

B. LaC. SATTERFIELD, C. L. CRISMAN & J. McKINLEY.

COAL SCREEN AND CHUTES.

No. 176,070.

Patented April 11, 1876.

Fig. 1.

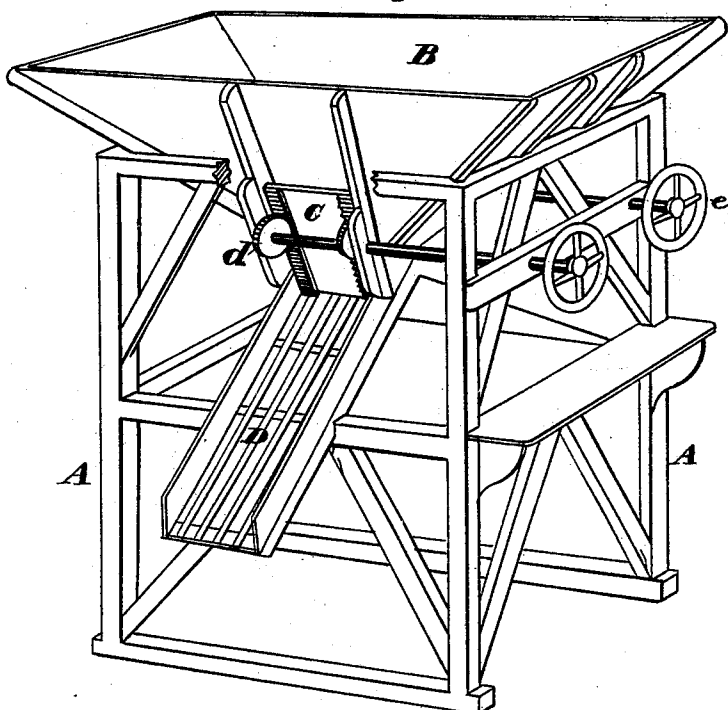
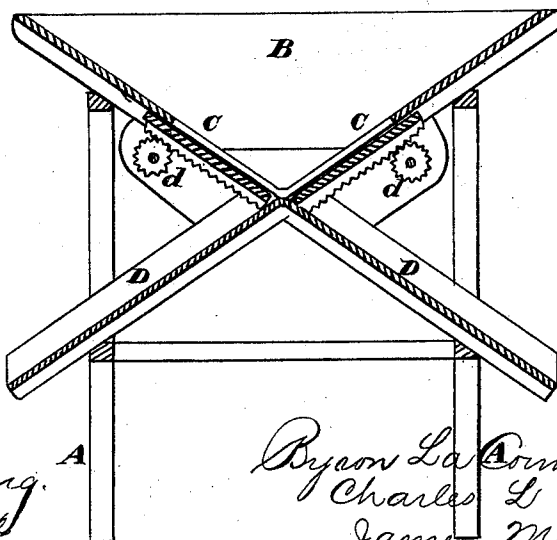


Fig. 2.



Witnesses

Geo. H. Strong
Jno L. Bone

Inventor

Bryon LaC. Satterfield
Charles L. Crisman
James McKinley
by Dewey & Co
their Attorneys

UNITED STATES PATENT OFFICE.

BYRON LA COUNT SATTERFIELD, CHARLES L. CRISMAN, AND JAMES
MCKINLEY, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN COAL SCREENS AND CHUTES.

Specification forming part of Letters Patent No. **176,070**, dated April 11, 1876; application filed
November 15, 1875.

To all whom it may concern:

Be it known that we, BYRON L. SATTERFIELD, CHARLES L. CRISMAN, and JAMES MCKINLEY, of San Francisco city and county, State of California, have invented a Coal Reservoir, Screen, and Chute; and we do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use our said invention without further invention or experiment.

Our invention relates to certain improvements in devices for screening coal, principally when it is discharged from ship upon a wharf, so that it can be at once assorted and received into vehicles to be carried to its destination.

Our improvements relate to the formation of a general reservoir, having gates in the bottom, so that the coal may be allowed to fall upon the screens at the time when the carts are ready to receive it, and it will thus be perfectly screened.

Our invention consists in the use of two or more screens and chutes, leading in different directions from the reservoir, so that a number of carts can be loaded at once.

Referring to the accompanying drawing for a more complete explanation of our invention—

Figure 1 is a perspective view of our invention.

A is a frame of suitable height which may be made portable by placing it upon wheels. Upon the top of this frame we place a large reservoir, B, which is made hopper-shaped, and has at its bottom two or three gates or

doors, C, which may be moved by any suitable mechanism.

In the present case we have shown a sliding gate, having a rack upon its back, and operated by a pinion, *d*, the shaft of which is provided with a hand-wheel, *e*. Below each of these gates a screen, D, and chute are placed, each one leading down at an incline to a point where the carts can be driven up to receive the load. A gate at this point may be used to control the discharge, but we prefer to depend upon the reservoir-gates, and it will be thus seen that no coal is admitted upon the screens until the cart is ready for it, and thus there is no accumulation of coal, which might slide down without being screened at all. A chute without a screen may be used when it is not necessary to separate the coal.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The large reservoir B, for the reception of the unscreened coal, provided with two or more gates or doors, C, at the bottom, in combination with two or more inclined screens and chutes, D, leading in different directions, the several parts constructed and arranged to operate in the manner substantially as and for the purpose specified.

In witness whereof we hereunto set our hands and seal.

B. L. SATTERFIELD.	[L. S.]
C. L. CRISMAN.	[L. S.]
JAMES MCKINLEY.	[L. S.]

Witnesses:

GEO. H. STRONG,
JNO. L. BOONE.