# C. Bishop.

## Loading Machine.

No. 35,297. Patented May 20, 1862.

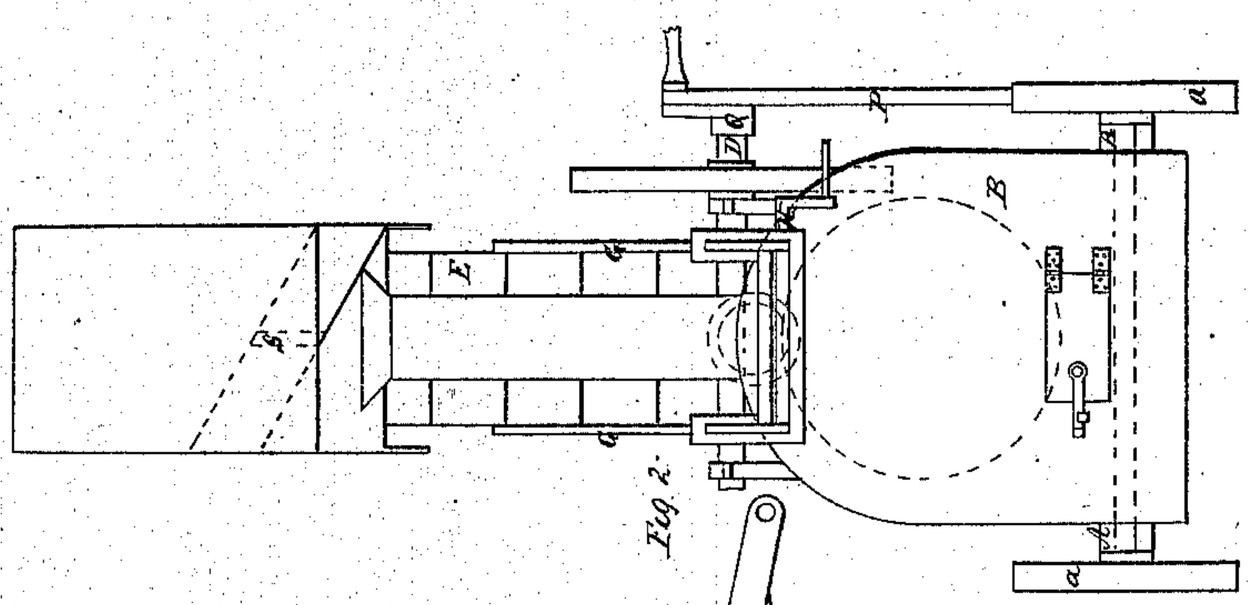

Fig. 2.

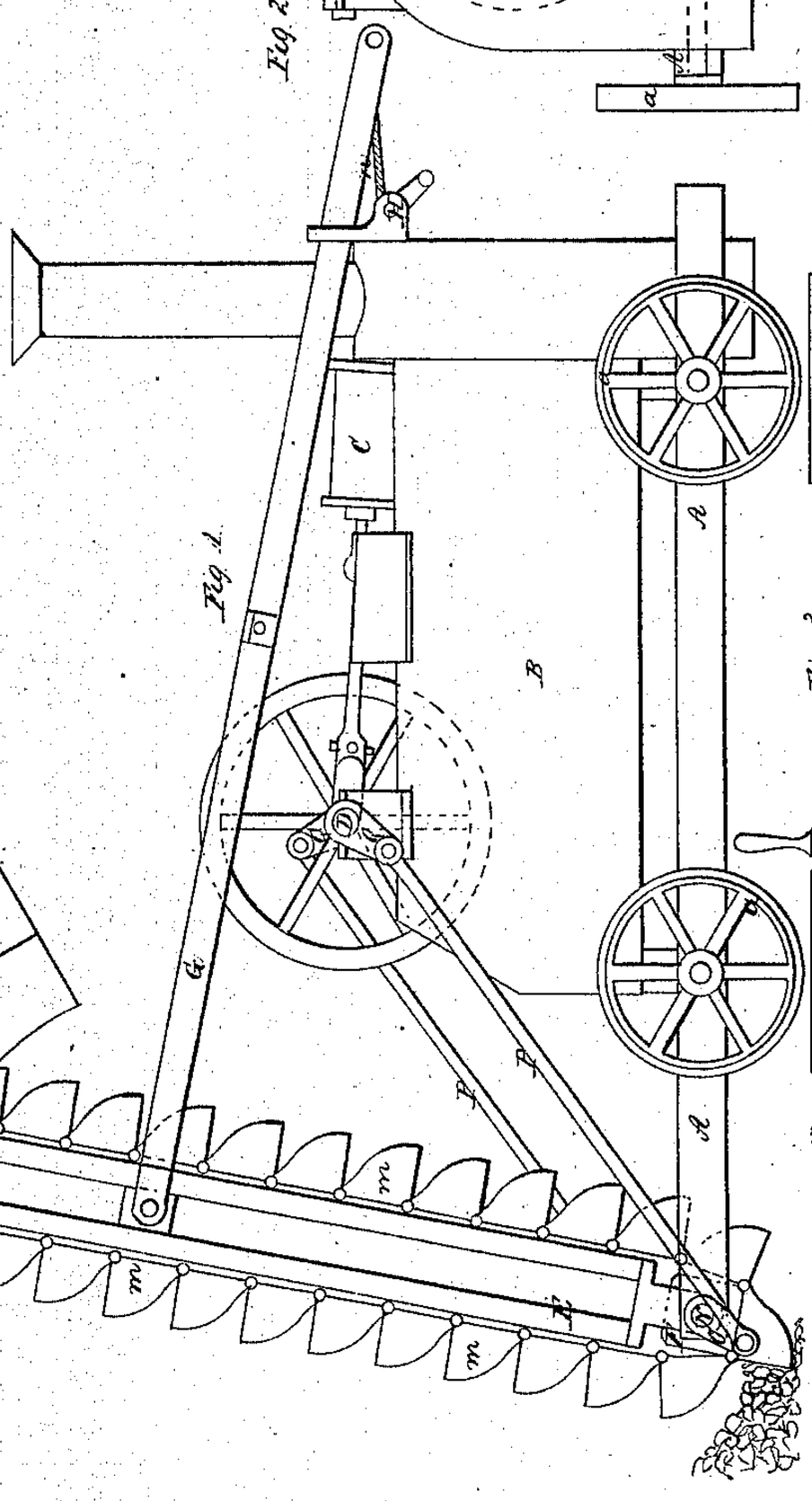

Fig. 1.

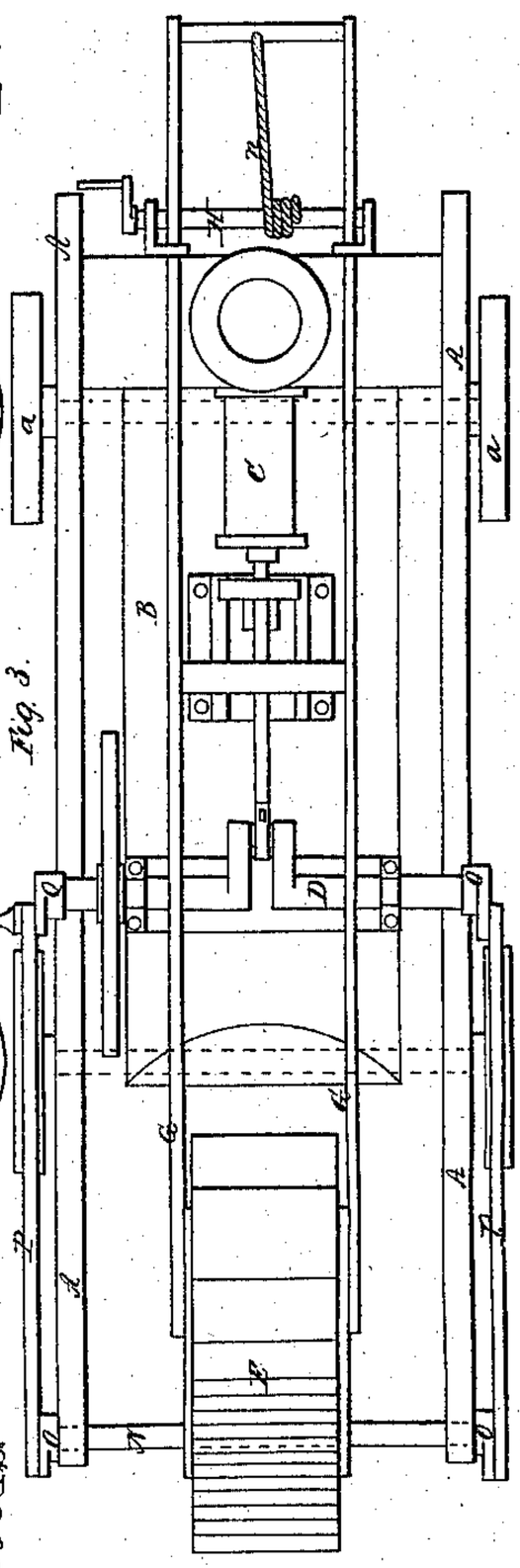

Fig. 3.

Witnesses,

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# UNITED STATES PATENT OFFICE.

CHARLES BUSHOR, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN MACHINES FOR LOADING COAL, &c.

Specification forming part of Letters Patent No. **35,297**, dated May 20, 1862.

*To all whom it may concern:*

Be it known that I, CHARLES BUSHOR, of the city of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in Machines for Loading Coal, &c.; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure I represents a longitudinal side elevation, Fig. II is an end view, and Fig. III a plan, of my improved machine.

Similar letters represent similar parts.

The nature of my invention consists in the combination of an elevator with a movable carriage or truck provided with a mechanical power—such as a steam-engine or its equivalent—whereby either the carriage or truck may be propelled or the elevator operated, as may be desired.

In the accompanying drawings, A represents a carriage supported on suitable wheels, *a*. Upon this carriage or truck A a steam-boiler, B, is fastened, on the top of which a cylinder, C, is secured, acting on a horizontal shaft, D. To the forward end of the truck A the lower end of an elevator, E, is attached, provided with suitable buckets, *m*, attached to a chain passing over drums F and F′ and constructed in the usual manner.

Near the upper end of the elevator-frame rods G G are attached, passing backward over the boiler and engine and connected through a rope or chain, *n*, with a windlass, H, attached to the end of the boiler B.

The shaft N on the forward end of the truck A, which carries the lower end of the elevator E, forms likewise the shaft for the lower drum, F, and is provided with cranks O on each end, which are connected through the rods P with corresponding cranks, Q, fast on the ends of the engine-shaft D, communicating thereby the required motion from the engine to this drum F, and through the same to the elevator chain and buckets *m*.

By the arrangement of the windlass H with the ends of the rods G G the upper end of the elevator E can be regulated and moved in any desired position for the discharge of the coal.

The top of the elevator is provided with a cover, M, provided with a spout, K, to discharge the coal. To this spout K a plate, S, is fitted, capable of being turned on its center, so as to direct the discharge of the coal toward the one or the other side, as may be desired.

The engine-shaft D may likewise be connected with the truck-wheels *a*, so as to propel the truck or carriage to any desired place where the elevator is to be used.

I claim—

The arrangement of an elevator on a movable truck, for the purpose of loading coal, when the same are constructed and combined in the manner substantially as set forth and described.

CHAS. BUSHOR.

Witnesses:

HENRY E. ROEDER,

CHARLES S. BENNETT.