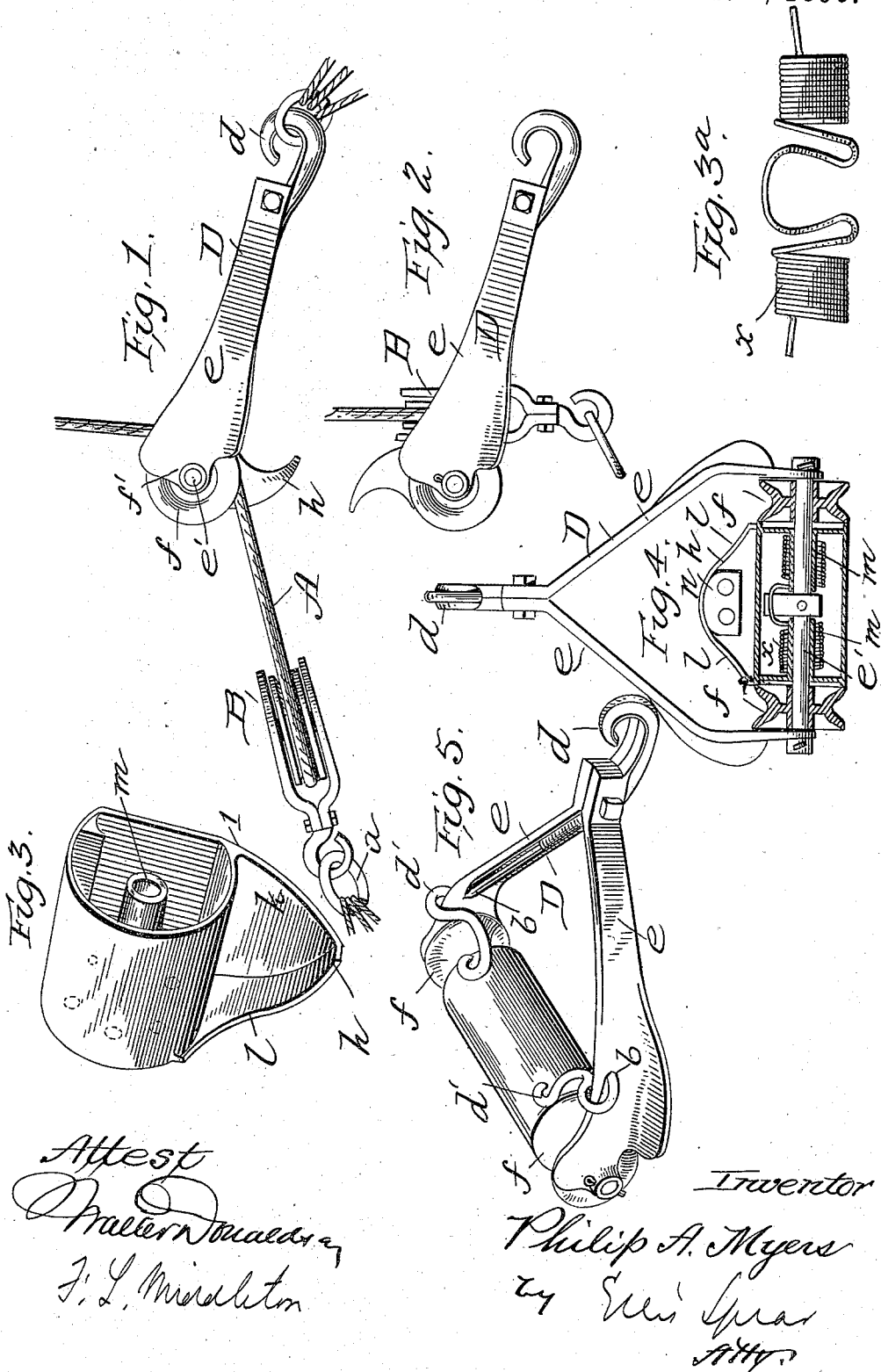


(No Model.)

P. A. MYERS.
SLING FOR HAY CARRIERS.

No. 554,136.

Patented Feb. 4, 1896.



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UNITED STATES PATENT OFFICE.

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SLING FOR HAY-CARRIERS.

SPECIFICATION forming part of Letters Patent No. 554,136, dated February 4, 1896.

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To all whom it may concern:

Be it known that I, PHILIP A. MYERS, a citizen of the United States, residing at Ashland, in the county of Ashland and State of Ohio, have invented certain new and useful Improvements in Slings for Hay-Carriers, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to the slings of hay-carriers; and it consists of a loop attachment for such slings, adapted to be used with the fork-pulley of a carrier.

I have found that in the use of the loop as now constructed, which is placed on the sling and through which the fork-pulley passes as the load is raised, the draft-ropes tend both to one side and to climb one on the other. For this reason, after long experiment, I have failed to make the loop work satisfactorily in connection with the fork-pulley, and to remedy this defect I have devised an improved loop provided with a separating or retaining device acting as a guide for holding the pulley-ropes apart during the hoisting, but permitting the passage of the fork-pulley.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 shows, in side elevation, my guide-loop in connection with a sling and at the beginning of its action. Fig. 2 is a similar view showing the pulley after it enters the loop. Fig. 3 shows one of the sections of the guide in perspective. Fig. 3^a shows the spring. Fig. 4 represents an axial section of the guide. Fig. 5 shows a modification.

In the drawings the sling is shown as provided with an eye *a* at one end adapted to the hook of the fork-pulley B. The eye at the other end of the sling engages with a loop D. This loop has a hook *d* for connection with the sling and diverging arms *e*, on the ends of which are carried the grooved pulleys *f*, one on each side. These pulleys are next to the arms, on the inside, and are journaled upon a bolt *e'*, which passes through both arms and is held by gibs *f'*. The pulleys turn freely on the bolt. Between the pulleys is located the guiding mechanism which separates the ropes and retains them each in its proper place.

In the form shown the guide consists of a

nose *h*, carried upon a cylinder on the bolt. Preferably I make this cylinder of two parts, one of which is shown in Fig. 3. This part forms one-half of the cylinder and guide. It is cast, preferably, flattened on one side, and from one edge of the flattened side *i* extends a curved plate *k*, having on its end the nose *h* and on its edge a flange *l*, connecting with the edge of the cylinder. The other end of the part has a head perforated for the end of a coiled spring *x* and on the inside an axially-arranged hollow stud *m*, forming the bearing on which the part turns and the support for the spring. Both sections of the cylinder are alike, and when put together with the edges of the curved plate abutting and with the spring in place the plate-sections are connected by means of a plate *n*, riveted to both. The ends of the springs are connected to the ends of the cylinder and move with it, while the center is held by a fixed bolt 2, so that the cylinder may turn against the tension of the spring. The parts are so arranged that when the loop is in place on the sling the nose *h* is underneath and turned toward the hook end of the loop. The fork-pulley is brought down through the loop and is drawn out and hooked to the sling. The load being raised in the ordinary manner, the fork-pulley is drawn up until it strikes the guide-flange, which turns as the pulley advances, against the tension of its spring, until the pulley has passed and the guide has been released, when it returns to its normal position; but during the passage of the rope over the side pulleys it is held, both the still and the moving part, securely upon the side sheaves, in their proper position, until the end of the sling passes over the cylinder. By this construction the draft-ropes are kept separate, the parts move up straight, the load is taken lengthwise of the wagon and no quarter-turn of the bundle is required.

The guide, while it holds the ropes apart and in proper place, does not obstruct the passage of the pulley and returns automatically to its normal position.

I have shown a modification in Fig. 5, in which the arms and sheaves of the loop are the same as in the other figures. In this form the guides consist of rods having bent ends *d'*, which bridge the grooves of the pulleys.

The rods are held to the inner faces of the loop and are under spring-tension, so that they may spring outward to allow the rope, as the hoisting takes place, to pass under the guides, which then shut down upon the rope and hold it in place. As the guides spring outward they do not interfere with the passage of the pulley. The rods pass through openings *b* at the base of the loop ends to support the same.

The spring-arms must shut over or by the side of the ropes, so as to hold them apart, and in place on each side.

It will be apparent that this guide is capable of great modification without departing from the spirit of the invention, and I do not limit myself to the forms shown.

I claim—

1. In combination, a loop D, side sheaves to receive the ropes, a movable guide for separating the ropes projecting into the path of the pulley-block and a pulley-block for moving said guide to allow of the passage of the block through the loop, substantially as described.

2. In combination, a loop D, side sheaves to receive the ropes, and a spring-separating device for the ropes, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

PHILIP A. MYERS.

Witnesses:

W. O. McDOWELL,
R. M. TUBBS.