

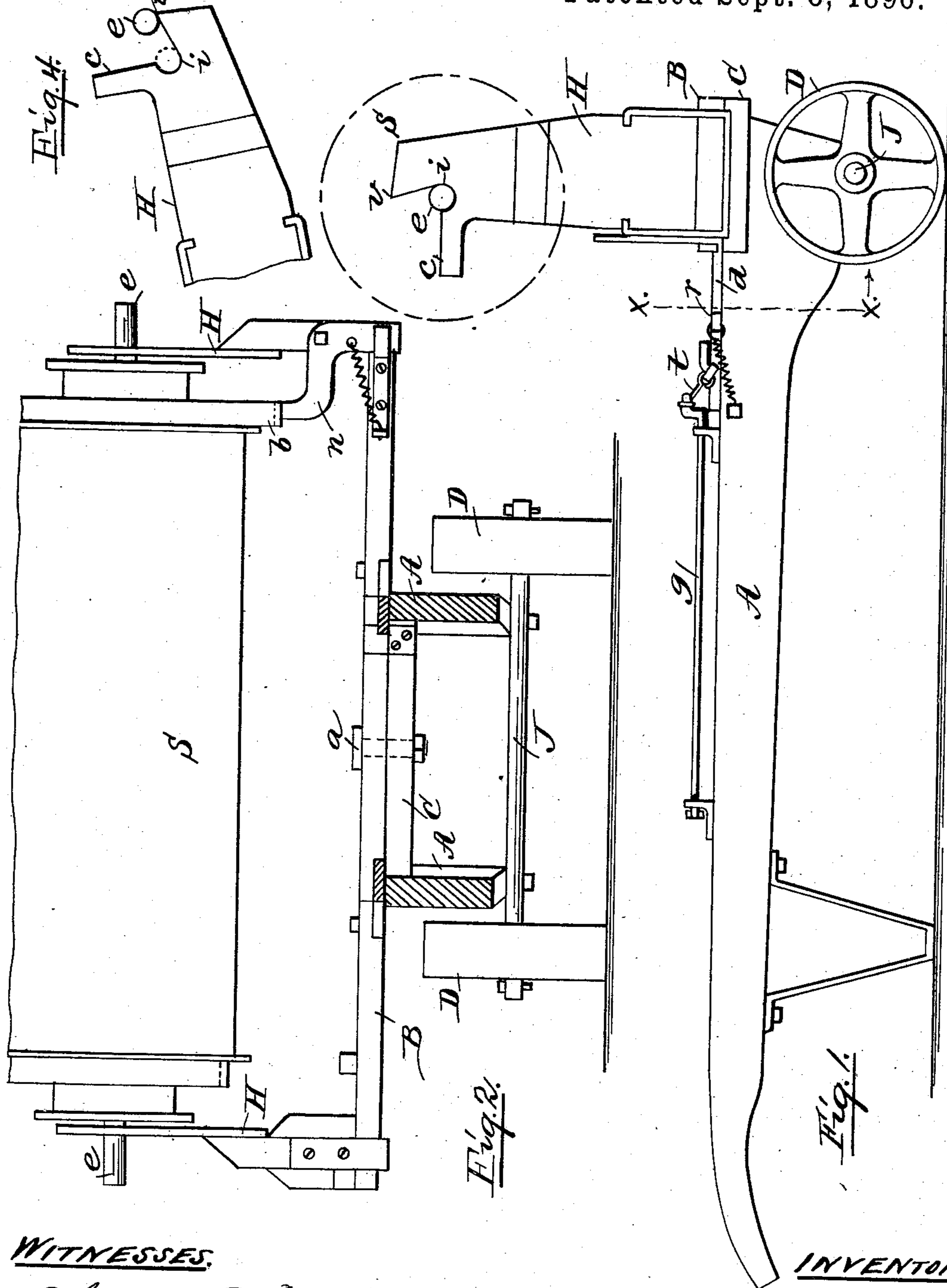
(No Model.)

2 Sheets—Sheet 1.

W. E. SHARPLES.
YARN BEAM TRUCK.

No. 567,417.

Patented Sept. 8, 1896.



WITNESSES:

Charles T. Harrigan
James E. Arnold

INVENTOR:

Wm E Sharples
By Benj Arnold
Att.

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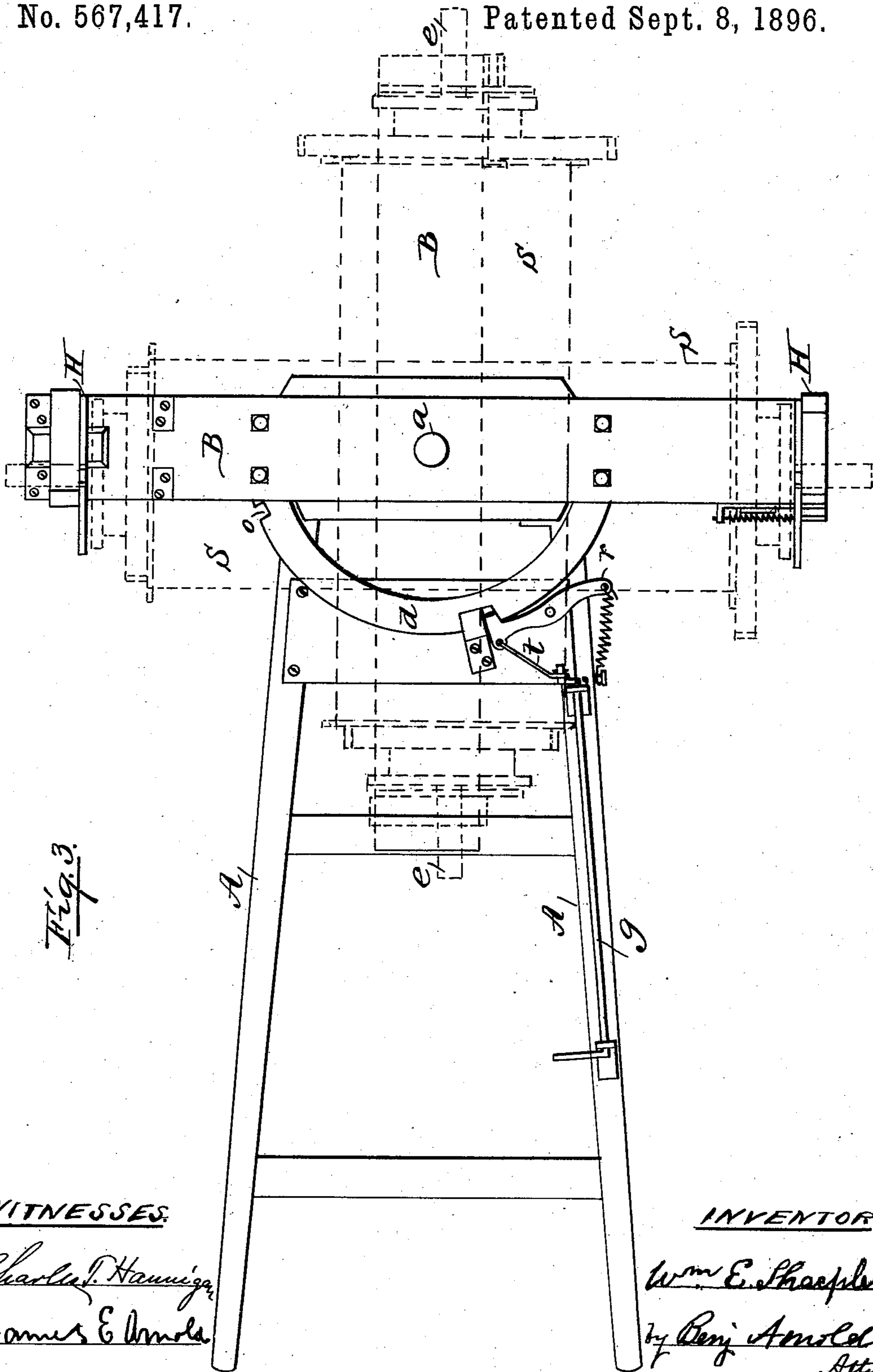


Fig. 3.

WITNESSES.

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UNITED STATES PATENT OFFICE.

WILLIAM E. SHARPLES, OF FALL RIVER, MASSACHUSETTS.

YARN-BEAM TRUCK.

SPECIFICATION forming part of Letters Patent No. 567,417, dated September 8, 1896.

Application filed June 16, 1896. Serial No. 595,825. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. SHARPLES, of Fall River, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Yarn-Beam Trucks; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to the trucks used for carrying roller-beams of yarn or cloth to and from the machine in manufacturing establishments, and is especially designed to accommodate itself to the narrow passages between the machines which necessarily obtain in such places. It is fully explained and illustrated in this specification and the accompanying drawings.

Figure 1 is a side elevation of the truck. Fig. 2 is a vertical cross-section on line $x x$ of Fig. 1. Fig. 3 is a top view with the yarn-beam shown in dotted lines in two positions, one position in which it is delivered to or taken from a machine and the other position in which it is carried through the passages between the machines. Fig. 4 shows the position of the upper part of the yarn-beam support when taking a beam from or delivering one to a machine.

The truck consists of two side bars $A A$, connected together by cross-bars and having at one end an axle J , made fast to its underside, upon the ends of which wheels $D D$ are secured. On the top of the side bars $A A$, over the axle J , a plate C is firmly secured to hold a pivot or bolt a , and a longer plate B is held on the cross-plate C on the pivot a , so as to be capable of swinging around horizontally on the pivot for about one-fourth of a circle. A vertical support H is placed at each end of the upper plate B to hold the yarn or cloth beam S . The notches in the upper ends of the support $H H$, that make the bearings for the journals $e e$ of the beam S , are made in a peculiar shape for the purpose of picking up or lifting the beam out of its bearings in a machine without handling it with the hands. This notch may be described as a hole made through the support H , near its upper end, of the proper size for the journals e of the beam

to turn in, and a cut made from directly over the center of the hole at the point v , down to one side of the hole at i , and another cut made in at c on the opposite side into the hole on a level with its center, and the piece between the two cuts removed. The object of making the notch in this shape is that by tipping the truck over on its wheels until the upper ends of the supports H are in the position seen in Fig. 4 the corner v can be shoved in under the journal of the beam when in a machine, and by then tipping the truck down again, as in Fig. 1, the journal will be lifted out of its bearing on the machine and will roll down into the bearing in the support H , and by tipping the truck a little farther over the beam can be lifted from the floor in the same way.

The operation of depositing a beam in the machine-bearings is just the reverse of this. The beam is brought up to the machine with the supports H nearly vertical, and when the beam is nearly over the bearings on the machine the truck is tipped over a little way to let the beam down and then drawn back, leaving the journals of the beam in the machine-bearings.

The pivoting of the upper plate B on the plate C so as to swing around quartering is to accomplish a very important object. To economize the space in a weave-room, the passages between the machines are made as narrow as will allow of the operatives passing around at their work, and are not wide enough to permit of a yarn-beam being wheeled through them while lying crosswise on the truck; but by arranging it so that the beam and its supporting parts can be swung around on the pivot a , so as to lie lengthwise of the truck, the whole may easily be wheeled through any passage that a person can conveniently pass through. To hold the plate B and the beam S in either of the two positions, a semicircular plate d is attached by both ends to the plate B , with two notches o made in its outer edge, and a catch-lever r is held on a pivot at its middle on one of the cross-bars in position, so that its inner end will engage in the notches o . The inner end of the catch r is connected by a link t to an arm on a rod g , held in bearings on a side bar A , so that by turning the rod g over out-

ward the catch *r* will be drawn out of the notch *o* it may be in, and the plate and beam can be turned so the catch will enter the other notch, a spiral spring attached to its outer end holding it engaged when not drawn out by the rod *g*.

To prevent the beam *S* from turning and unrolling the yarn or cloth when *in transitu*, a knee-lever *n* is pivoted on one of the supports *H*, so that its upper end will engage in the beam-gear *b*, and it is held there by a spiral spring attached to it below the pivot.

Having thus described my improved truck, I claim as my invention and desire to secure by Letters Patent—

In a truck for moving yarn or cloth beams,

a truck-body mounted on wheels, a beam-carrying plate held revolubly on a pivot on the truck over said wheels, a semicircular plate attached to said beam-plate, a lever-catch pivoted on the truck and arranged to catch in notches in the semicircular plate to hold it, a rod held in bearings on a side bar of the truck, a connecting-link between one end of said rod and the lever-catch, all in combination, substantially as described.

In testimony whereof I have hereunto set my hand this 4th day of June, A. D. 1896.

WILLIAM E. SHARPLES.

In presence of—

CHARLES E. MILLS,
ERNEST J. HARRISON.