(No Model.)

E. E. CARTER.

TRUCK FOR MINING MACHINES.

No. 428,551. Patented May 20, 1890.

FIG. 1.

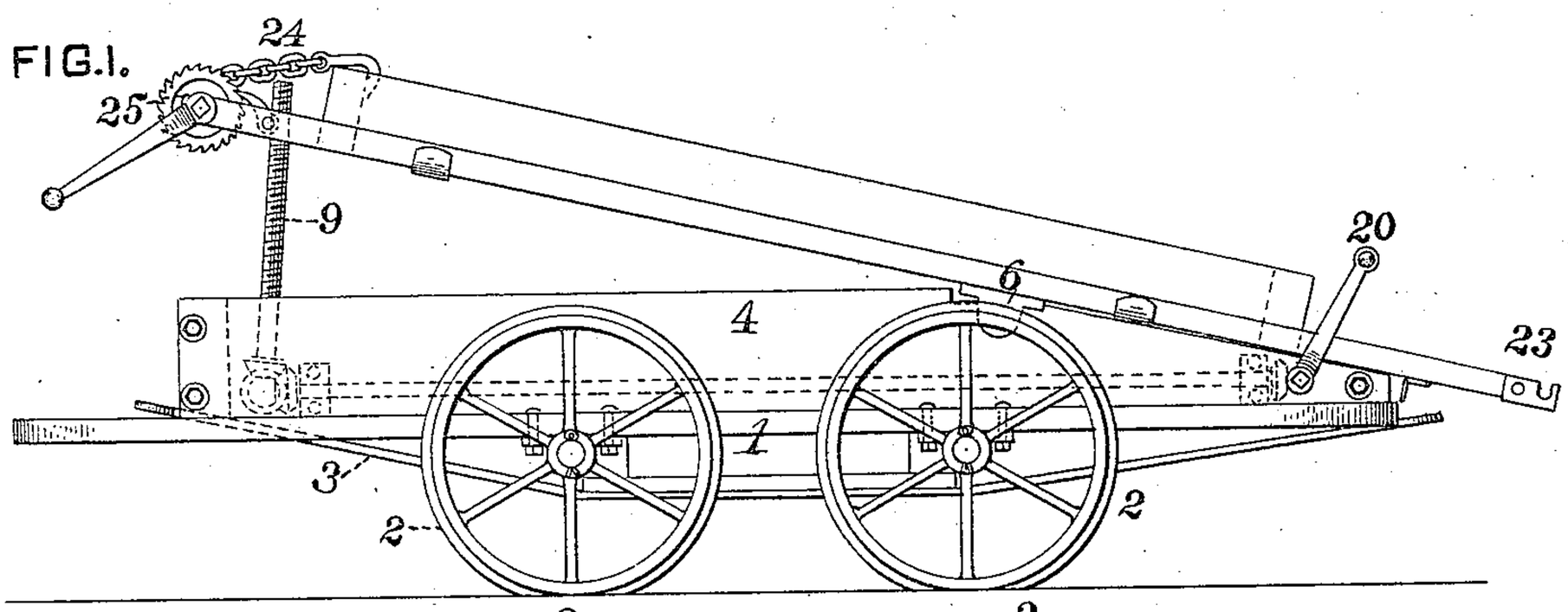


FIG. 2.

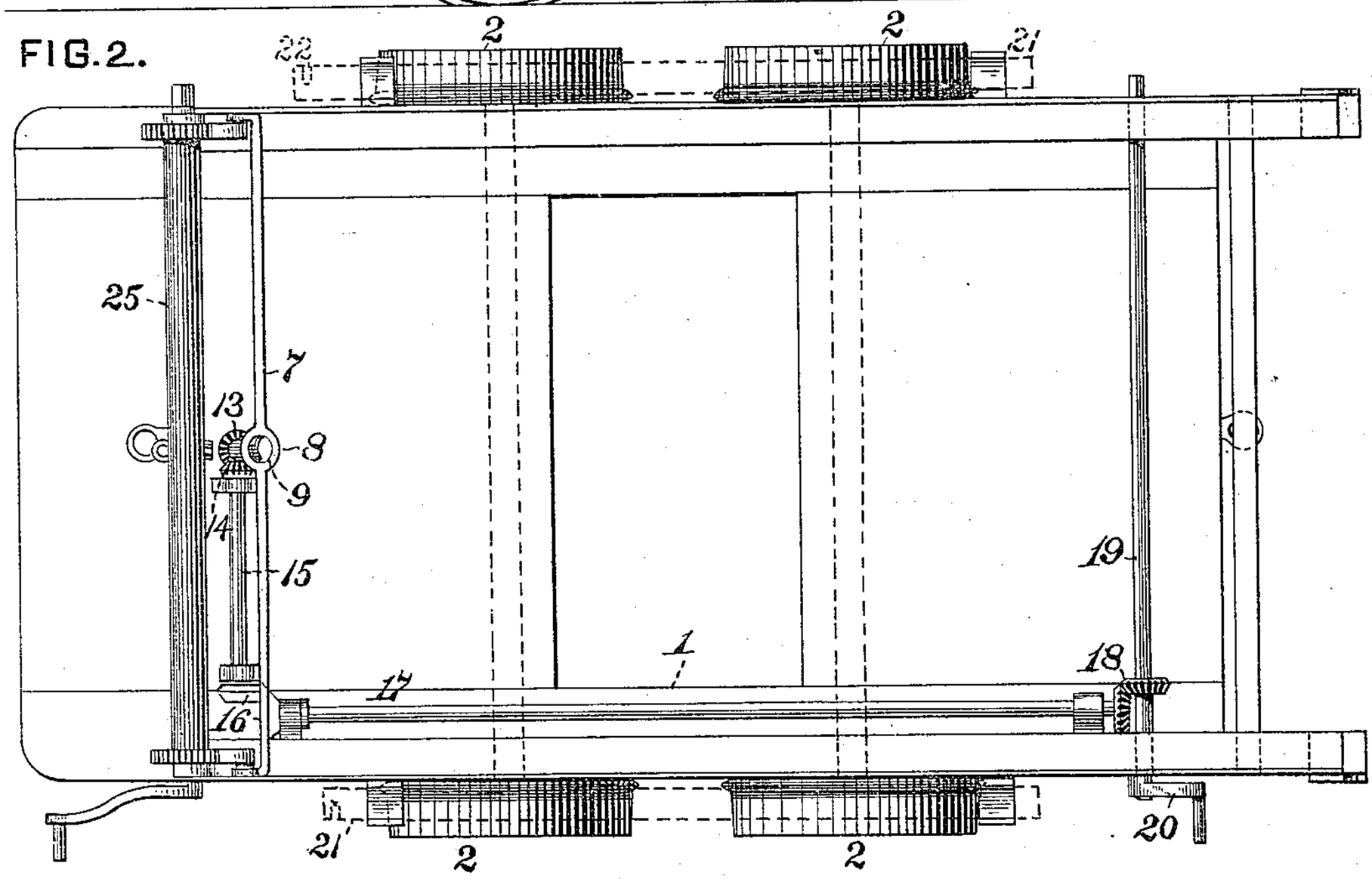
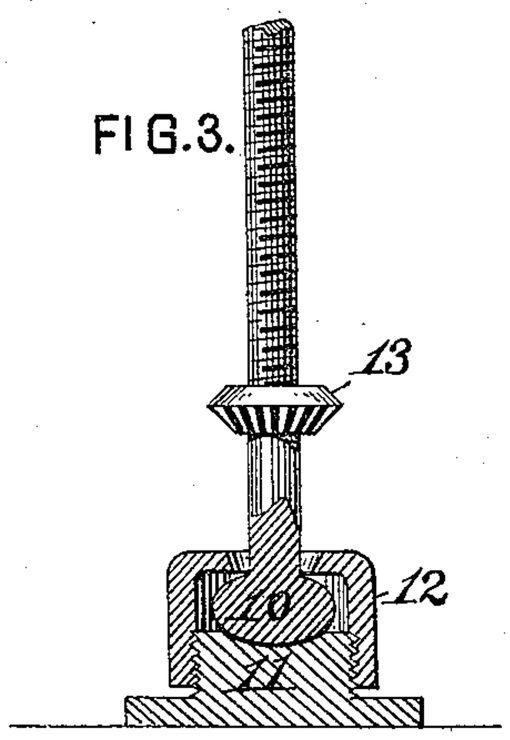


FIG. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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TRUCK FOR MINING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 428,551, dated May 20, 1890.

Application filed March 17, 1890. Serial No. 344,120. (No model.)

To all whom it may concern:

Be it known that I, EDWIN E. CARTER, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered certain new and useful Improvements in Trucks for Mining-Machines, of which improvements the following is a specification.

The invention described herein relates to certain improvements in trucks for moving mining and other machines from place to place, as required, and has for its object a construction and arrangement of mechanical devices or elements whereby the machines may be readily loaded and unloaded.

The invention claimed is hereinafter more fully described.

In the accompanying drawings, forming a part of this specification, Figure 1 is a view of the machine in side elevation. Fig. 2 is a top plan view of the same, and Fig. 3 is a detail view, on an enlarged scale, of the mechanism for raising and lowering the front end of the bed.

In the practice of my invention I provide a frame 1, which is supported by the axles of the wheels 2, and held in proper position by a truss-rod 3. On this frame are secured the side pieces 4, forming the rests or supports for the bed 5 when in horizontal position. On the under side of the bed and in line with the side pieces 4 are secured the pivot-blocks 6, having convex portions fitting within correspondingly-shaped recesses in the upper edges of the side pieces 4, as shown in Fig. 2. These blocks form the pivoted supports for the bed when it is desired to tip the same for loading or unloading the machine. A bar or plate 7 is attached to the front end of the bed 4, and in said bar or plate is formed an internally-threaded opening 8 for the reception of the threaded rod 9, which is provided at its lower end with a rounded or ball-shaped enlargement 10, adapted to rest in a concave seat in the block 11, secured, as shown in Fig. 1, to the frame 1. The rod 9 is held on its seat by a cap 12 fitting over the enlargement or head 10 and screwing onto the block. The cap 12 is slotted, so as to permit of a swinging movement of the rod as the bed is raised or lowered. A beveled pinion 13 is keyed to the rod 9 at a point a little above the cap 12, and is driven by a corresponding pinion 14 on the inner end of a shaft 15, mounted in suitable bearings on the frame 1. This shaft is provided at its outer end with a beveled pinion 16, arranged to intermesh with a corresponding pinion on the shaft 17, which is in turn driven through the mediums of pinions 18 by a shaft 19, extending across the frame and having its ends suitably shaped for the reception of the cranks 20. This arrangement of gearing and shafts permits of the adjustment of the bed from the rear thereof.

As shown in Fig. 1, the side pieces 4 are beveled off at their rear ends to permit of the desired inclination of the bed. In order to pass over lumps of coal or other obstacles, it is desirable that the wheels should be made comparatively large, thereby raising the frame and bed to a considerable height; hence, as it is undesirable to make the bed longer than the machine to be transported, and as such length would not be sufficient to allow the rear end of the bed when properly inclined to reach the floor, I provide bars or skids 21 to bridge over the distance from the rear end of the bed to the floor. These bars or skids are provided at one end with hooks 22, adapted to engage eyes 23, secured to the rear end of the bed, thereby forming a continuation of the bed. When not in use, the bars or skids are placed in clips or supporting-hooks attached to the sides of the bed, as shown in Fig. 1.

When it is desired to move a machine, the outer ends of the skids or bars are placed under the edge of the base or frame of the machine, which is indicated at A. The truck is then backed up until the hooks 22 of the skids can be caught in the eyes 23. By rotating the crank-shaft 19 the bed 5 is so moved as to form with the skids a regular inclined plane. A hook on the end of a chain 24 is then caught on any suitable part of the machine A, and the chain is then wound up on the drum 25, mounted, as shown, at the front end of the bed, thereby drawing the machine onto the bed 5. The skids are then unslipped and placed in the clips and the bed lowered onto the side pieces. The unloading of the

machine is effected by a reversal of these operations.

I claim herein as my invention—

1. In combination with a truck, a bed pivotally mounted on said truck, a laterally-movable screw engaging a nut attached to the front end of the bed, and a crank-shaft at the rear end of the truck, adapted by interposed mechanism to rotate the screw, and a winding-drum mounted at the front end of the bed, substantially as set forth.

2. In combination with a truck, a bed pivotally mounted on said truck, a pivotally-mounted screw engaging a nut attached to the front end of the bed, a crank-shaft at the rear end of the truck, adapted through interposed mechanism to rotate the screw, a winding-drum mounted at the front end of the bed, and skids or bars constructed to be removably attached to the rear end of the bed, substantially as set forth.

In testimony whereof I have hereunto set my hand.

EDWIN E. CARTER.

Witnesses:
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W. B. CORWIN.