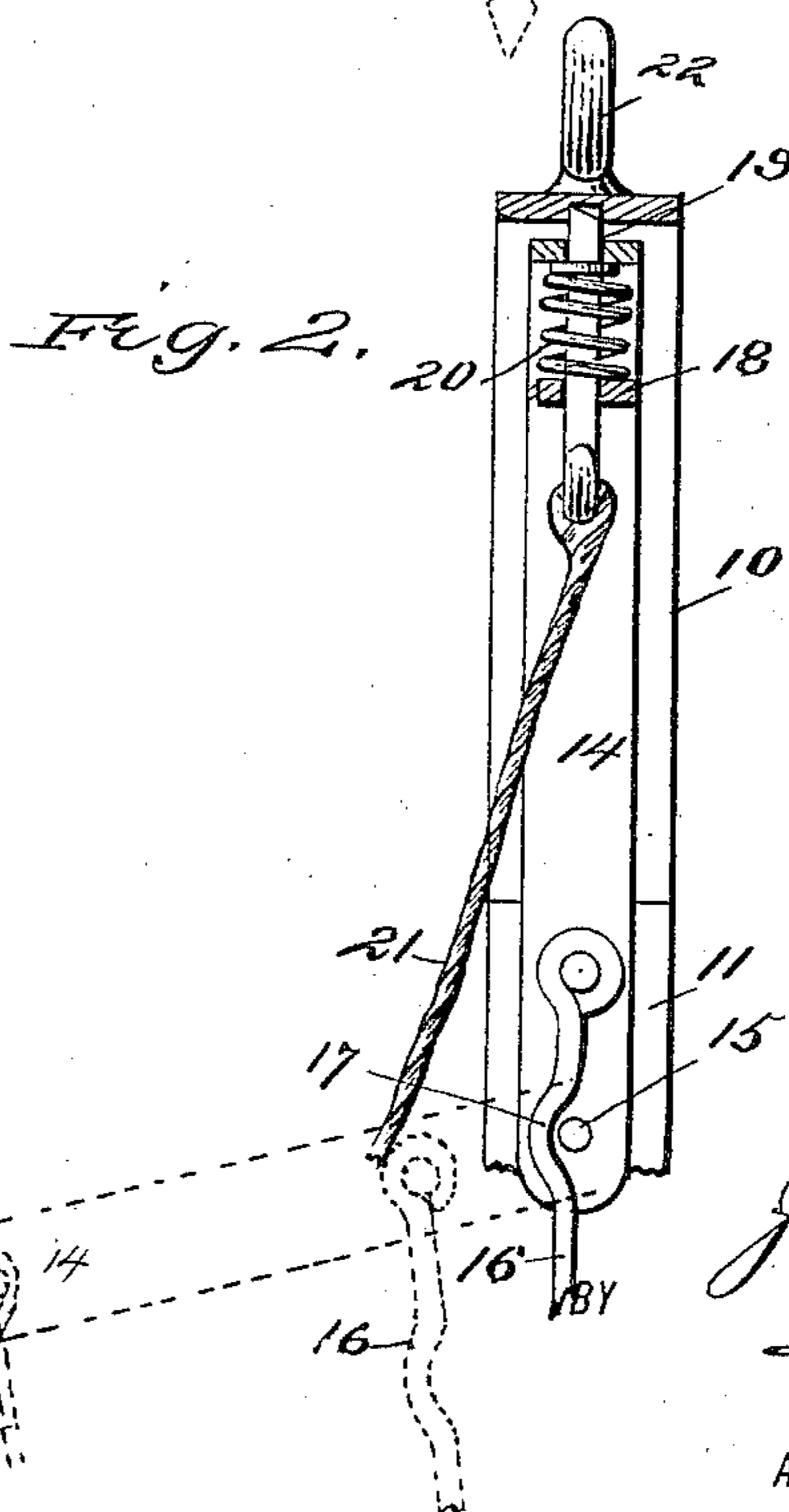
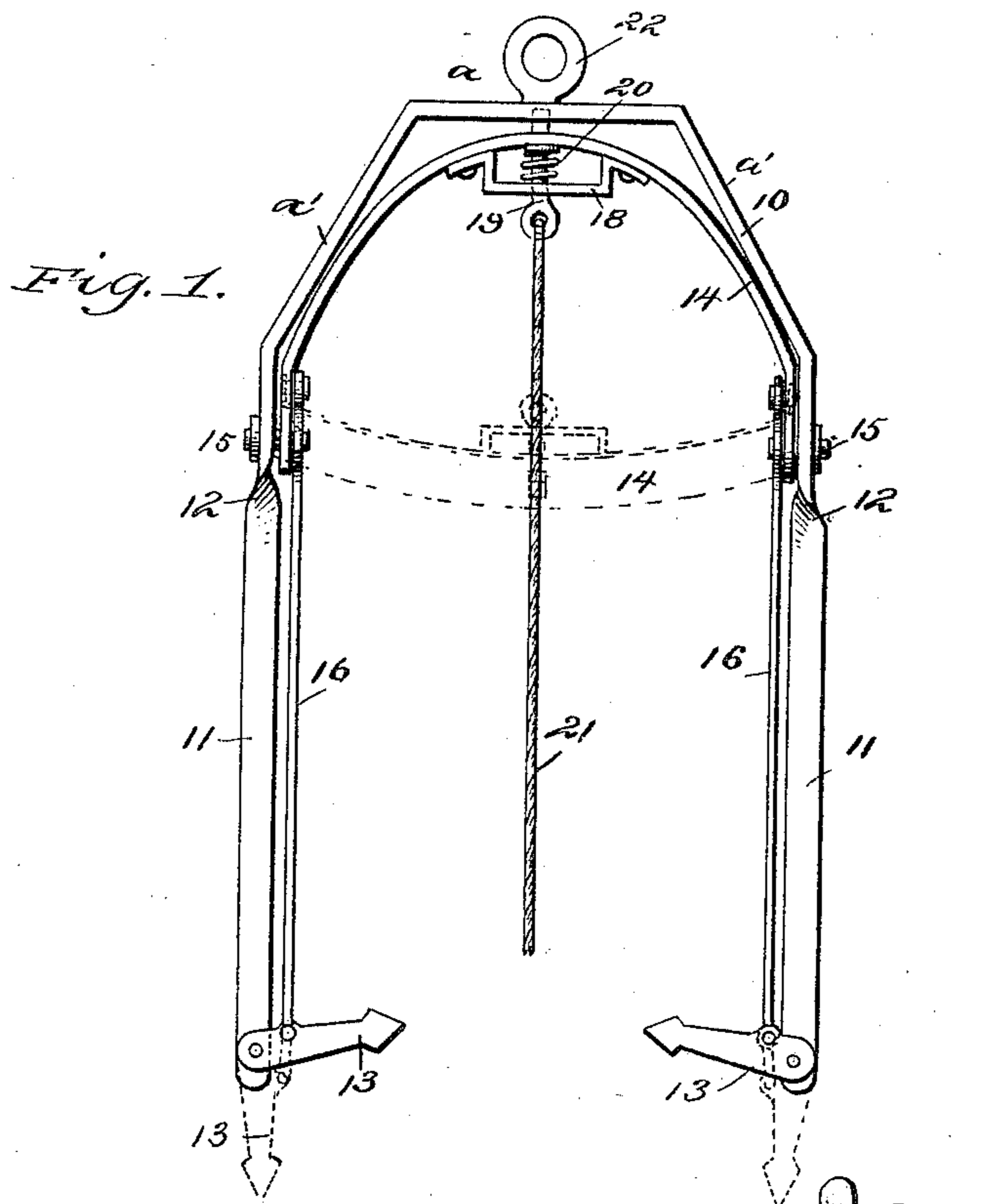


(No Model.)

J. S. GOCHNAUER.
HAY FORK.

No. 411,220.

Patented Sept. 17, 1889.



WITNESSES:
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UNITED STATES PATENT OFFICE.

JOSEPH SEIFERT GOCHNAUER, OF EAST BERLIN, PENNSYLVANIA.

HAY-FORK.

SPECIFICATION forming part of Letters Patent No. 411,220, dated September 17, 1889.

Application filed April 9, 1889. Serial No. 306,531. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH SEIFERT GOCHNAUER, of East Berlin, in the county of Adams and State of Pennsylvania, have invented a new and useful Improvement in Hay-Forks, of which the following is a full, clear, and exact description.

The object of the present invention is to so improve the construction of the hay-fork illustrated and described in the Letters Patent granted to myself May 13, 1884, No. 298,574, that the said construction will be materially simplified, and wherein the fork will be capable of more convenient and positive manipulation.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter more fully described, and pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters and figures of reference indicate corresponding parts in both the views.

Figure 1 is a side elevation of the fork, illustrating the carrying position in positive lines and the delivery position in dotted lines; and Fig. 2 is a partial central vertical section through Fig. 1.

The upper portion of the frame preferably consists of a single bar 10, bent to polygonal shape, whereby a horizontal top *a* is obtained, and downwardly and outwardly inclined sides *a'*. To the lower extremity of the inclined sides *a'* the side bars 11 of the frame are securely attached, which side bars, if found desirable in practice, may constitute an integral portion of the upper section of the frame. The said side bars, below their point of connection with the upper section of the frame, are twisted, as shown at 12, whereby the lower portions of the side bars are at a right angle to the said upper frame section, as best illustrated in Fig. 1.

Upon the extremity or lower end of each of the side bars 11 a tine 13 is pivoted, adapted to be carried upward horizontally, as illustrated in positive lines in Fig. 1, or perpendicularly downward, as shown in dotted lines in the same figure.

In the upper end of the side bars 11, above the twist 12, the lower end of a bow or yoke 14 is pivoted by suitable pintles 15, passing through the said bow or yoke and through the said side bars, the bow or yoke being located within the frame. Above each pivotal point of the yoke to the frame of the fork one end of a rod 16 is pivotally attached, the other end of the rods being secured one to each tine 13, at the upper edge, near the inner end. In order that the connecting-rods 16 may clear the pintles 15, the said rods are slightly curved where they pass the said pintle, as illustrated at 17 in Fig. 2.

A bracket 18 is rigidly secured to the under surface of the bow or yoke 14 at the center, and through the said bracket and bow or yoke a vertical bolt 19 is passed, having attached thereto a spring 20, below the yoke and bearing upon the upper face of the bracket.

The bolt 19 is adapted to enter an aperture produced in the horizontal member of the upper frame-section, the said bolt 19 being manipulated through the medium of a rope or chain 21, secured to the lower end of the bolt and passing downward to the operator. The upper frame-section 10 is provided with an eye 22, adapted to receive a hook or any suitable form of carrier.

In the operation of the device the rope 21 is pulled downward, whereupon the bolt 19 is released from engagement with the upper frame-section and the bow or yoke 14 is drawn downward to an essentially horizontal position, which is illustrated in dotted lines in Figs. 1 and 2. When the bow or yoke is thus drawn downward, the connecting-rod 16, acting upon the tines 13, carry them down to a vertical position, as illustrated in dotted lines in Fig. 1. The fork is now introduced into the hay and the yoke or bow carried upward to its normal position within the frame, whereby the tines are elevated to a horizontal position within the frame, as illustrated in positive lines in Fig. 1, effectually retaining a suitable quantity of hay. The fork is then carried, in any approved manner, to the place where the hay is to be delivered, when the rope 21 is again pulled downward and the

tines carried to the vertical position above described, permitting the hay to readily drop from the fork.

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

The combination, with a skeleton frame provided with vertical side bars and a tine pivoted to the lower end of each of the said side bars, of a yoke or bow pivoted within the
10 frame, above the center, connecting-rods pivoted to the bow, above its pivotal point, and to each of the said tines, a bracket secured

to the under surface of the bow at the center, a spring-actuated bolt held to slide vertically through the said bracket and bow, and capable of engagement with the frame, and a rope
15 attached to the said bolt, leading downward beyond the frame, all combined for operation substantially as herein set forth.

JOSEPH SEIFERT GOCHNAUER.

Witnesses:

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