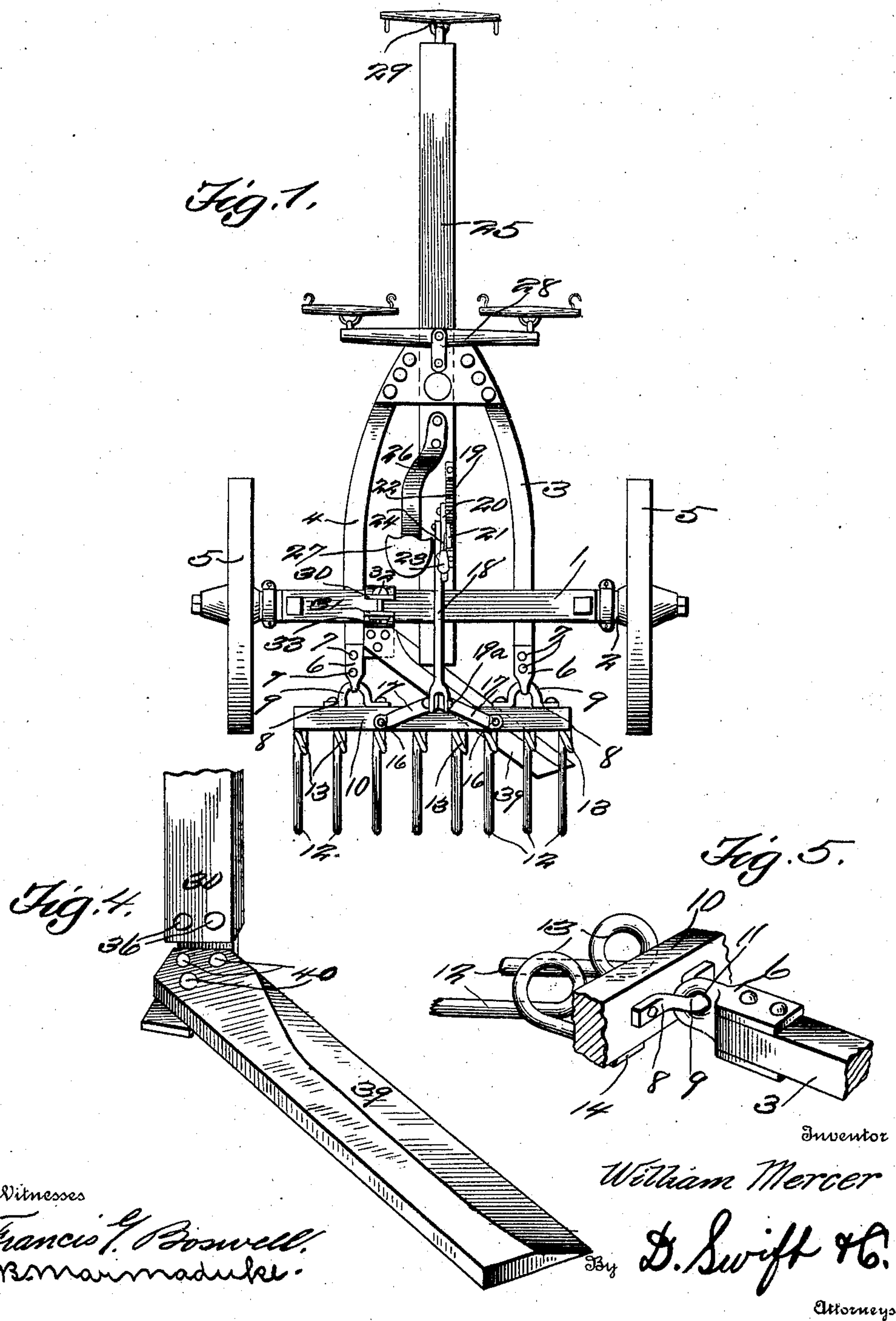


W. MERCER.
 COMBINED RAKE AND STALK CUTTER.
 APPLICATION FILED JULY 8, 1909.

963,455.

Patented July 5, 1910.

3 SHEETS—SHEET 1.



Witnesses
 Francis T. Boswell.
 R. M. Marmaduke.

Inventor
 William Mercer
 D. Swift & Co.
 Attorneys

W. MERCER.
COMBINED RAKE AND STALK CUTTER.
APPLICATION FILED JULY 8, 1909.

963,455.

Patented July 5, 1910.

3 SHEETS—SHEET 2.

Fig. 2.

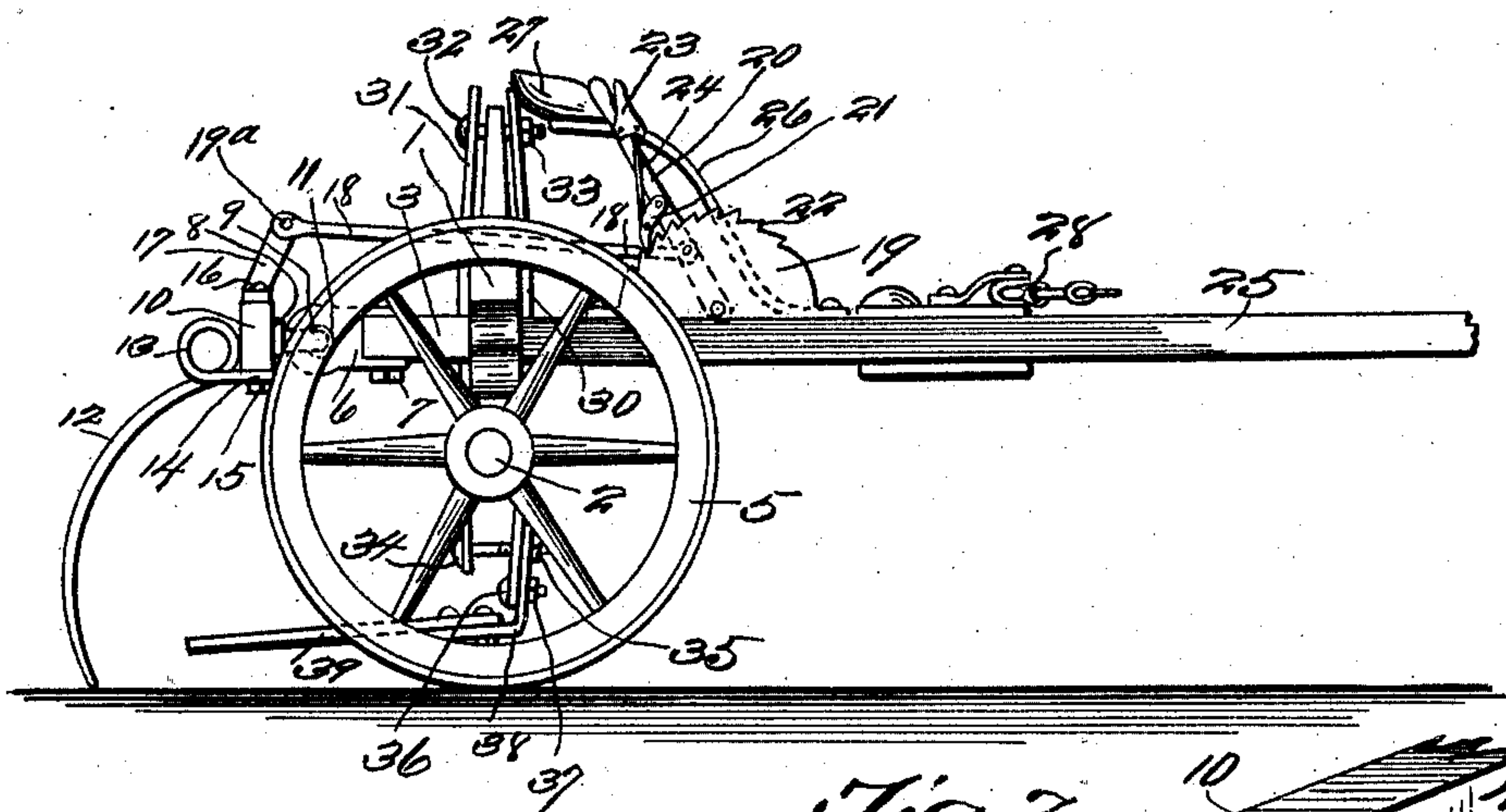


Fig. 7.

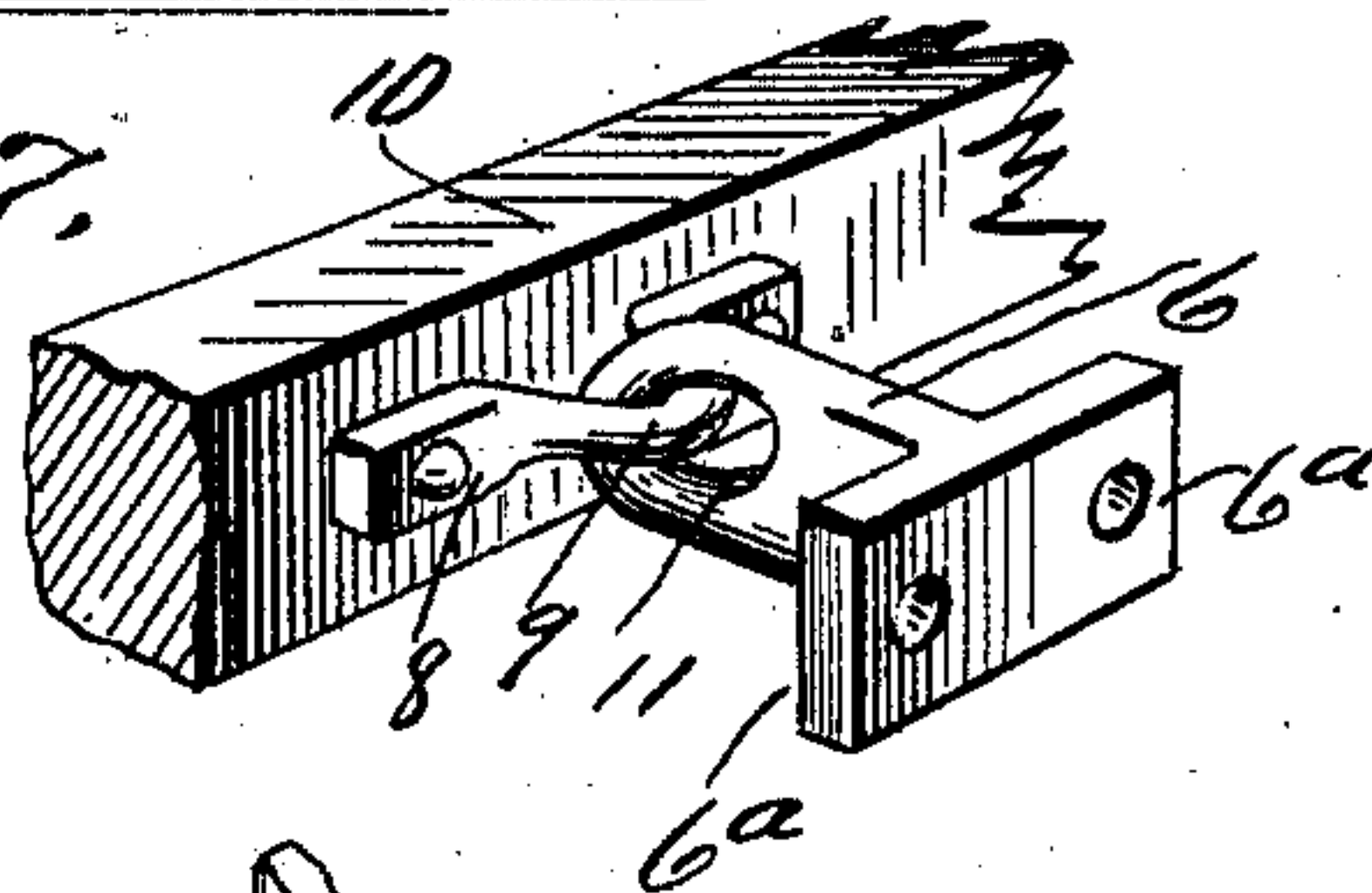
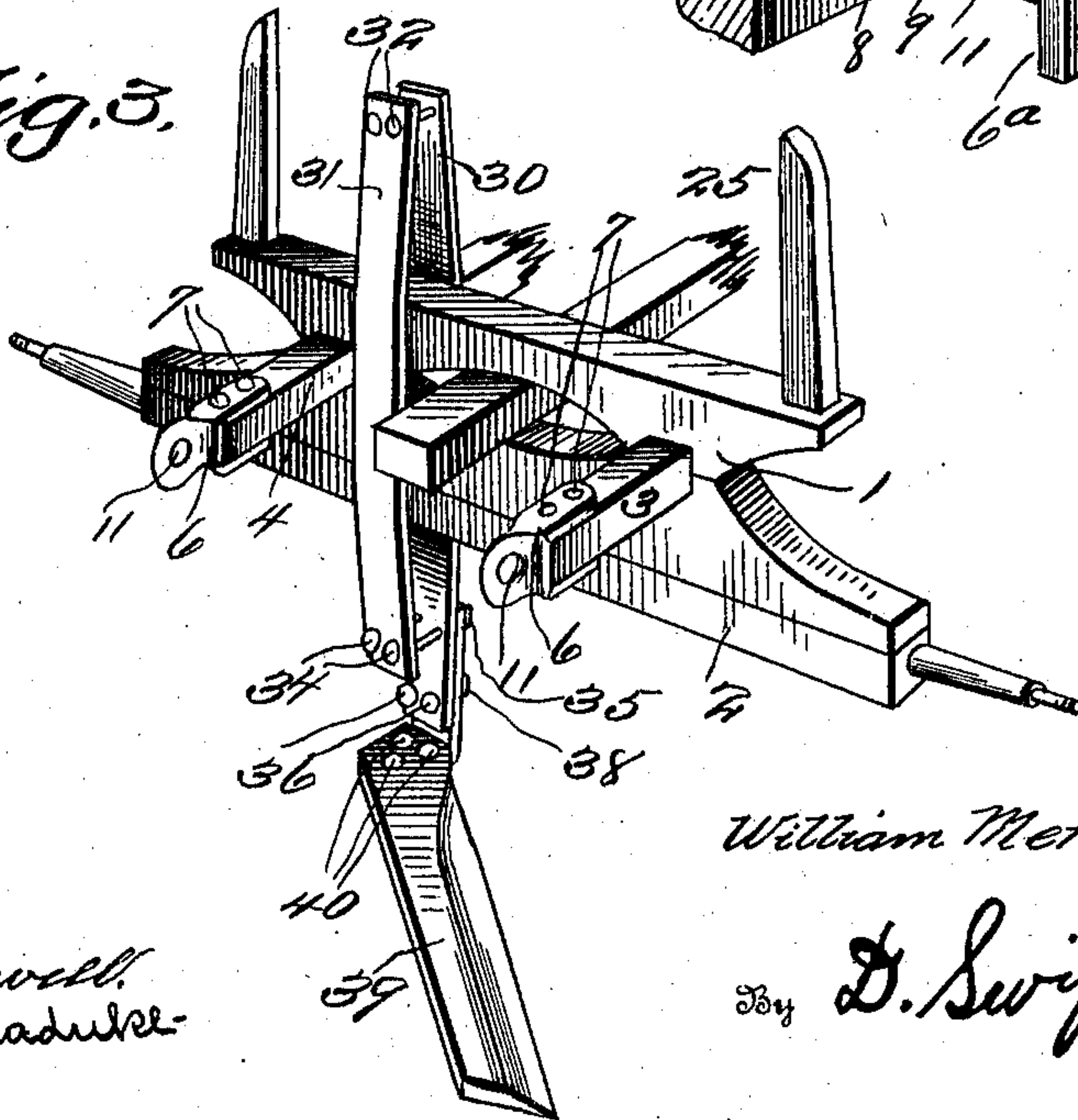


Fig. 3.



Inventor

William Mercer

By

D. Swift & Co.

Attorneys

Witnesses

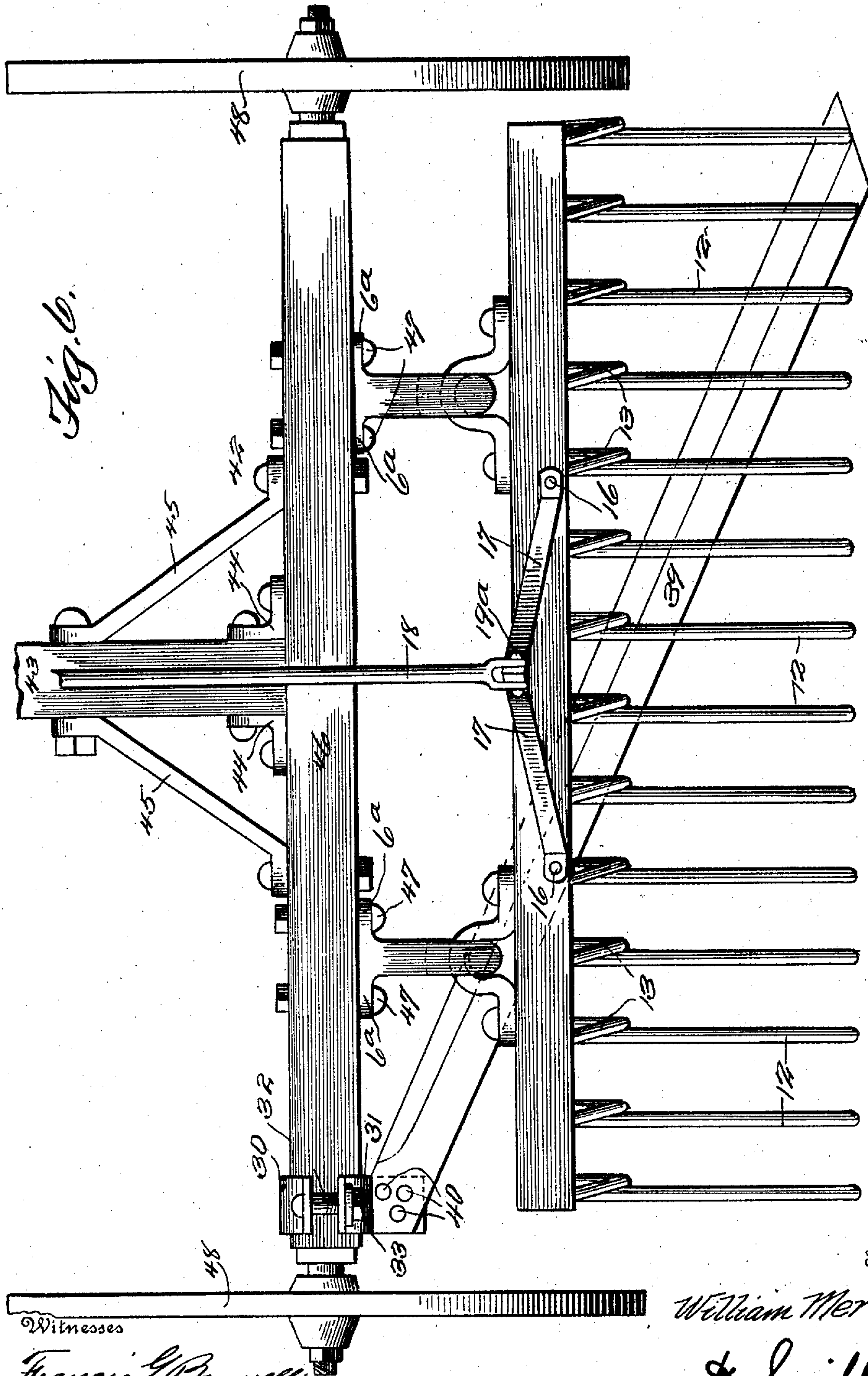
Francis G. Boswell.
J. B. Marmaduke.

W. MERCER.
COMBINED RAKE AND STALK CUTTER.
APPLICATION FILED JULY 8, 1909.

963,455.

Patented July 5, 1910.

3 SHEETS—SHEET 3.



Witnesses

Francis J. Boswell
Dr. M. M. Maduke

Inventor

William Mercer

By

D. Swift & Co.

Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM MERCER, OF GILLIAM, LOUISIANA.

COMBINED RAKE AND STALK-CUTTER.

963,455.

Specification of Letters Patent.

Patented July 5, 1910.

Application filed July 8, 1909. Serial No. 506,567.

To all whom it may concern:

Be it known that I, WILLIAM MERCER, a citizen of the United States, residing at Gilliam, in the parish of Caddo and State of Louisiana, have invented a new and useful Combined Rake and Stalk-Cutter; and I do hereby declare the following to be 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.

This invention pertains to cotton stalk harvesters, and the primary object thereof is to provide a simple efficient device of this design, whereby cotton stalks may be easily and readily severed, and thereafter raked in piles.

The invention aims as a further object to provide a severing device for the stalks, which may be easily and quickly applied to the rear axle of an ordinary wagon. When the severing device is applied in this manner, the body of the wagon, the front axle and the front wheel are removed, and to the coupling pole the usual equalizer and neck yoke are applied.

A further object of the invention is to provide means, whereby the rake, which is pivotally attached to the rear portion of the frame of the running gear of the wagon, may be raised and lowered.

A further object is the provision of a novel plan for securing the severing means to the rear axle of the running gear, comprising a pair of members which are adapted to straddle the axle, and held in such position by means of suitable bolts or other fastening means.

This invention comprises further objects and combinations of elements, which will be hereinafter more fully described, shown in the accompanying drawings, and the novel features thereof will be pointed out by the appended claim. The features, elements and the arrangement thereof, which constitute the above entitled invention, may be changed or varied, that is to say, in an actual reduction to practice with the understanding that the changes and variations accruing from said reduction to practice are limited to the scope of the appended claim.

To obtain a full and correct understanding of the details of construction, combinations of features, elements and advantages, reference is to be had to the hereinafter set

forth description and the accompanying drawings in connection therewith, wherein,

Figure 1 is a plan view of a running gear of an ordinary wagon, showing the body thereof, the front wheels and their axle removed, showing the rake and the severing means applied to the rear axle of the running gear. Fig. 2 is a side elevation of Fig. 1. Fig. 3 is a perspective view of the rear axle, showing the severing means clamped thereto. Fig. 4 is an enlarged detail perspective view of a portion of the severing means. Fig. 5 is a perspective view showing the connections between the rake and the hounds of the rear axle. Fig. 6 is a plan view of a rake frame, showing the severing means applied thereto. Fig. 7 is a perspective view showing the connection between the pivotally mounted rake and the axle of the rake frame, as shown in Fig. 6.

In regard to the drawings 1 designates the bolster of the rear axle 2 of the running gear, as shown clearly in Figs. 1 and 2.

3 and 4 designate the rear hounds of the running gear, while 5 designates the wheels of the apparatus. Attached to the rear extremities of the hounds are the members 6, which are secured in place by suitable bolts 7, as shown. 8 designates plates, which are provided with central arched portions 9. These plates are secured by several bolts to the bar 10 of the rake. To fasten the plates 8 to the bar, they must first be inserted through the apertures 11 of the members 6.

Carried by the bar 10 are a plurality of members 12 forming suitable rake teeth. These members 12 are provided with coil portions 13, so as to provide resiliency for the teeth. The ends 14 of said members 12 are secured by means of bolts 15 to the said bar 10, as shown clearly in Fig. 2.

Secured by bolts 16 are two members 17, which are angularly arranged with relation to the bar 10, their upper ends being brought together, as clearly shown, and to them the connecting rod 18 is pivotally connected by means of the bolt 19.

Mounted upon the coupling pole of the running gear is a segment rack 19, to which a lever 20 is pivoted, to which lever the connecting rod 18 is pivotally connected, as will be clearly seen in Fig. 2. The lever 20 is provided with a pawl 21, which is designed to cooperate with the teeth 22 of the segment 19, that is to say, when it is desired

to hold the rake teeth in a raised position. To disengage the pawl from the teeth, a hand grip 23 is carried by and pivoted to the lever 20, adjacent the handle portion of the lever. Said hand grip and the pawl have pivoted between them a rod 24. By the manipulation of the hand grip the pawl may be easily and quickly disengaged from the teeth. Also carried by the coupling pole 25 is a spring member 26, to the upper and rear portions of which the usual form of seat 27 is secured. The usual form of equalizer and neck yoke 28 and 29 are carried by the coupling pole as will be seen clearly in Figs. 1 and 2.

30 and 31 designate clamping members, which are disposed, one upon each side of the axle and bolster of the running gear, and are secured in such position by means of the bolts and nuts 32 and 33, and 34 and 35, as shown clearly in Figs. 1, 2 and 3 of the drawings. Secured to the member 30, which is longer than member 31, by the bolts and nuts 34 and 35, and by the additional bolts 36 and nuts 37 is an angle member 38, to the lower angle portion of which the knife 39 is securely fixed, there being several bolts 40 for rigidly and securely holding the knife in the proper position.

The knife in Fig. 1 is disposed approximately upon a forty-five degree angle, that is to say with relation to the axle of the running gear, in order that the knife may have a shearing action upon the stalks. In the form shown in Fig. 6, the angle of the knife is somewhat varied. By drawing the apparatus as shown in Fig. 1 through a cotton field, the knife will easily and quickly sever the stalks, while the rake will readily rake them into piles. To deposit the stalks into piles, it is necessary to swing the rake upon its pivot, through the manipulation of the lever 20.

In Fig. 6 of the drawings, the same form

of rake as shown in Figs. 1 and 2 is employed, with the exception that it is pivoted to the usual rake carrying frame 42, having the usual form of tongue 43. This tongue is connected to the axle of the rake carrying frame by the angle plates 44, and is braced rigidly in position by the members 45, as shown clearly. The rake is pivoted to the rake carrying frame, in the same manner as shown in Figs. 1 and 2, but with the exception that the members 6 are somewhat differently formed, their lateral portions being secured to the axle 46 of the rake carrying frame, by means of the bolts 47. The axle 46 is provided with the usual form of wheels 48.

As will be clearly seen the knife 39 is carried by and secured to the axle 46 by means of the same clamping members 30 and 31.

The rake in Fig. 6 is identical with that shown in Fig. 2, the parts and elements thereof are designated by corresponding reference characters.

Having thus fully described the invention, what is claimed as new and useful is:—

In a cotton stalk harvester, a wagon frame, a rake mechanism carried thereby, a pair of parallel members, one of which is longer than the other removably clamped to the rear axle of the wagon frame, a right angular member secured to the longer member, and a stalk cutting knife bolted to the right angular member with its cutting edge extending at an angle of nearly 45 degrees to the axle of the wagon frame.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM MERCER.

Witnesses:

A. R. CURRY,
HARRY C. WYCHS.