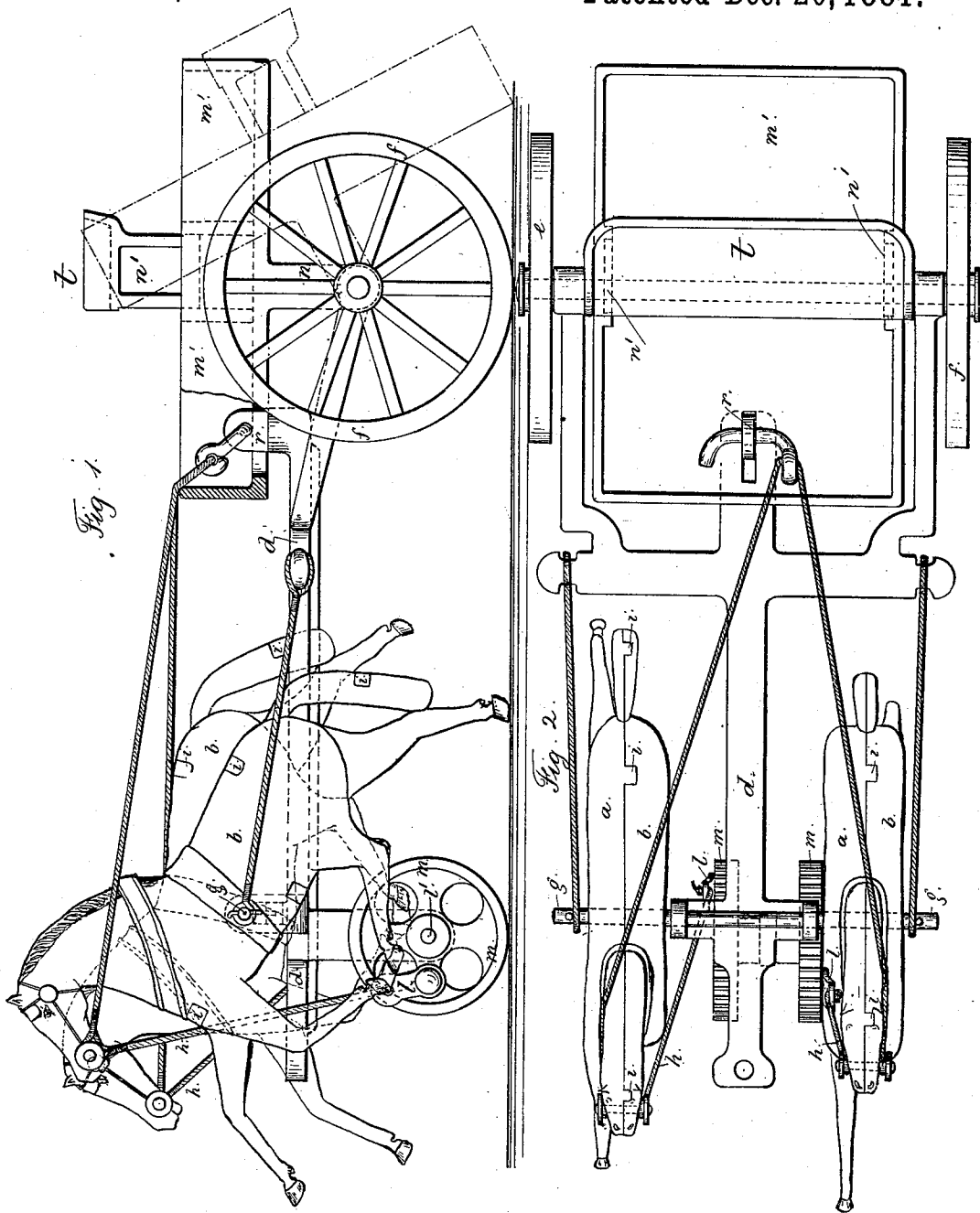


(No Model.)

F. W. CARPENTER.
TOY HORSES AND CART.

No. 251,093.

Patented Dec. 20, 1881.



Witness
Charles Smith
J. Hall.

Fig. 5.

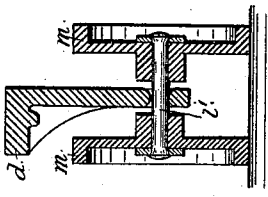
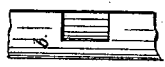


Fig. 3.



Fig. 4.



Inventor

Francis W. Carpenter
per Lemuel W. Lovell atty

UNITED STATES PATENT OFFICE.

FRANCIS W. CARPENTER, OF HARRISON, NEW YORK.

TOY HORSES AND CART.

SPECIFICATION forming part of Letters Patent No. 251,093, dated December 20, 1881.

Application filed November 12, 1881. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS W. CARPENTER, of Harrison, in the county of Westchester and State of New York, have invented an Improvement in Toy Horses and Carts, of which the following is a specification.

Toy horses have been made by me of cast or malleable iron with pins on one half-shell, passing into holes in the other half-shell, so that the horse is made by placing the half-shells together and riveting up the said pins, as seen in my Patent No. 244,433, and toy cars have been made with a metal body and downward projections for the axles to pass through. In my Patent No. 241,188 the horses are placed upon a wire or horizontal studs, and are made to rock thereon by means of connecting-straps from the horses' heads to cranks and wheels that are below the tongue on rigid axles.

My present invention relates to an improvement in connecting the two half pieces or shells forming the cast-iron horse so as to avoid rivets; also, in constructing the cart in such a manner that it can be tipped to dump the contents, and the wheels that are used to give motion to the horses are made so as to accommodate themselves to inequalities in the surface over which the toy is drawn.

In the drawings, Figure 1 is an elevation, partly in section, of the toy cart. Fig. 2 is a plan of the toy. Fig. 3 is a section at the interlocking fins. Fig. 4 shows the notch that is adapted to receive the fin, and Fig. 5 is a section of the oscillating axle for the front wheels.

The horses are made of cast or malleable metal in two half pieces or shells, *a b*, placed together, as in my said Patent No. 244,433; but instead of riveted pins to hold them together I form upon one of the shells, near the edge, laterally-projecting fins *i i*, at two or more places, and I make in the other half-shell corresponding recesses, having beveled surfaces at the bottoms of the recesses, so that the two half-shells can be placed together, and then, by bending down the fins into the recesses, the parts are locked firmly together. It is preferable to use three or four of these interlocking fins at different places around the

edges of the toy horse, as shown. The tongue *d* is between the two horses; or there may be shafts extending back to the axle.

e and *f* are the wheels of the cart.

The pin *g* is preferably fastened securely in place, but may be movable, and it supports the horse or horses and forms an axis on which such horses are rocked by the action of the straps *h*, extending from the heads down to the cranks *l* of the wheels *m*, as in my aforesaid patent. Instead, however, of the wheels *m* revolving upon a rigid shaft passing through the downward projection below the tongue, I make use of an axle, *u*, that passes loosely through the downward projection from the tongue, and hence it can rock sufficiently in the hole to allow the wheels to rest evenly upon the surface over which the toy may be drawn. This insures the continuous movement of the horses and prevents one wheel being turned by contact with the floor, while the other remains out of contact and stationary.

The cart is made of a metal frame, *m'*, having downward projections *n*, through which the axle passes, and there is a locking device to hold the cart from tipping, such locking device being composed of the stud *r* on the tongue *d*, passing into an opening in the frame or bottom of the cart and receiving a pin or bolt through the stud, which bolt, for convenience, is preferably curved. When this pin is withdrawn the cart can be tipped backwardly upon the axle to discharge the contents.

The cart-bottom may be cast with the sides; or there may be a separate bottom introduced, either of wood or metal.

The seat *t* is supported by the end pieces, *n*, that pass in between ribs that are upon the inner surfaces of the metal frame. This construction allows the seat to be removed whenever desired.

The horses can be removed from the stationary rod on which they are pivoted.

I claim as my invention—

1. The combination, with the toy horses, wheels, and cranks, of the axle for the wheels, connected to the downward projection from the tongue, so that it may oscillate to allow the front wheels to bear evenly upon the surface

over which they are drawn, substantially as set forth.

2. The toy horses, made of cast or malleable metal shells, having fins projecting laterally on one shell interlocking with the edges of the other shell and clinched, substantially as set forth.

3. A toy cart having a metal frame with downward projections, in combination with the wheels, the axle passing into or through the downward projections, and a locking device introduced between the tongue and the body of the cart, substantially as set forth.

4. The combination, in a toy cart, of a metal

frame, wheels, and an axle for the wheels, connected with the frame and forming a pivot for the metal frame, and a locking device to hold the cart in position, substantially as specified.

5. The combination, with the toy vehicle, of the removable cast-metal seat, substantially as set forth.

Signed by me this 11th day of November, A. D. 1881.

FRANCIS W. CARPENTER.

Witnesses:

GEO. T. PINCKNEY,
CHAS. H. SMITH.