

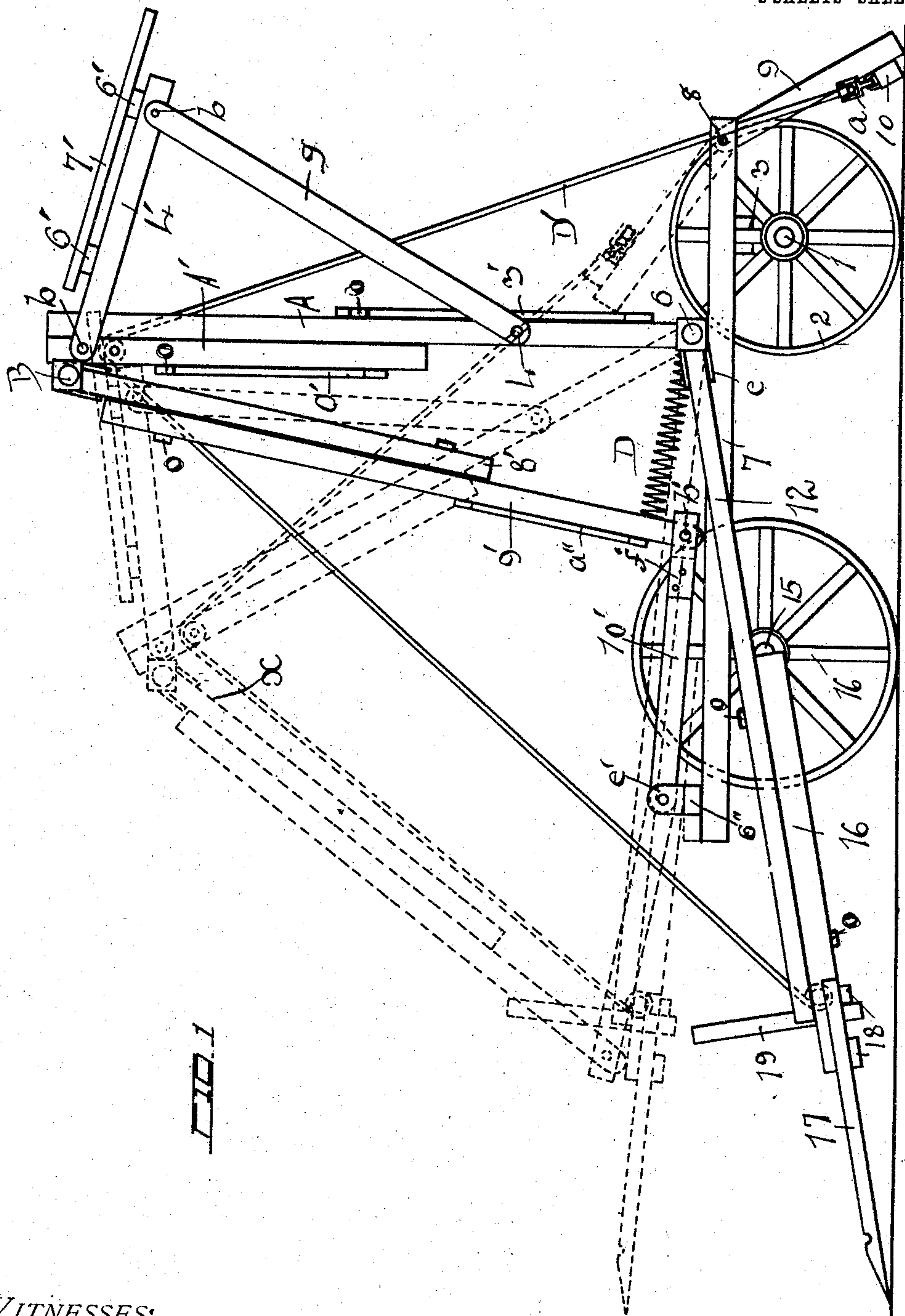
No. 780,514.

PATENTED JAN. 24, 1905.

H. J. LUDERS.
HAY STACKER.

APPLICATION FILED MAR. 29, 1904.

2 SHEETS—SHEET 1.



WITNESSES:

F. G. Larson.

Sara Davis.

INVENTOR:

BY

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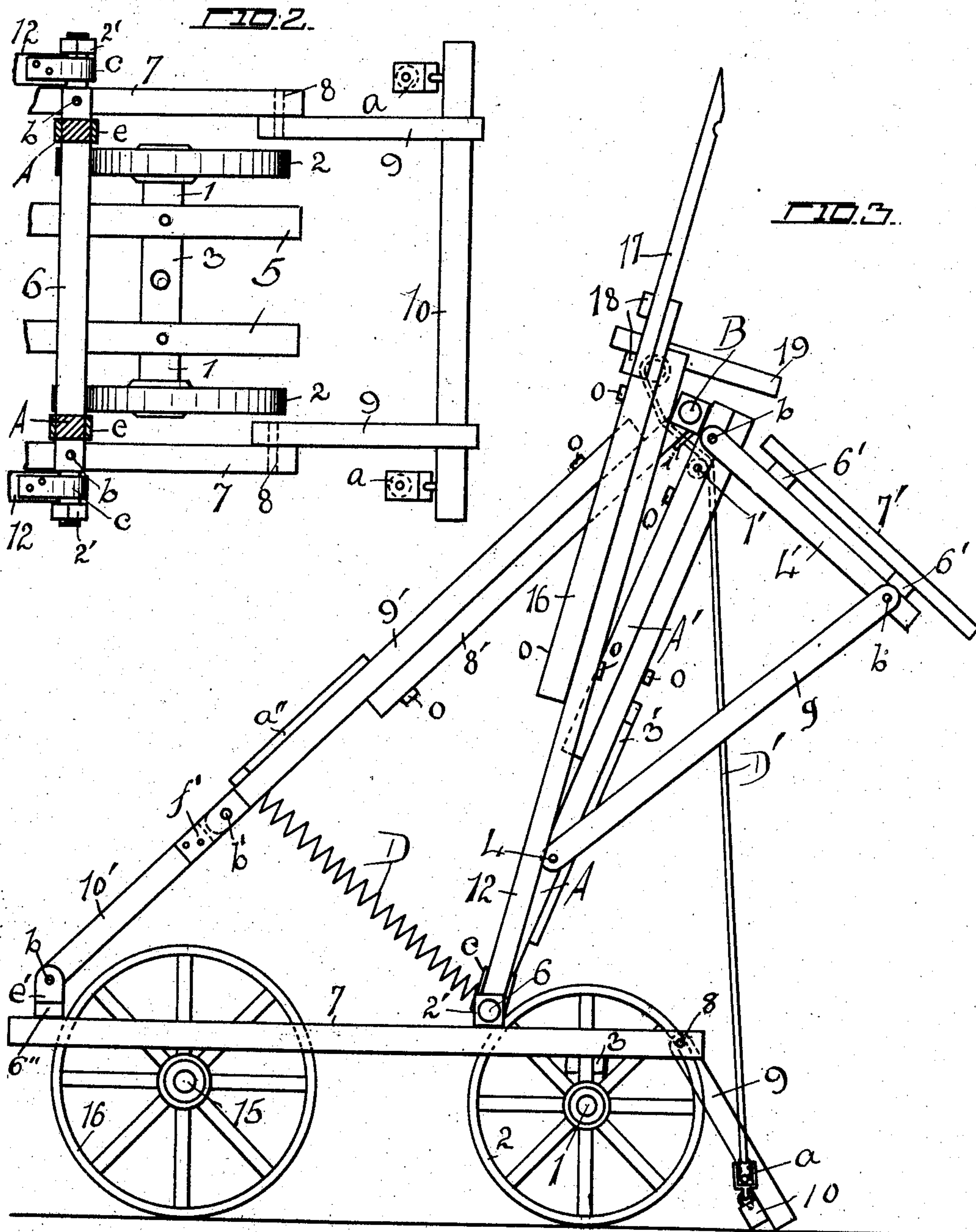
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UNITED STATES PATENT OFFICE.

HANS JORGEN LUDERS, OF WAYNE, NEBRASKA.

HAY-STACKER.

SPECIFICATION forming part of Letters Patent No. 780,514, dated January 24, 1905.

Application filed March 29, 1904. Serial No. 200,647.

To all whom it may concern:

Be it known that I, HANS JORGEN LUDERS, a citizen of the United States of America, residing at Wayne, in the county of Wayne and State of Nebraska, have invented certain useful Improvements in Hay-Stackers; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to a new and useful improvement in hay-stackers.

The object of my invention is to provide a stacker having an adjustable dumping-platform and an adjustable elevating-fork and embodies certain other useful combinations more fully described hereinafter.

In the accompanying drawings I have shown in Figure 1 a side elevation of stacker embodying my invention, disclosing in dotted lines a position of the dumping-platform and elevating-fork in one position. Fig. 2 shows a broken central view of the forward portion of the frame, while Fig. 3 discloses the side elevation showing the fork after dumping the load.

In carrying out the aim of my invention I provide a forward axle 1 with suitable supporting-wheels 2, which axle is secured to bolster 3, and secured to this bolster 3, as shown in Fig. 2, are the frame-bars 5 5, provided with the transverse bar 6, supporting the side frame-bars 7, as shown in Fig. 2. The rear ends of the frame-bars 5 and 7 are connected by means of the transverse bar 6'', as shown in Fig. 1. Pivotally secured to the side frame-bars 7, as shown in Fig. 2, by means of the pins 8, are the bars 9, secured by the transverse bar 10, which bar 10 is provided with two sheaves *a*, as also shown in Fig. 3. Secured to the ends, which are rounded, of the transverse bar 6 and pivotally work thereon are the straps *c*, which pivotally support the fork-standards 12, which are secured adjustably to the outer fork-standards 16 by means of suitable standards *o*. These outer fork-standards, being secured by the

transverse bars 18, support the fork-tines 17 and also the stop-bars 19, as shown in Figs. 1 and 3. Movably secured by means of the straps *c* to the transverse bar 6 are the platform-standards A, which are adjustably secured to the platform stub-standards A', as shown in Fig. 3, from which standards A' extend the sills 4', supporting the brace-bars *g*, secured by means of the pins *b* and 4, the sills 4' supporting the bars 6', to which the dumping-platform 7' is secured. Secured to the rear transverse frame member 6'', as shown in Figs. 1 and 3, are the ears *e*', which are pivotally secured to the link members 10', provided with the bars *f*', supporting the pin *b*' to receive the link member 9' to form a set of toggle-bars, to the upper members 9' of which are secured, by means of the bolts *o*, the frame members 8', which frame members 8' in turn are movably secured to the transverse bar B, fixed to the platform-standards A', as shown. Extending from the upper link members 9' are the coil-springs D, secured below to the transverse bar 6 at any suitable point. Mounted upon a pin 1', as shown in Fig. 3, is a sheave over which passes a rope or cable D', secured to the fork and passing through an eyelet *i* and downward over the sheaves *a*, as shown in Fig. 3.

The operation of my device is as follows: The dumping-platform is arranged so that the platform-standards A are preferably vertically positioned, in which condition the toggle-bars are at an angle to one another, as shown in Fig. 1, the members 9' resting upon the frame-bars 7, the spring D normally exerting a pressure to hold the platform-standards A in a vertical position. The fork 17 would then be permitted to drop upon the ground and would be filled with hay, and then in drawing upon the cable D' this fork would be carried up to deposit its load upon the dumping-platform 7', which dumping-platform tilts backward, this adjustment being brought about in allowing the standards A and A' to lean backward, as disclosed in Fig. 3, which results in the toggle-bars 9' and 10' being brought in alignment, in which position the toggle-bars 9' and 10' are held against a

slight tension of the spring D. In this position the platform 7' is held at a considerable incline, as shown in Fig. 3, so that the hay will be deposited upon the stack.

5 The rear members 9, as shown in Fig. 1, prevent the frame from tilting with a heavy load.

Fig. 1 discloses the fork as about to receive a load, while the dotted lines *x* discloses the fork in an intermediate position, while the fork in Fig. 3 is disclosed in its dumping position.

When an exceptionally-high stack is made, the extended secured members A and A' are slid outward to increase their length, as are the members 12 and 16 and A' and 9', the bar *g* also being shifted so that the dump-platform may be given a proper angle.

When the hay-stacker is carried from place to place and is not in working operation, the toggle-bars 10' and 9' may be thrown outward toward the rear end of the wagon, as shown in dotted lines in Fig. 1, so that the weight of the platform and standard is brought more fully over the center of the vehicle. In this condition the spring D is distended, and this spring D is used in drawing the toggle-

bars inward, as shown in Fig. 1, when the frame is placed in working condition.

Having thus described my said invention, 30 what I claim as new, and desire to secure by United States Letters Patent, is—

In a stacker, the combination with a portable supporting-frame, of adjustable fork-standards movably secured to said platform, 35 a fork secured to the outer end of said standards, adjustable platform-standards secured to said portable supporting-frame, a dumping-platform secured to the upper ends of said last-mentioned standards, toggle-bars secured 40 at one end to said supporting-frame and at the remaining end to the upper end of said platform-standards, and a strand extending from said fork and passing over a suitable sheave secured to one of said platform-stand- 45 ards all arranged as and for the purpose set forth.

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

HANS JORGEN LUDERS.

Witnesses:

CLAUS KAY,
HENRY LEY.