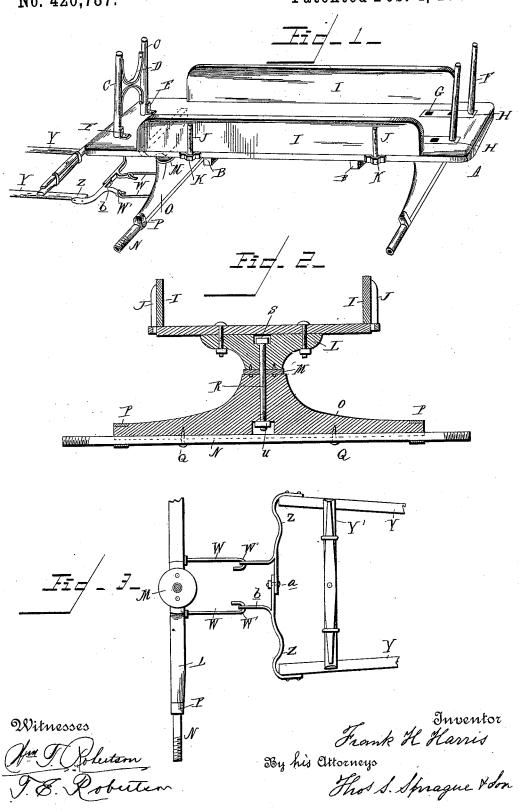
## F. H. HARRIS.

No. 420,787.

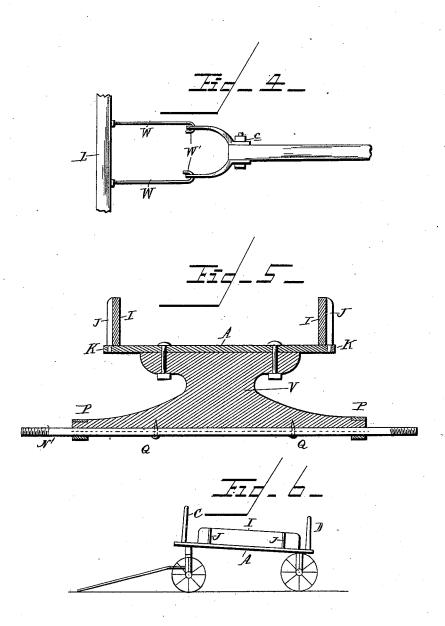
Patented Feb. 4, 1890



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No. 420,787.

Patented Feb. 4, 1890.



Witnesses

J.S. Robertson

Frank L. Harris

By his attorneys

Thos S. Sprague & Son

## United States Patent Office.

FRANK H. HARRIS, OF AUBURNDALE, OHIO.

## TOY DRAY.

SPECIFICATION forming part of Letters Patent No. 420,787, dated February 4, 1890.

Application filed March 13, 1889. Serial No. 303,187. (No model.)

To all whom it may concern:

Be it known that I, Frank H. Harris, a citizen of the United States, residing at Auburndale, in the county of Lucas and State 5 of Ohio, have invented certain new and useful Improvements in Toy Drays, of which the following is a specification, reference being had therein to the accompanying draw-

This invention relates to new and useful improvements in toy drays; and the invention consists in the peculiar construction and combination of the different parts, whereby the device is economically manufactured and 15 provided with the necessary solidity to become a serviceable article for the various uses to which it may be applied, all as more fully hereinafter described, and shown in the ac-

companying drawings, in which-

Figure 1 is a perspective view of the same. Fig. 2 is a cross-section through the axis of the forward truck. Fig. 3 is a plan of the running-gear provided with a pair of shafts. Fig. 4 is a similar view with a single pole at-25 tached thereto. Fig. 5 is a cross-section through the axis of the hind gear, and Fig. 6 is a diagram.

A is a platform of suitable length and width and additionally strengthened by cross-30 cleats B, secured thereto on the under side.

C are the forward stakes, yoked together by the malleable-iron bracket D, secured between the same, and stepped with their lower ends into sockets formed in the platform and 35 detachably secured thereto by the angleirons E.

Fare the rear stakes, adjustably secured in sockets G, formed near the rear end of the platform in the longitudinal direction there-40 of. A series of sockets are provided for each stake, and these are re-enforced by iron plates H, and provided with corresponding sockets and secured to the platform, preferably flush therewith. The platform is provided with 45 side-boards I, which extend only a part of the length of the platform and are removably secured thereto by means of metal stakes J, preferably of malleable iron, the lower ends of which engage into sockets K, secured to the 50 edges of the platform. The platform is mounted upon front and rear trucks, which

convenient handling and loading of goods, as in the ordinary construction of large drays.

The front truck consists of a bolster L, 55 bolted to the under side of the platform and provided with the bearing-plate or fifth-

wheel M.

N is the axle, preferably a piece of pipe, screw-threaded upon the ends to receive the 60 axle-nut, which holds the wheels in place, and provided with an axle-cap O, grooved upon its under side to receive the axle and secured thereto by suitable clips or ferrules P and screws or nails Q, which prevent the axle from 65

rolling on the axle-cap.

R is the king-bolt, engaging with its head S in a corresponding recess formed in the top of the bolster and confined therein by the platform. It is screw-threaded at its lower 70 end to receive the nut U, seated in a corresponding recess on the under side of the axlecap immediately above the axle. The hind gear is provided with an axle N', constructed and secured, like the axle of the front gear, 75 to a bolster V, which is bolted to the plat-

W are two metallic hounds secured to the axle-cap of the front gear, and, projecting forwardly, terminate in inwardly-turned 80

hooks W'.

Y are a pair of shafts provided with the cross-bar Y', to which an evener may be secured, and with the shaft-irons Z, which are constructed in two parts meeting in the cen- 85 ter, whereby they are secured together by a suitable bolt a. These shaft-irons have rearwardly-projecting arms b, provided with eyes adapted to engage with the hooks W' of the hounds.

In practice, the parts being constructed and arranged as shown and described, it will be seen that the device is adapted to all ordinary uses of a dray; or by removing the stakes and side-boards the device may be used 95

as a platform-truck.

The manner of constructing the front and the rear gears insures great strength, and by securing the king-bolt in the manner described the front gear cannot become accinoo dentally detached, the only way of detaching it being by turning the whole front axle in the same manner as it would be necessary present the usual difference in heightfor the | in unscrewing the nut U from the king-bolt.

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The king-bolt itself can never become lost. Neither can the nut U, which is held in its recess. The manner of securing the shafts permits their being readily detached after unserewing the bolt a, and a single pole, as shown in Fig. 4, the pole-irons of which are also made in two parts and detachably secured to the pole by means of a bolt c, may be put in place thereof.

What I claim as my invention is-10

1. In a dray, the combination, with the front gear provided with the hooked hounds W, of the shafts Y, provided with the twopart shaft-iron Z, having overlapped ends se-15 cured together in the center and provided with the rearwardly-projecting arms b upon opposite sides of the overlapped ends and having eyes to engage into the hooks of the hounds, substantially as described.

2. In a dray, the combination, with the platform, of a front gear consisting of the bolster L, secured to the under side of the platform, the axle-cap O, to which the axle N is secured, and the king-bolt R, provided with 25 the head S, inclosed in a recess on top of the

bolster between the same and the platform.

and provided with the nut U, inclosed in a recess on the under side of the axle-cap above

the axle, substantially as described. 3. In a dray, the combination of the plat- 30

form provided with the removable front stakes C, the removable rear stakes F, the removable side-boards I, the front gear consisting of the bolster L, bolted to the under side of the platform, the axle-cap O, to which 35 the axle N is secured, the king-bolt R, connecting the bolster L and axle-cap O and provided with the head S and nut U, inclosed in recesses formed, respectively, in the bolster and in the axle-cap, and the rear gear con- 40 sisting of the bolster V, bolted to the under side of the paltform and having the axle N secured to it, all the parts being arranged and constructed substantially as described.

In testimony whereof I affix my signature, 45 in presence of two witnesses, this 10th day of

December, 1888.

FRANK H. HARRIS.

Witnesses: J. PAUL MAYER, ED. McBrearty.