No. 772,883. PATENTED OCT. 18, 1904.

J. T. HINES.

ARMATURE TRUCK.

APPLICATION FILED JUNE 8, 1904.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.

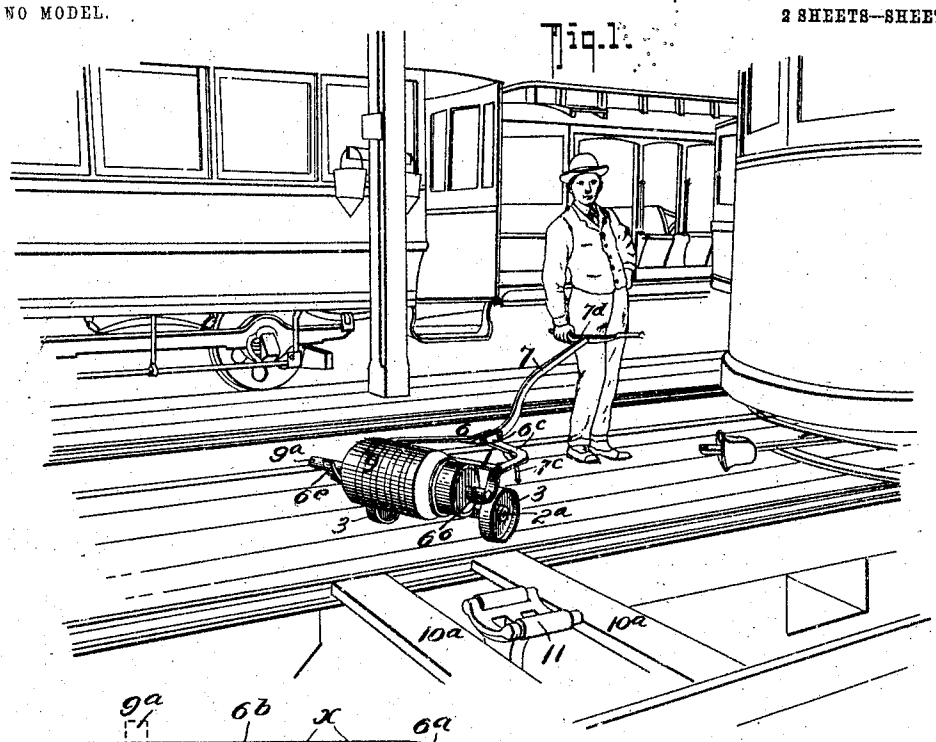



Fig. 3.

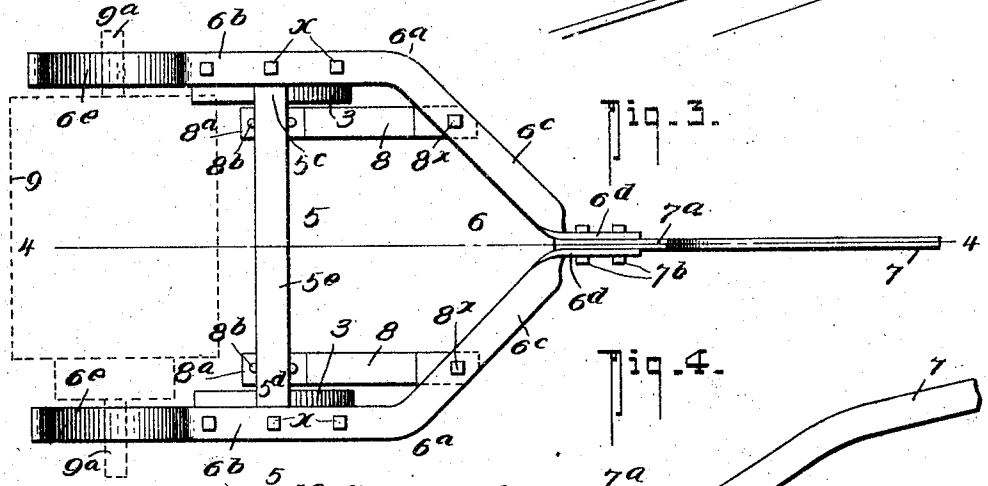
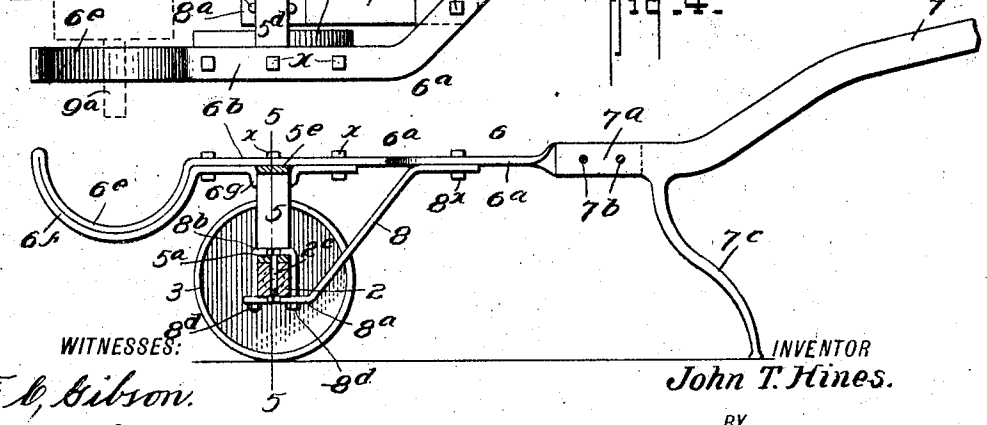



Fig. 4.




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PHOTO-LITHOGRAPHED BY SACHETT & WILHELMS LITHO. & PTG. CO. NEW YORK.

No. 772,883. PATENTED OCT. 18, 1904.

J. T. HINES.

ARMATURE TRUCK.

APPLICATION FILED JUNE 8, 1904.

NO MODEL. 2 SHEETS—SHEET 2.

Fig. 2.

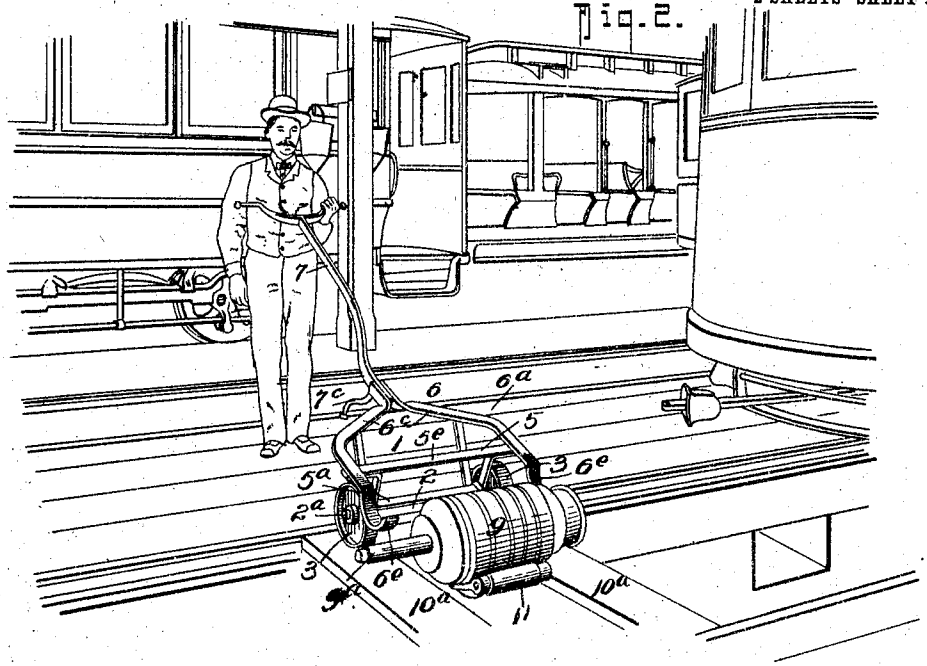



Fig. 5.

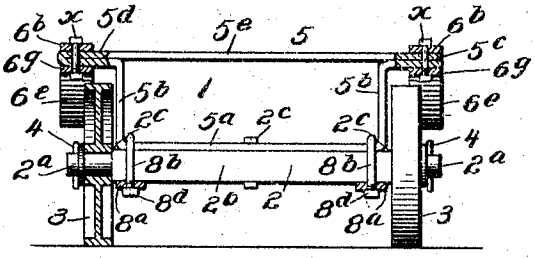
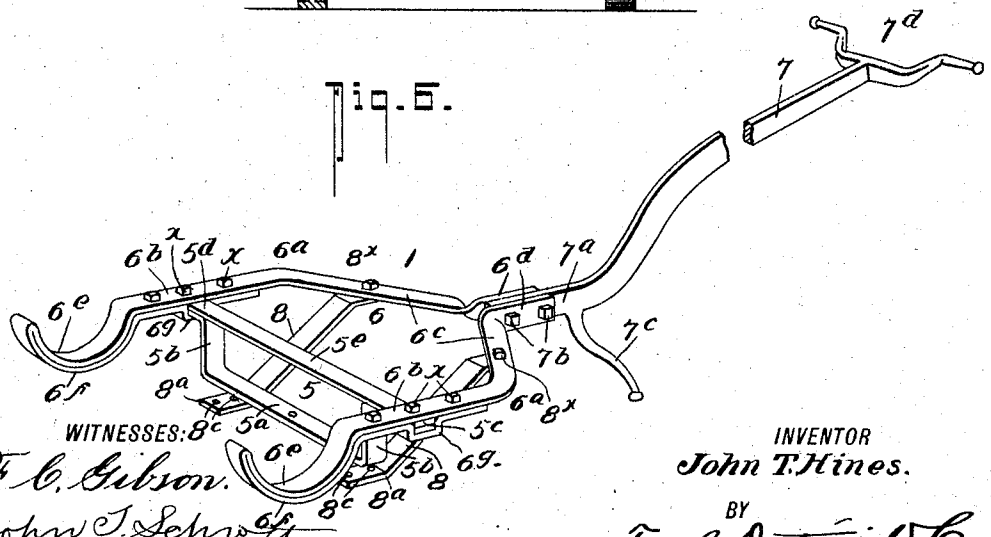



Fig. 6.




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No. 772,883. Patented October 18, 1904.

# UNITED STATES PATENT OFFICE.

JOHN T. HINES, OF ROANOKE, VIRGINIA, ASSIGNOR OF ONE-HALF TO THOMAS JACKSON CARTER, OF ROANOKE, VIRGINIA.

## ARMATURE-TRUCK.

SPECIFICATION forming part of Letters Patent No. 772,883, dated October 18, 1904.

Application filed June 8, 1904. Serial No. 211,642. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN T. HINES, residing at Roanoke, in the county of Roanoke and State of Virginia, have invented certain new and useful Improvements in Armature-Trucks, of which the following is a specification.

My invention relates to improvements in trucks, and the same is more particularly designed for use in manipulating and moving armatures for electric motors, dynamos, and the like; and the invention primarily seeks to provide a device of this character of a very simple, economical, and durable construction which will readily and effectively serve its intended purposes.

Generically my invention comprises a suitable frame mounted upon truck-wheels having fingers or arms for receiving the armature.

With other objects in view the invention also includes certain details of construction and combination of parts, all of which will be first described in detail and then be specifically pointed out in the appended claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view showing my invention as applied for use. Fig. 2 is a similar view after the armature has been unloaded from the truck. Fig. 3 is a top plan view of the truck. Fig. 4 is a vertical longitudinal section thereof on the line 4 4 of Fig. 3. Fig. 5 is a cross-section on the line 5 5 of Fig. 4. Fig. 6 is a detail perspective view of the truck-frame detached.

Referring now to the accompanying drawings, in which like numerals and letters of reference indicate like parts in all the figures, the truck 1 includes an axle 2, on the reduced ends $2^a$ $2^a$ of which the wheels 3 3 are mounted, and these wheels are held on the reduced portions $2^a$ $2^a$ of the axle 2 by the split keys 4 4 or in any other approved manner. The axle 2 is formed with an enlarged portion $2^b$ $2^b$ to form a distance member and the reduced ends $2^a$ $2^a$ before referred to, and where the enlarged and reduced portions of the axle join they form shoulders $2^c$ $2^c$, as clearly shown in Fig. 5.

5 designates a frame composed of a single strip of metal, including a horizontal portion $5^a$ to fit on the axle and the upwardly-extending right-angled portions $5^b$ $5^b$ and the outwardly-extended portions $5^c$ $5^d$, the portion $5^d$ being bent back upon itself to form the horizontal portion $5^e$, as shown.

Secured to the horizontal portion $5^e$ of the member 5, which portion $5^e$ extends parallel to the axle 2, is a Y-shaped horizontally-disposed member 6, composed of two parts $6^a$ $6^a$, each of corresponding construction, which includes the parallelly-disposed portions $6^b$ $6^b$, bolted or otherwise secured to the member $5^e$ at its ends $5^c$ $5^d$ and extending at right angles thereto, but in a plane parallel therewith. The member 6 also includes integrally-formed rearwardly and convergingly extending portions $6^c$ $6^c$, which terminate in the flat parallel ends $6^d$ $6^d$, lying in parallel planes and spaced apart to receive the securing ends $7^a$ of the handle-lever 7, to which it is securely bolted, as at $7^b$ $7^b$, or otherwise fastened. The parallel portions $6^b$ $6^b$ extend forwardly and are bent into U-shaped hook members $6^e$ $6^e$ and then bent back upon themselves, as at $6^f$, and extend under the portions $6^b$ $6^b$ and the ends $5^c$ $5^d$, as at $6^g$, and are secured to the said portions $6^b$ $6^b$ and the ends $5^c$ $5^d$ by the bolts $x$ $x$, as clearly shown in the drawings.

8 8 designate brace members bolted or otherwise secured, as at $8^\times$, to the converging portions $6^c$ $6^c$ at one end of the members 8, and the said members 8 have their other ends, $8^a$ $8^a$, apertured, as at $8^c$ $8^c$, to receive the clips $8^b$ $8^b$, which take over the horizontal portion $5^a$ and the axle 2 and are secured by nuts $8^d$ $8^d$ to hold the members 5 and the members 8 to the axle 2, and to prevent lateral movement of the member 5 on the axle I pass a bolt $2^c$ through the portion $5^a$ and the axle 2. (See Figs. 2 and 4.) The handle-lever 7 also includes a leg $7^c$ and a cross or handle member proper, $7^d$, at its fee end, the leg $7^c$ serving to hold the truck, with the handle member $7^d$, sufficiently elevated to be readily grasped by the hand of the operator when the truck is at rest.

By providing the hook members $6^e$ $6^e$ in the manner shown and described the armature 9 can be picked up thereby with its shaft $9^a$ resting in the hook members $6^e$ $6^e$ and held parallel with the truck-axle, so that the truck can be readily rolled or moved onto the cross-supports $10^a$ $10^a$ over the "motor-pit" of the car-barn and the armature readily deposited upon or removed from the holding or handling crane 11, as clearly shown in Fig. 2.

By providing the hook members $6^e$ $6^e$ of the double thickness of metal by bending the same back upon themselves and securing the so-bent-back ends to the frame very strong and rigid members are obtained, which will not become twisted or bent out of shape by their prolonged use.

From the foregoing description, taken in connection with the accompanying drawings, it is thought the complete operation, construction, and advantages of my invention will be readily apparent to those skilled in the art to which it appertains, and I desire it understood that slight changes in the construction and arrangement of parts can be readily made without departing from the scope of the invention or that of the appended claims.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A truck comprising an axle, wheels mounted thereon, a frame including a vertically and a horizontally disposed portion mounted on said axle between said wheels, said horizontally-disposed portion including a pair of hook ends to receive the shaft of the armature with the armature between the hooks to hold the same parallel with said axle, for the purposes specified.

2. A truck comprising an axle, wheels mounted thereon at each end, a frame including a vertical member and a horizontal member mounted on said axle, said horizontal member being secured to said vertical member and terminating in hook portions to receive an armature, brace members joining said horizontal member with the axle, and a handle member secured to said horizontal member, substantially as shown and described.

3. An armature-truck comprising an axle, wheels mounted on each end of said axle, a frame mounted on said axle and including vertical sides and a transverse member joining said sides, a second frame member secured to said transverse portion of the vertical members and terminating in hook members, a handle-lever having a foot, secured to said second frame member, braces joining said second frame member with the axle, substantially as shown and described.

4. An armature-truck comprising an axle, wheels mounted thereon, a vertically-disposed frame portion including vertical side members and a cross member mounted on said axle, a second frame member including a pair of arms terminating in hook ends and secured to said transverse portion of the vertical frame member, a handle-lever secured to said pair of arms at their rear ends, substantially as shown and described.

5. An armature-truck comprising an axle, wheels mounted thereon, a vertically-disposed frame portion including vertical side members and a cross member mounted on said axle, a second frame member including a pair of arms terminating in hook ends and secured to said cross portion of the vertical frame member, a handle-lever secured to said pair of arms at their rear ends, and brace members joining said arms with the axle, substantially as shown and described.

6. An armature-truck comprising an axle, wheels mounted thereon, a vertical frame member consisting of a single strip of metal forming transverse portions and vertical portions, said vertical frame member adapted to be secured to said axle, a second frame member consisting of a pair of arms each terminating at one end in hook members, said arms being secured to one of said transverse portions of the first-mentioned frame member, a handle-lever secured to said arms at their other ends, said lever member having a handle portion and a foot, and braces securing said arms with the axle, substantially as shown and described.

7. An armature-truck comprising an axle, wheels mounted thereon, a vertical frame member consisting of a single strip of metal forming a transverse axle-engaging member, vertical side supports, and a transverse top portion, said transverse axle member being secured to said axle, a second frame member consisting of a pair of arms terminating at one end in hook members, said arms being secured to said transverse top portion of the first-mentioned frame member, a handle-lever having a handle portion and a foot, and braces securing said arms with the axle, said arms being each composed of a single strip of metal bent back upon itself at the hook ends, substantially as shown and described.

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