

No. 843,328.

PATENTED FEB. 5, 1907.

J. R. COMBS.
HAY CARRIER.
APPLICATION FILED AUG. 7, 1905.

Fig. 1

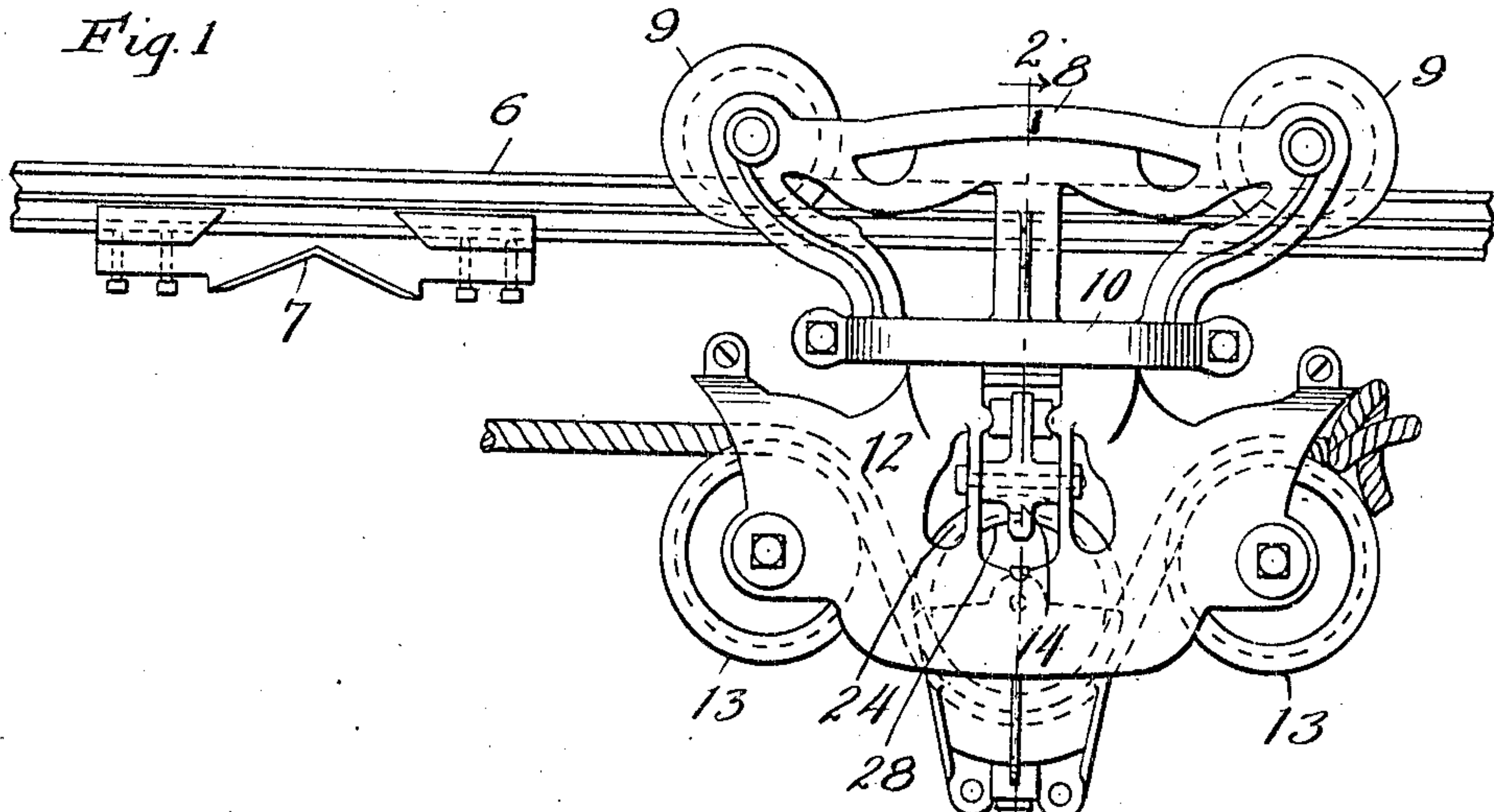


Fig. 2

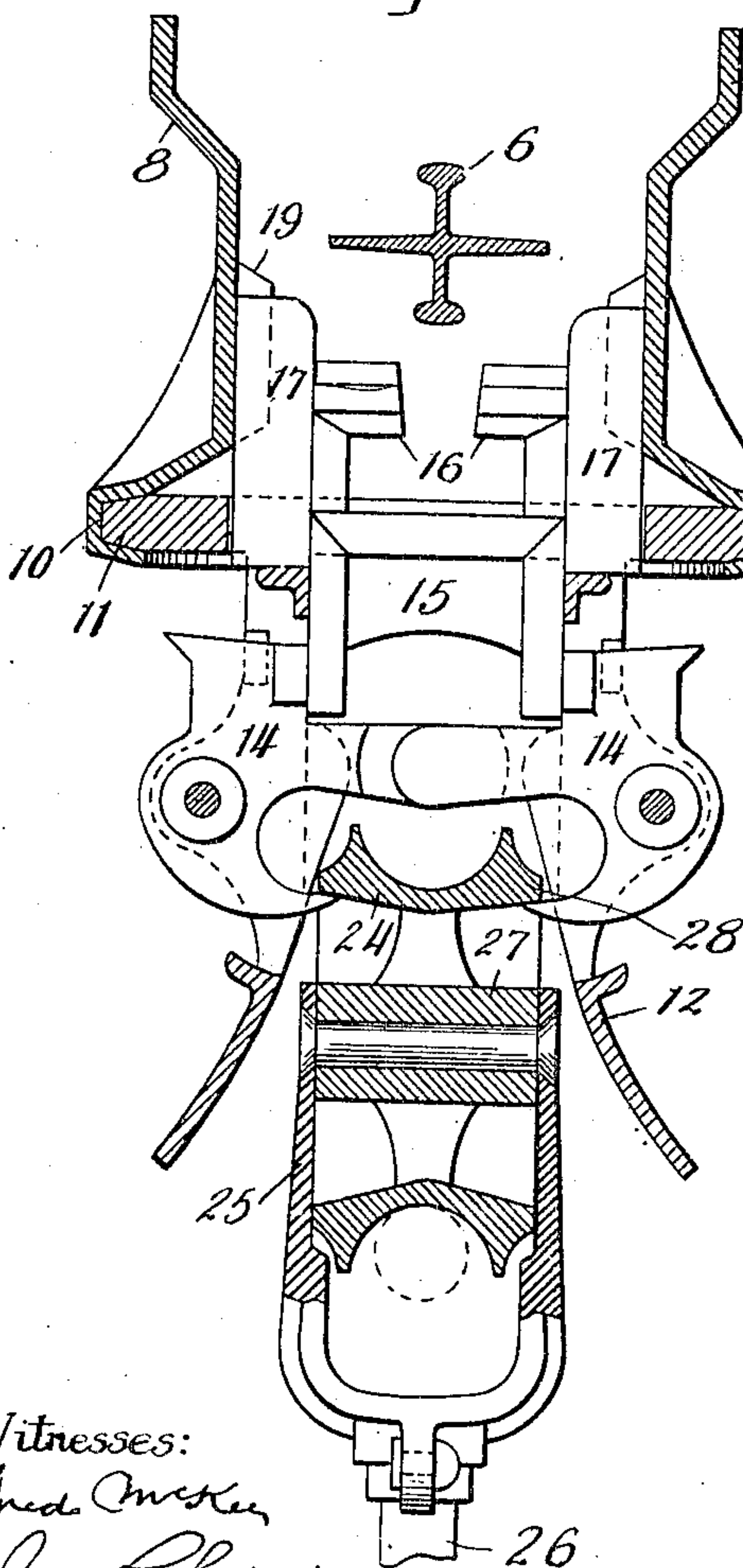
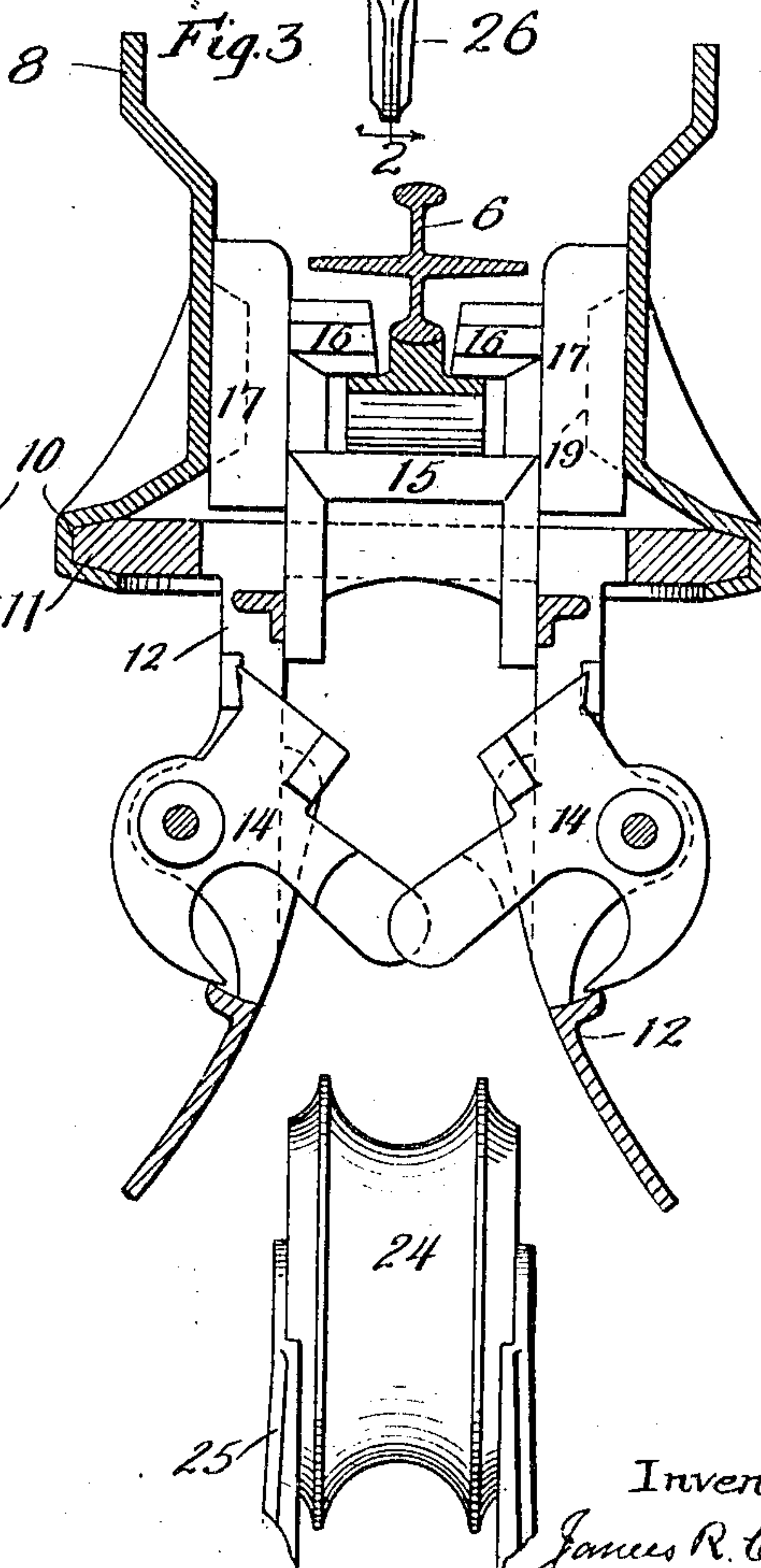


Fig. 3



Witnesses:

Fred. O. Miller

Justus L. Quinn

Inventor:

James R. Combs

By H. A. Low

Att'y

UNITED STATES PATENT OFFICE.

JAMES R. COMBS, OF THE UNITED STATES NAVY.

HAY-CARRIER.

No. 843,328.

Specification of Letters Patent.

Patented Feb. 5, 1907.

Application filed August 7, 1905. Serial No. 273,049.

To all whom it may concern:

Be it known that I, JAMES R. COMBS, of the United States Navy, a citizen of the United States, temporarily residing in Indian Head, in the county of Charles and State of Maryland, have invented a new and useful Improvement in Hay-Carriers, of which the following is a specification.

In that class of hay-carriers having laterally-located grappling-hooks for engaging the fork-pulley and supporting the same while carrying the load it has been customary to so construct the pulley and the hooks that the latter either enter recesses in the side frame of the pulley or set under the hub of the pulley, and thus support the latter. I believe a better construction to be one in which the hooks engage directly with the rim of the pulley instead of its frame or hub, because the frame is thereby left free to rock on the pulley-axis in the changes of position of the load without causing any movement by the pulley itself or any friction between the pulley and the hooks.

The invention is fully disclosed in the drawings, forming a part of this specification, and in which—

Figure 1 is a side elevation, and Figs. 2 and 3 are vertical sections on the line 2 2 of Fig. 1 of a carrier embodying my invention, Fig. 2 showing the fork-pulley as being entered in the carrier, and Fig. 3 showing the position after the carrier has been engaged by the trip-block.

In the drawings, 6 represents the carrier-track, and 7 the ordinary construction of trip-block.

8 represents the frame in which the supporting-wheels 9 are journaled and forming the car or carriage of the carrier. In the lower part of this frame a circular groove 10 is formed, in which the rim 11 of the turn-table is supported in the usual manner. Depending from the rim is the main body 12 of the turn-table, in which are pivoted the rope-pulleys 13 and also the grappling-dogs 14. The drop-lock is shown at 15, with the usual overhanging arms 16 for engaging the trip-block. The lock is adapted to move down between the upper arms of the dogs, as plainly seen at Fig. 2. The drop-lock also has wings 17, moving between guards or

ways 19 on the inside of the frame 8 and is movable vertically in such ways in the usual manner. The guards hold the drop-lock from turning with the turn-table, as will be understood.

In order to lock the turn-table against swiveling, the rim of the turn-table is cut away at opposite sides, so as to permit the wings 17 of the drop-lock to move to the position given at Fig. 2 and engage the rim when the drop-lock falls down into position between the grappling dogs or hooks. The drop-lock effects this locking whenever the fork-pulley is raised so as to operate the dogs, and it releases the lock whenever it is raised by the trip-block, as in Fig. 3.

The fork-pulley consists of the usual sheave 24, the U-shaped frame 25, in which the sheave is pivoted, and the hook 26, supported by said frame. The invention is found in the construction of the sheave 24 and frame 25, which are so fashioned as to permit the grappling-dogs to engage the sheave directly. To this end the frame is cut off at the top, so as to expose the sheave at its sides and above the hub 27, and the sheave itself is made strong with its rim projecting sufficiently upon each side to engage the dogs to engage and hold it with certainty. By thus cutting off the frame at the top all interference by the frame with the dogs is prevented and the dogs are given full opportunity to enter under the rim.

I claim—

1. The combination in a hay-carrier, of the grappling-dogs and a fork-pulley sheave having an overhanging rim which is exposed above the pulley-frame, the lower ends of said dogs swinging directly beneath the rim of the sheave.

2. The combination in a hay-carrier, of the turn-table, the grappling-dogs and the fork-pulley, the latter having a sheave and a frame supporting the same, and the frame being adapted to expose the sheave so its rim may be engaged by the dogs, and the lower ends of said dogs swinging directly beneath said rim.

JAMES R. COMBS.

Witnesses:

J. S. BARKER,
FRED MCKEE.