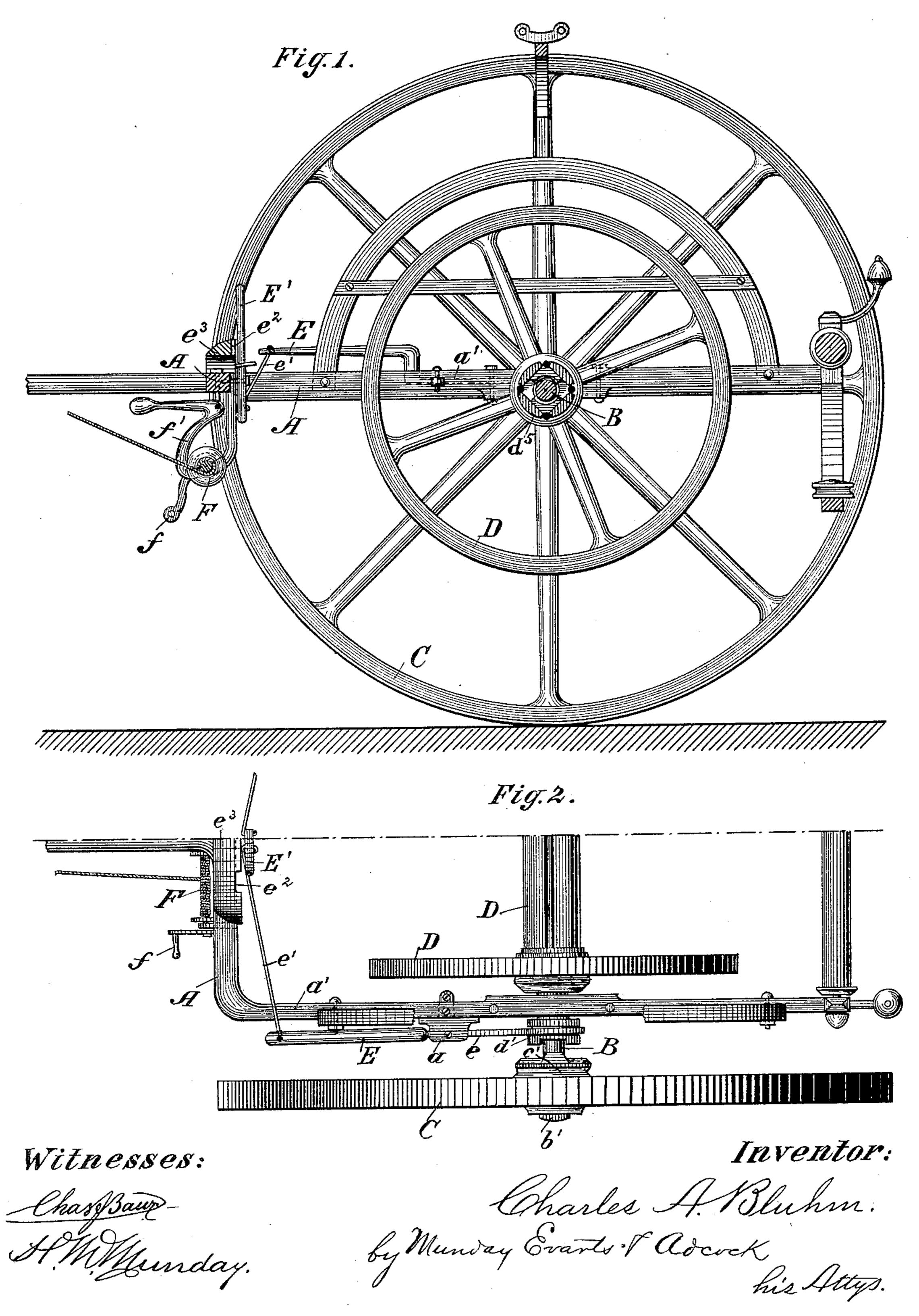
## C. A. BLUHM.

HOSE CARRIAGE.

No. 318,444.

Patented May 26, 1885.

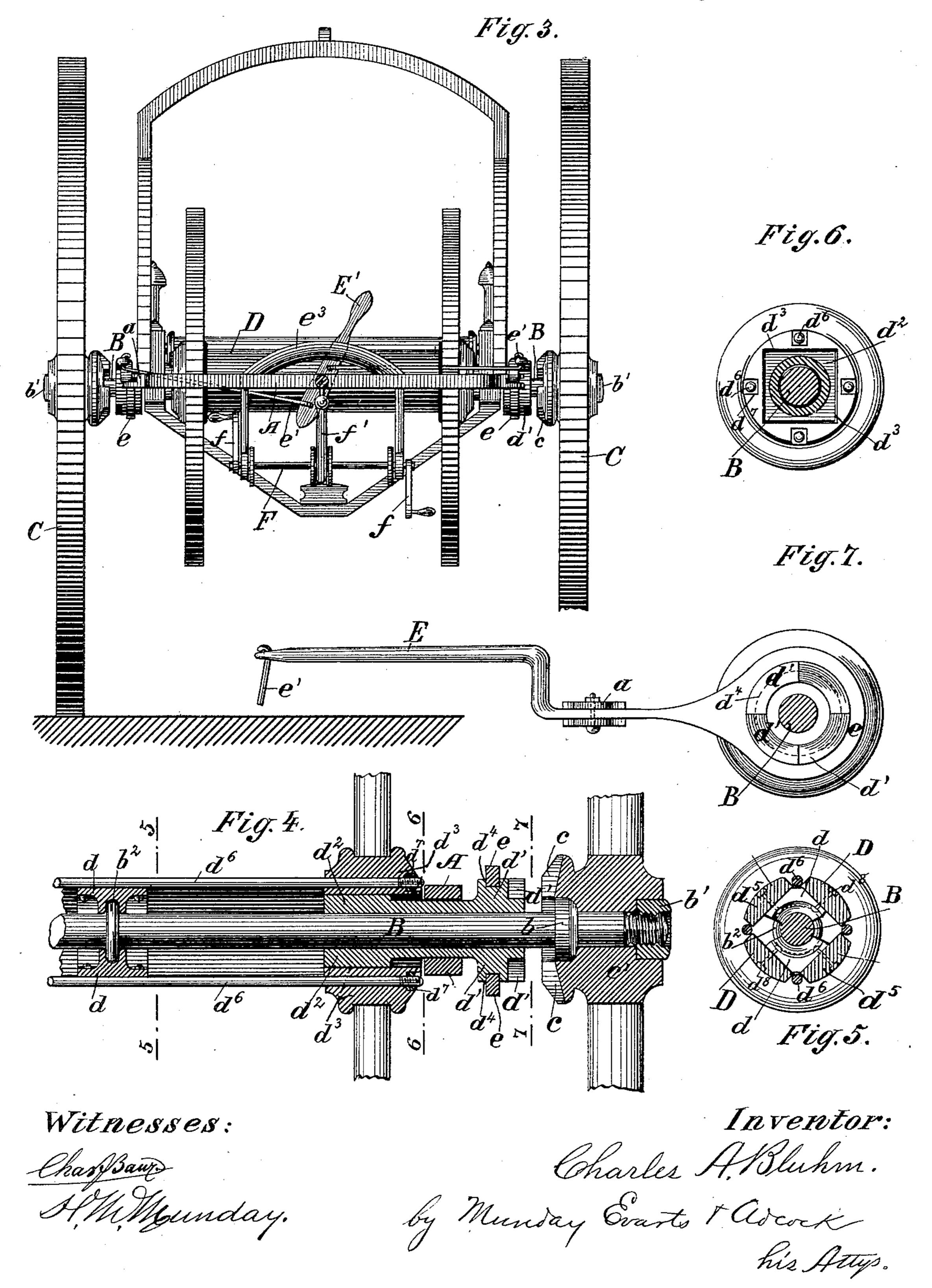


## C. A. BLUHM.

HOSE CARRIAGE.

No. 318,444.

Patented May 26, 1885.



## United States Patent Office,

CHARLES A. BLUHM, OF MICHIGAN CITY, INDIANA, ASSIGNOR TO HIMSELF, HENRY H. BLUHM, AND FRED H. BLUHM, ALL OF SAME PLACE.

## HOSE-CARRIAGE.

SPECIFICATION forming part of Letters Patent No. 318,444, dated May 26, 1885.

Application filed March 16, 1885. (No model.)

To all whom it may concern:

Be it known that I, Charles A. Bluhm, a citizen of the United States, residing in Michigan City, in the county of La Porte and State of Indiana, have invented a new and useful Improvement in Hose-Carts, of which the following is a specification.

This invention consists in mounting the hose reel or drum upon the axle of the cart and combining it with the revolving wheels by means of a clutch, so that it may revolve with the wheels or independently thereof, as may be desired. In this way the hose may be reeled up either by hand or by the movement of the cart, as preferred.

It also consists in the novel devices and novel combinations of devices herein shown and described, and more particularly pointed out in the claims.

In the accompanying drawings, which form a part of this specification, and in which similar letters of reference indicate like parts, Figure 1 is a side elevation of a hose-cart embodying my invention. Fig. 2 is a partial plan view. Fig. 3 is a front view; Fig. 4, a central longitudinal section through the axle. Figs. 5, 6, and 7 are cross-sections on lines 55, 6 and 77 of Fig. 4, respectively.

In said drawings, A represents the frame of 30 the cart, B the axle, C the wheels, and D the hose reel or drum. The wheels revolve upon the axle, and are secured in the usual manner, the axle having shoulders b and nuts b'. The drum D is prevented from sliding on 35 the axle B by means of a ring or projection,  $b^2$ , secured to the axle engaging a grooved ring or saddle, d, secured to the drum on its inner face. The drum or reel D is caused to revolve with the wheels C by means of the slid-40 ing clutch-sleeves d' engaging the clutch-faces c of the wheel-hubs c'. The sleeves d' have square ends  $d^2$ , which fit in the hubs  $d^3$  of the drum, so that the drum must turn with the sleeves. The sleeves d' are at all times free to 45 turn on the axle, and when the clutch d' engages the clutch-face of the wheel-hubs the drum will revolve with the wheels. When not so engaged, it may revolve independently of |

the wheels. The clutches d' are operated si-

multaneously by a pair of levers, E, having 50 yokes or collars e, which fit in the circumferential grooves  $d^4$  in the sleeves d', which levers are pivoted to brackets a on the frame, and are connected to the hand-lever E' by the rods e'. The lever E' may be fixed in position to hold the clutches engaged or disengaged by notches  $e^2$  in the curved bar  $e^3$ . The side bars, a', of the frame fit on each side of the drum D, so that, the drum being stationary on the axle, it will also prevent the frame from 60 sliding thereon.

The hose drum or reel is preferably constructed of two hubs or wheels,  $d^3$ , four removable drum or spindle pieces,  $d^5$ , and four threaded rods,  $d^6$ , having nuts  $d^7$ , by which the 65 whole is bound together. The grooved ring d is made in two or more parts and secured to the drum-pieces  $d^5$  by bolts or screws  $d^8$ .

My invention is applicable to both horse and hand hose-carts; but in the drawings I 70 show it as applied to a hand hose-cart.

F represents the reel for winding up the traction-rope; f, the crank for turning it, and f' a weighted pawl for holding it in position.

1. The combination, in a hose-cart, of its axle and wheels with a hose reel or drum fitted loosely so as to turn freely on said axle, and a clutch consisting of a clutch-face on the wheel and a sliding clutch-sleeve on the axle, 80 whereby the reel may be made to revolve with the wheels when desired, substantially as specified.

2. The combination, with hose-reel D, provided with grooved ring or saddle d, of axle 85 B, provided with ring or projection  $b^2$ , wheels C, provided with clutch-faces c, and clutch-sleeves d', substantially as specified.

3. The combination, with hose-reel D, provided with grooved ring or saddle d, of axle 90 B, provided with ring or projection  $b^2$ , wheels C, provided with clutch-faces c, clutch-sleeves d', clutch-levers E, and hand-lever E', substantially as specified.

4. The combination of hubs  $d^3$  with drum- 95 pieces  $d^5$  and threaded rods  $d^6$ , substantially as specified.

5. The combination of hubs  $d^3$ , drum-pieces

parts and secured to said drum pieces, and axle B, provided with ring or projection  $b^2$ , substantially as specified.

substantially as specified.
5 6. The combination, with the axle and wheels of a hose-cart, said wheels having clutch-faces, | Witnesses: of a reel or drum mounted on said axle, a pair of the Fred Krentz, and the same and the same and the same and the same area. sliding clutch-sleeves adapted to engage the H.B. Turnill.

 $d^5$ , rods  $d^6$ , grooved ring or saddle d, made in | clutch-faces of said wheels, and levers for operating said clutch sleeves, substantially as ic  $\operatorname{specified}_{\cdot}$