R. FERGUSON.

Apparatus for Unloading Vessels.

No. 18,539. Patented Nov. 3, 1857.

Fig: 4.

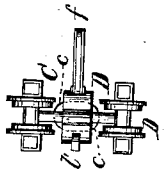


Fig: 3.

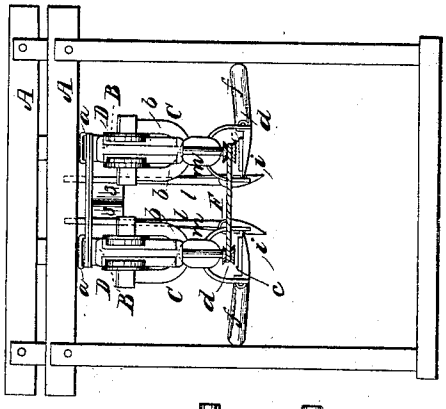


Fig: 1.

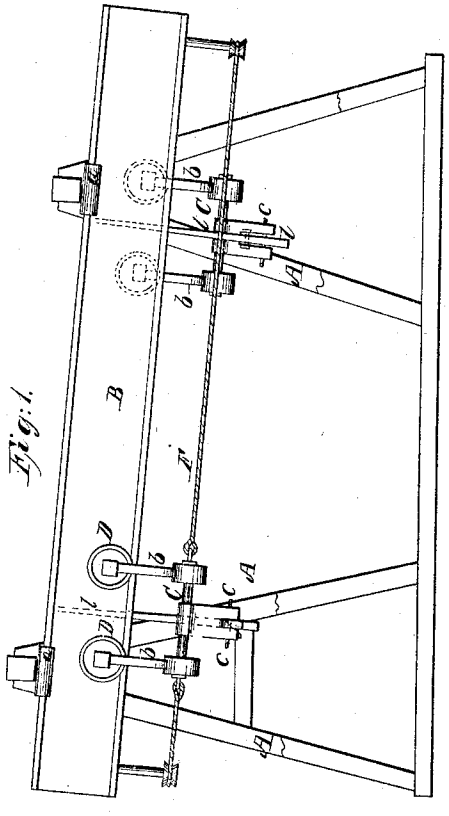
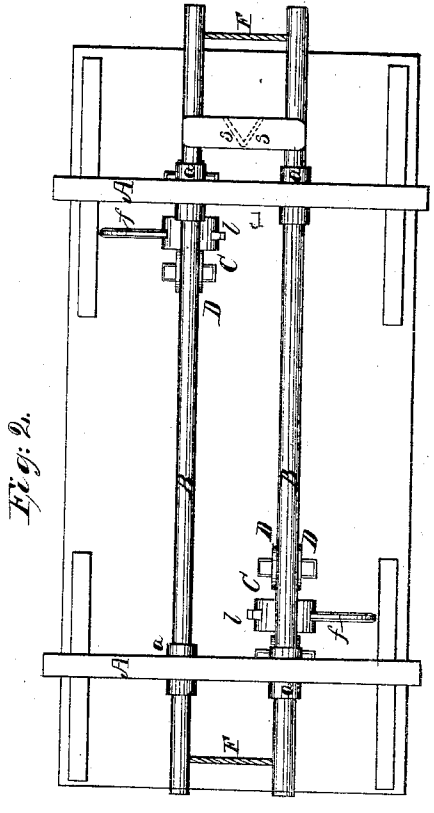


Fig: 2.



UNITED STATES PATENT OFFICE.

ROBT. FERGUSON, OF NEW ORLEANS, LOUISIANA.

APPARATUS FOR UNLOADING VESSELS, &c.

Specification of Letters Patent No. 18,539, dated November 3, 1857.

To all whom it may concern:

Be it known that I, ROBERT FERGUSON, of the city of New Orleans, parish of Orleans, and State of Louisiana, have invented a new and useful Improved Apparatus for Unloading Vessels and other Analogous Purposes; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, forming part of this specification, in which—

Figure 1 is a side view of the apparatus. Fig. 2 is a top view; Fig. 3 is an end elevation; and Fig. 4 is a top view of the carriage detached.

Similar characters of reference in the several figures denote the same part.

The object of the apparatus hereinafter to be set forth, is the unloading of sack salt, iron, coal and other articles of like character.

The apparatus consists of a suitable number of trestles A, for supporting the rails B B. These rails are made in sections; and a number used depending on the points of reception and delivery of the load. The sections are attached to the trestles by slipping the upper flanges of the rails into the pieces *a*, attached to the cross beams of the trestles.

The car C is connected with the rail B by four wheels D, resting upon, and traversing the under face of lower flange. Between the frame pieces *b b* of the car is suspended the platform *c* for holding the article to be transported. This platform is hinged at *d*, and when empty is maintained in position by an arm *f*. It rests on a projection *i* on the lower arm of a lever *l*. This lever is kept in position for holding the platform by means of a spring *m*. The action of this construction is such that if, when the platform is loaded, the projection *i* be removed from under it; the load will at once drop. After discharging its load, the platform is lifted by the weight of arm *f*. And if all extraneous force be removed from lever *l*, the spring *m* will carry projection *i* into position to support any weight that may be placed upon the platform.

In practical operation, the load being placed upon one car, it descends by its own gravity until at the lower extremity of the rail, the long arm of lever *l* presses against an inclined stud *s*, and causes projection *i* to be removed from under the platform and the load to be discharged.

The two cars C being connected by an endless chain F, the descent of the loaded car carries up the empty one, which on being loaded descends in its turn, disengaging lever *l* from the stud *s* and permitting spring *m* to carry projection *i* under the first platform. Where coal is to be discharged the bottom of the bucket will fall as described for the platform. Any desired modification may be made to suit the article to be discharged.

I claim—

The combination of swinging platform *c*, arm *f*, cover *l*, and spring *m*, with the body of the carriage, operating substantially as and for the purposes set forth.

In testimony whereof, I have hereunto signed my name before two subscribing witnesses.

ROBT. FERGUSON.

Witnesses:

L. ELLIS,

ALBERT DODGE.