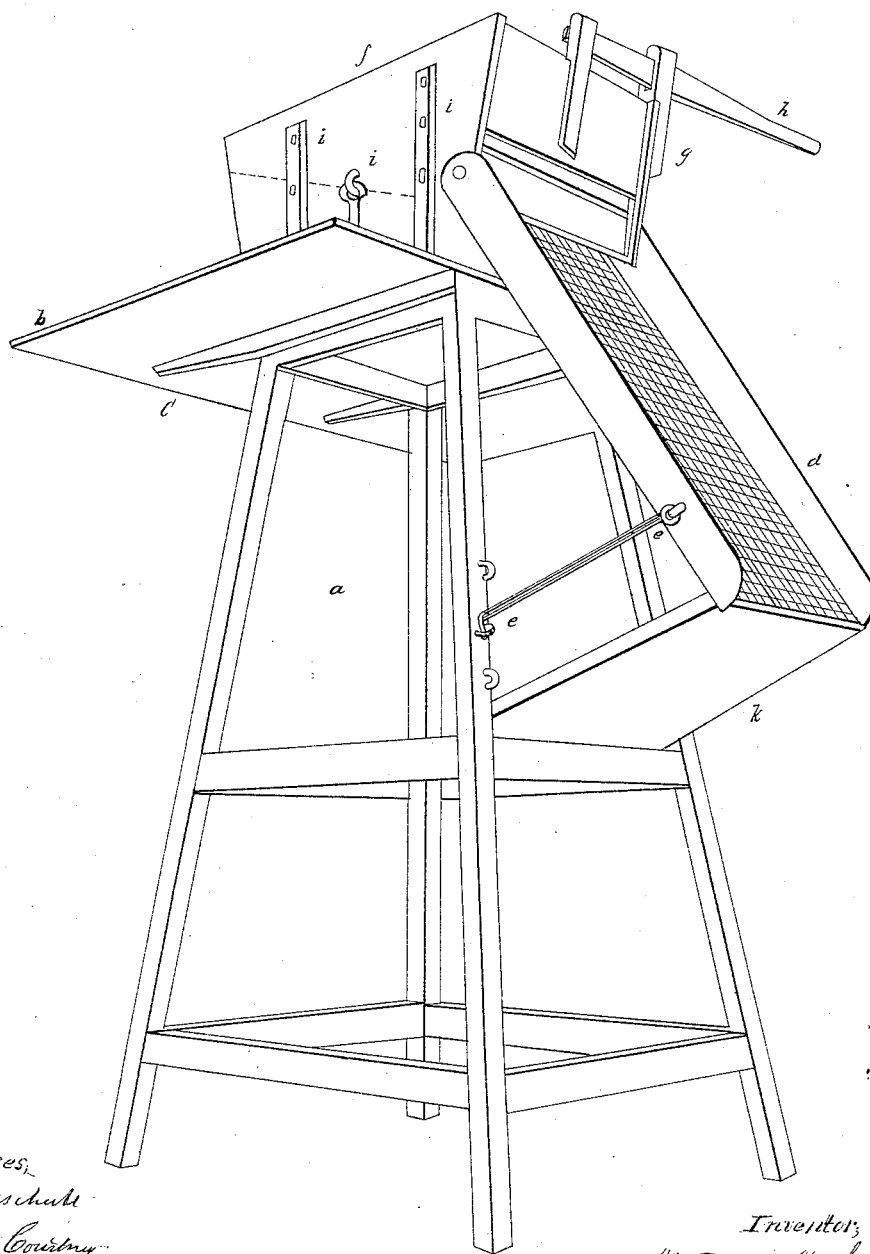


*W. Sparks,
Coal Screen.*

N^o 49,932.

Patented Sep. 12, 1865.



*Witnesses,
J. M. Meschke
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*Inventor,
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UNITED STATES PATENT OFFICE.

WILLIAM SPARKS, OF NEW YORK, N. Y.

COAL-SCREEN.

Specification forming part of Letters Patent No. **49,932**, dated September 12, 1865; antedated September 6, 1865.

To all whom it may concern:

Be it known that I, WILLIAM SPARKS, of the city and State of New York, have invented, made, and applied to use a certain new and Improved Coal-Screen; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the annexed drawing, making a part of this specification, wherein I have represented a perspective view of the invention I have made complete and ready for use.

The nature and object of my invention is to enable the coal-dealer to deliver the coal to his customers directly from the dock as perfectly screened as when it is hauled to and screened at the yard, by which means he is enabled to reduce the cost of his coal to himself and the price of the same to his customers.

The nature of my invention consists of a frame-work, *a*, (see drawing,) constructed of any good, sound timber or joist, about four by four inches square, the four posts at the corners of said frame being six feet apart at the bottom and three feet at the top, and nine feet, or thereabout, high. On the top of the frame-work *a* is a platform, *b*, projecting two feet around three sides of the frame, supported, as shown at *c*, by pieces attached to the frame at the top. An ordinary screen, *d*, attached to the frame is upon the side of the frame over which the platform *b* does not project, supported by a long hook and staple from the post or leg of the frame-work *a* to the screen *d* at *e e*. To the lower end of the screen *d* is a kind of apron, to convey the dust from the coal that passes through the screen *d* to the ground under the frame-work.

Upon the top of the platform *b* is a feeding box or hopper, *f*, into which the coal is emptied from the tub in which it is hoisted out of the vessel at the dock, for the purpose of graduating the quantity of coal passing over the screen *d* into the cart or other vehicle or receptacle by means of a sliding gate, *g*, worked by a lever, *h*, to increase or diminish the aperture in the in-feeding box *f* for the egress of the coal upon the screen *d*.

The feeding-box *f* is constructed about three

feet square, two feet deep at the mouth or aperture of egress, and one foot at the opposite side of the same, as indicated by the dotted line on the feeding-box *f*. The feeding-box *f* is supported and secured upon the platform *b* by means of four legs and hooks and staples, as shown at *i i i*.

Having completed the construction of my invention, I place it in a proper position for the reception of coal from the vessel or cars at the dock or depot, the cart or other vehicle being placed under the screen *d*. The driver of the cart or vehicle takes his place upon the top of the platform *b* to receive the coal as it is hoisted from the vessel or car, he empties it into the feeding box or hopper *f*, and by means of the lever *h*, acting upon the sliding gate *g*, regulates the egress of coal out of the feeding-box *f* upon the screen in such a manner that the dust of the coal will be entirely separated from the coal and deposited upon the ground or into a receptacle under the frame-work *a*. The cost of transporting and screening the coal at the yard is thus saved and the price of one of the most important articles of universal consumption materially reduced.

I do not claim the different parts composing my improved coal-screen, separately considered, nor the arrangement of the inclined screen, which is used in every coal-yard, and the hopper or feeding-box *f*, the bottom of which is also inclined, but not so that the impact of the stream of coal shall be perpendicular, or nearly so, to the said screen, as set forth in claim of Samuel Boothe's patent, dated October 20, 1859; but

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

The combination of the screen *d* and gate *g*, at the upper end of the said screen, with the frame-work *a* and the elevated platform *b*, in the manner and for the purpose set forth.

WM. SPARKS.

Witnesses:

JOHN MERCHUTT,
THOMAS COURTNEY,
W. WHEELWRIGHT.