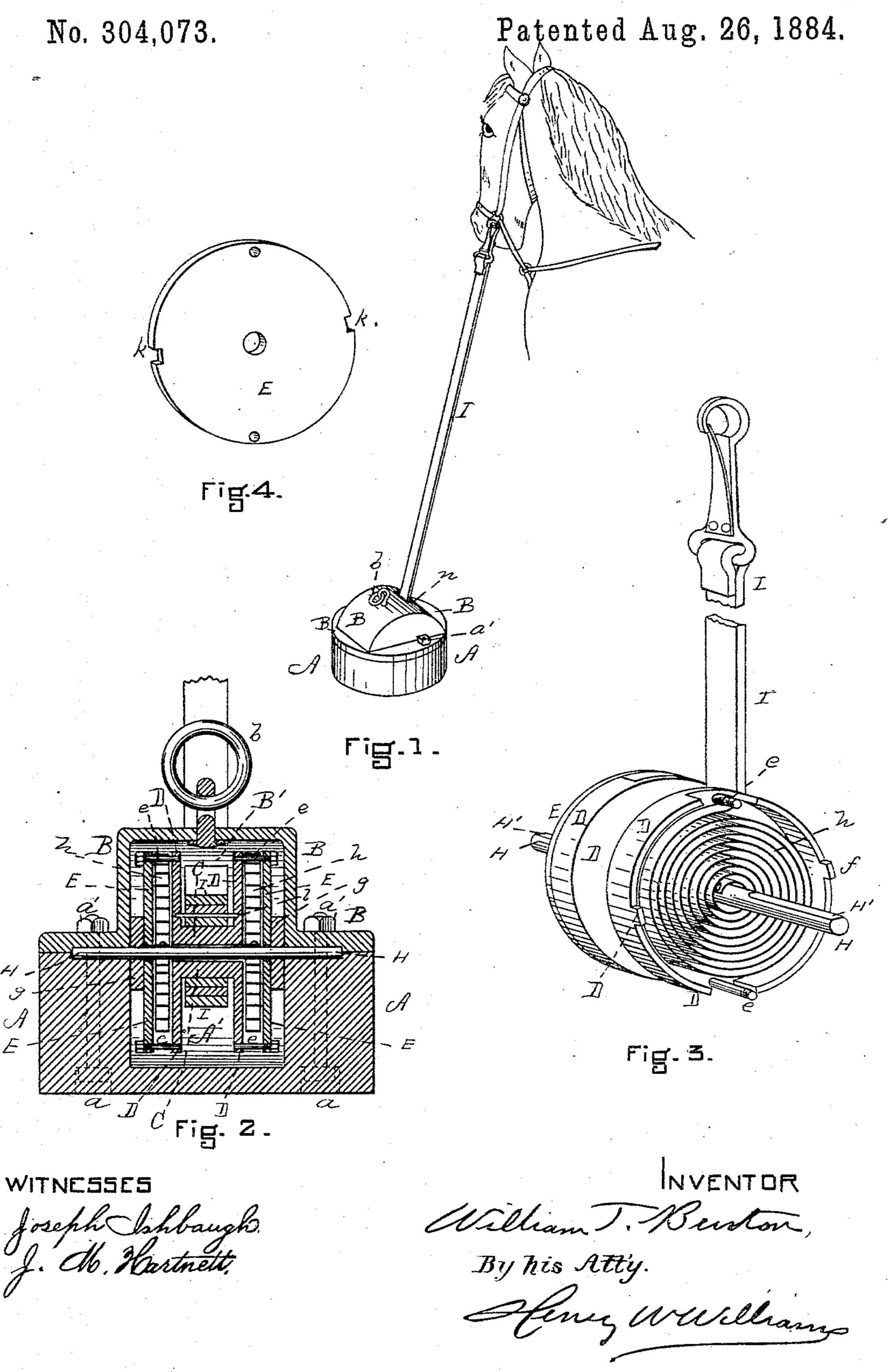
W. T. BURTON.

HORSE HITCHING WEIGHT.



United States Patent Office.

WILLIAM T. BURTON, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO GEORGE W. GOGIN, OF SAME PLACE.

HORSE HITCHING-WEIGHT.

SPECIFICATION forming part of Letters Patent No. 304,073, dated August 26, 1884.

Application filed February 18, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM T. BURTON, of Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Horse-Weights, of which

the following is a specification.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is a view in perspective of my improved horse-weight as it appears in practical operation. Fig. 2 is an enlarged vertical section of the device. Fig. 3 is a perspective view of the operating mechanism removed. Fig. 4 is a view of one of the side plates, E, removed from the operating mechanism.

A represents the weight proper, provided with the concave cavity or chamber A'. B is the cover, provided with the concave chamber B', and firmly bolted to the base A of the 20 weight by means of the bolts a and nuts a'. (See broken lines in Fig. 2.) A ring, b, is attached to the cover B, for convenience in handling the weight. The concave chambers A' and B' are of shape to accommodate a drum, 25 C, rigidly secured to which are the circular boxes D, provided with the plates or disks E, secured to said boxes D by suitable bolts or connections, e. Teats f, extending from the flanges or rings, making parts of said boxes D, 30 extend into corresponding openings, k, in the plates or disks E, thus rigidly securing said plates E to said boxes D. The drum is hung loosely upon the horizontal spindle H, said spindle being flattened or squared, as shown 35 at H', (see Fig. 3,) next its opposite ends, which lie in coincident grooves in the cover B and base A, said grooves fitting the spin-

dle ends sufficiently to prevent the spindle from rotating. Washers g are placed on the spindle, as shown in Fig. 2, between the plates E and the chamber-walls, to prevent said plates from coming into contact with said walls.

In each box D is a coiled spring, h, one end of which is secured to the spindle H, and the other end to one of the bolts e.

Secured centrally to the drum C by means of a cross-pin, l, or other suitable mechanical device, is a strap, I, which coils around said drum, passes up through an opening, N, in 50 the cover B, and is provided with an ordinary snap-hook for attachment to the bit-ring of the bridle. In practical operation, when the weight is not in use, the strap I is drawn in through the opening n (the snap-hook only 55 projecting) and around the drum C by the power of the springs h. As the strap is drawn out from the weight and attached to the horse's bridle, it, uncoiling, rotates the drum C(loose upon the spindle) against the force of the com- 60 pressing-springs h, secured to the spindle. It will readily be perceived that with every downward movement of the horse's head the strap is correspondingly drawn into the weight, and with every upward movement of 65 the horse's head the strap is correspondingly drawn out of the weight, so that it cannot possibly become entangled in the legs of the animal or trodden upon and soiled, as is apt to be the case with straps attached to weights as 70 commonly constructed.

I am aware that a hollow weight provided with a barrel or spring for winding up the hitch-strap and retracting it into said weight is not new in this invention, which consists in 75 the particular mechanism above described for accomplishing this result.

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

In a horse-weight provided with means for retracting the hitch-strap, the combination of the base and cover AB, circular boxes D, each containing a coiled spring, h, disks E, provided with the openings k, teats f, connections 85 e, spindle H, drum C, and cross-pin l, all arranged and constructed substantially as and for the purpose set forth.

WILLIAM T. BURTON.

Witnesses:

HENRY W. WILLIAMS, JOSEPH ISHBAUGH.