F. NEARING.

AUTOMOBILE DUMPING TRUCK ADAPTABLE FOR PURPOSES OF HOISTING.

APPLICATION FILED FEB. 11, 1919.

1,320,024. Patented Oct. 28, 1919.

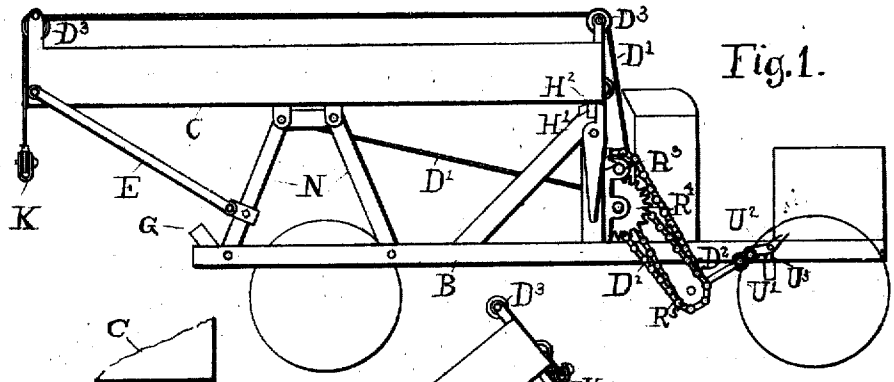


Fig. 1.

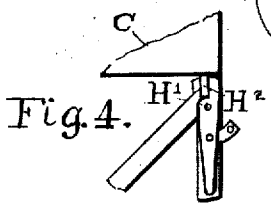


Fig. 4.

Fig. 2.

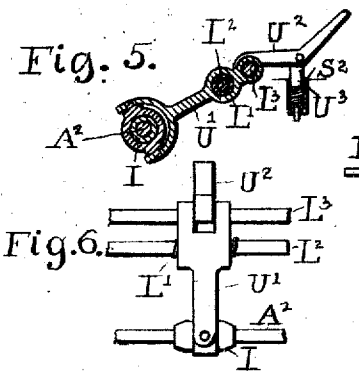


Fig. 5.

Fig. 6.

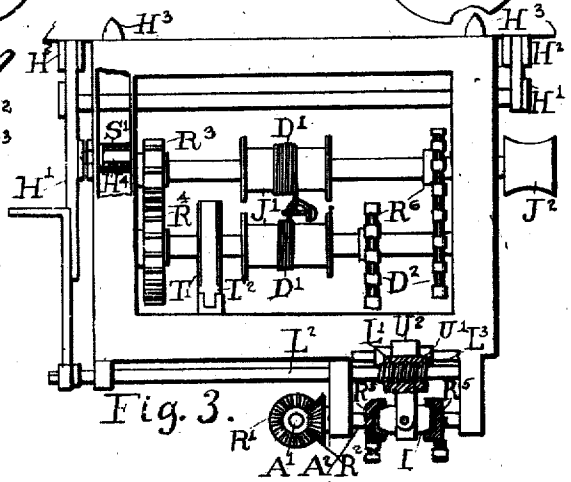


Fig. 3.

WITNESSES

Charles H. Harlow Jr.

Charles J. Pairier

Frank Nearing Inventor

UNITED STATES PATENT OFFICE.

FRANK NEARING, OF NEW YORK, N. Y.

AUTOMOBILE DUMPING-TRUCK ADAPTABLE FOR PURPOSES OF HOISTING.

1,320,024. Specification of Letters Patent. Patented Oct. 28, 1919.

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To all whom it may concern:

Be it known that I, FRANK NEARING, a citizen of the United States, residing at 62 West 93rd street, in the borough of Manhattan, city, county, and State of New York, have invented a new and useful Automobile Dumping-Truck Adaptable for Purposes of Hoisting, of which the following is a specification.

And the objects of my invention are:

The ability to adapt the dumping mechanism to purposes of hoisting, towing or any drum pulling that may be required.

The ability to hold a load suspended by the band brake.

The secure stabilizing of the body to the frame and standards by the latches and spurs upon the frame bolster against unusual stresses when towing or carrying a load suspended from the rear end of body.

I attain these objects by the mechanism illustrated in the accompanying drawings. Figure 1. is a side view of the truck showing the location of the sliding block for moving the friction cones, the sprocket chains, drum gears and swivel pulleys.

Fig. 2. is a side view of the truck as dumped with drum gears and chains omitted, showing the brake, latch, and stabilizing spurs.

Fig. 3. is a front view of the operating machinery stripped, with the friction recesses and sliding block in section and a portion of the upright frame cut away to show the stud and spring for locking the latch, and the brake disk and band with the lever omitted.

Fig. 4. is a view of the latch and arc.

Fig. 5. is a sectional view of the sliding block.

Fig. 6. is a plan view of the sliding block, with guide rod and lock.

Similar letters refer to similar parts throughout the drawings and description.

B. is the frame.

N N. are standards supporting the body.

D^1 D^1 are the ropes wound on the drums J^1 and terminating with shackles K.

C. is the body which has sockets at front and rear ends for the swivel pulleys D^3.

H^1 H^1. are the latches which consist of strong hooks at the upper end of handle bars which are fixed on a rod mounted in bearings across the upper portion of the upright frame and engage the staples H^2 on the under side of the body.

A portion of the latch bar H^1 forms an arc of even radius from the rod upon which H^1 is pivoted.

H^4. is a stud with a round head extending outward from the side of the upright frame and pressed by a spring S^4 against and into holes in the inner face of the said arc to hold the latch closed or open as desired.

H^3. are conical spurs fixed on the upper side of the bolster which supports the front end of the body, said spurs fit in corresponding sockets in the bottom of the body C and stabilize the body when towing, lifting or pulling with a rope working in the pulleys on the front and rear end of body when the said body is latched.

T^1. is the brake disk partly encircled by the band T^2 which is operated by the lever T^3 provided with a pawl which engages a toothed arc to hold the brake on when set.

J^2. is a winch head on the outer side of one drum shaft.

R^6. are sprocket wheels fixed on the drum shafts which are geared together by gears R^3 and R^4.

The said sprocket wheels R^6 are connected by chains D^3 D^2 to the sprocket wheels R^5 R^5 which are loosely mounted on the transverse shaft A^3.

Between the said sprocket wheels R^5 upon a square section of the said shaft A^3 is also loosely mounted a spindle I consisting of two outpointing truncated cones including a cylindrical portion.

The said cones face corresponding recesses in the hubs of the sprocket wheels R^5 so that either end of the said spindle I engaging the facing recess forms a friction clutch and fixes the engaged sprocket wheel to the transverse shaft A^2 upon which is fixed the bevel gear R^2 which engages the similar gear R^1 which is fixed on the main shaft A^1.

The spindle I has about its cylindrical portion a groove within which groove and encircling the said spindle is a ring provided with studs upon its opposite sides, which studs engage forks which forms a part of a threaded sliding block U^1 which is fitted with a screw L^1 and guide rod L^3; the screw L^1 is upset on a shaft L^2, the axis of which is parallel to the axis of the said shaft A^2 and the turning of the said screw L^1 in the threads of the block U^1 moves the friction cones on the spindle I to engage the sprocket wheels R^5.

The sliding block U^1 is held in a neutral position by one end of the lockbar U^2 which is shaped like two joining sides of an obtuse triangle pivoted on a pin in a line which equally divides the included angle and is held closed or open by a stud pressed by a spring S^2 against the said lock bar U^2 at a point midway between the pin and the apex of the said angle until the opposite end of the lock bar U^2 which forms a pedal is pressed downward until the stud passes the said apex and holds the lock open until the locking end is pressed back to the first position for locking the said block U^1.

L^2 is the screw shaft.

L^3 is the guide rod to hold the block U^1 in line.

In operation the shackles are disconnected from the dumping connections and may be connected as desired for any hoisting or drum-pulling or the winch head may be used.

Having thus described my invention, I hereby claim the following:

1. In a dumping truck a frame, a body, standards pivoted to the body and to the frame, drums enwound with ropes, means for operating the drums including outfacing friction cones having an included cylindrical portion encircled by a ring, studs upon the ring engaging the forked portion of a sliding block, a screw passing through the axis of the said block parallel to the axis of the friction cones for moving the said cones by the action of the aforesaid screw, a crank for turning the screw.

2. In a dumping truck, a frame, a body, front standards pivotally connecting the body with the frame, rear standards pivotally connecting the body with the frame, drums enwound with cables terminating with shackles for pulling and hoisting when the said cables are disconnected from the body and rear standards, a winch head fixed on one drum shaft, a swivel pulley mounted on the body, and a brake on one drum shaft to lower, or hold a load suspended.

3. In a dumping truck, a frame, a body, front and rear standards pivotally connecting the body and the frame, ropes enwinding drums, swivel pulleys in sockets in front and rear end of body, latches in the upright portion of the frame to engage staples in the underside of the body, means to lock the latches comprising a stud having a rounded head pressed outward by a spring from the upright frame against an arc forming a portion of the latch handle and having holes to engage the said stud, spurs set on the upright portion of the frame to fit corresponding sockets in the body to stabilize the body with the frame when towing or carrying suspended, a rear load.

FRANK NEARING.

Witnesss:
ADOLPH HANSEN,
CHARLES J. POIRIER.