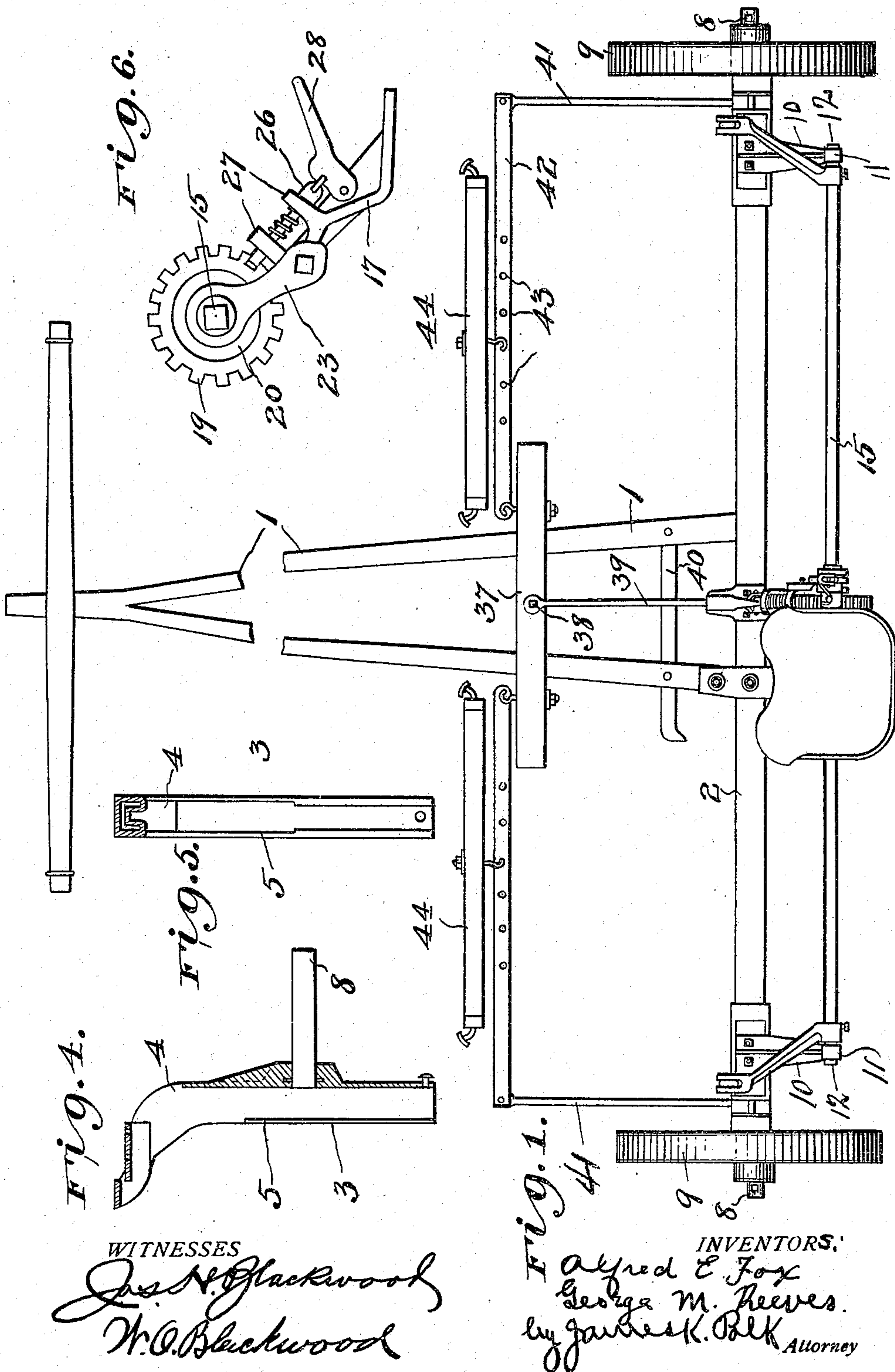


DISK HARROW.

Patented Aug. 10, 1909.

3 SHEETS—SHEET 1.

930,466.



930,466.

A. E. FOX & G. M. REEVES.
DISK HARROW.

APPLICATION FILED SEPT. 29, 1908.

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3 SHEETS—SHEET 2.

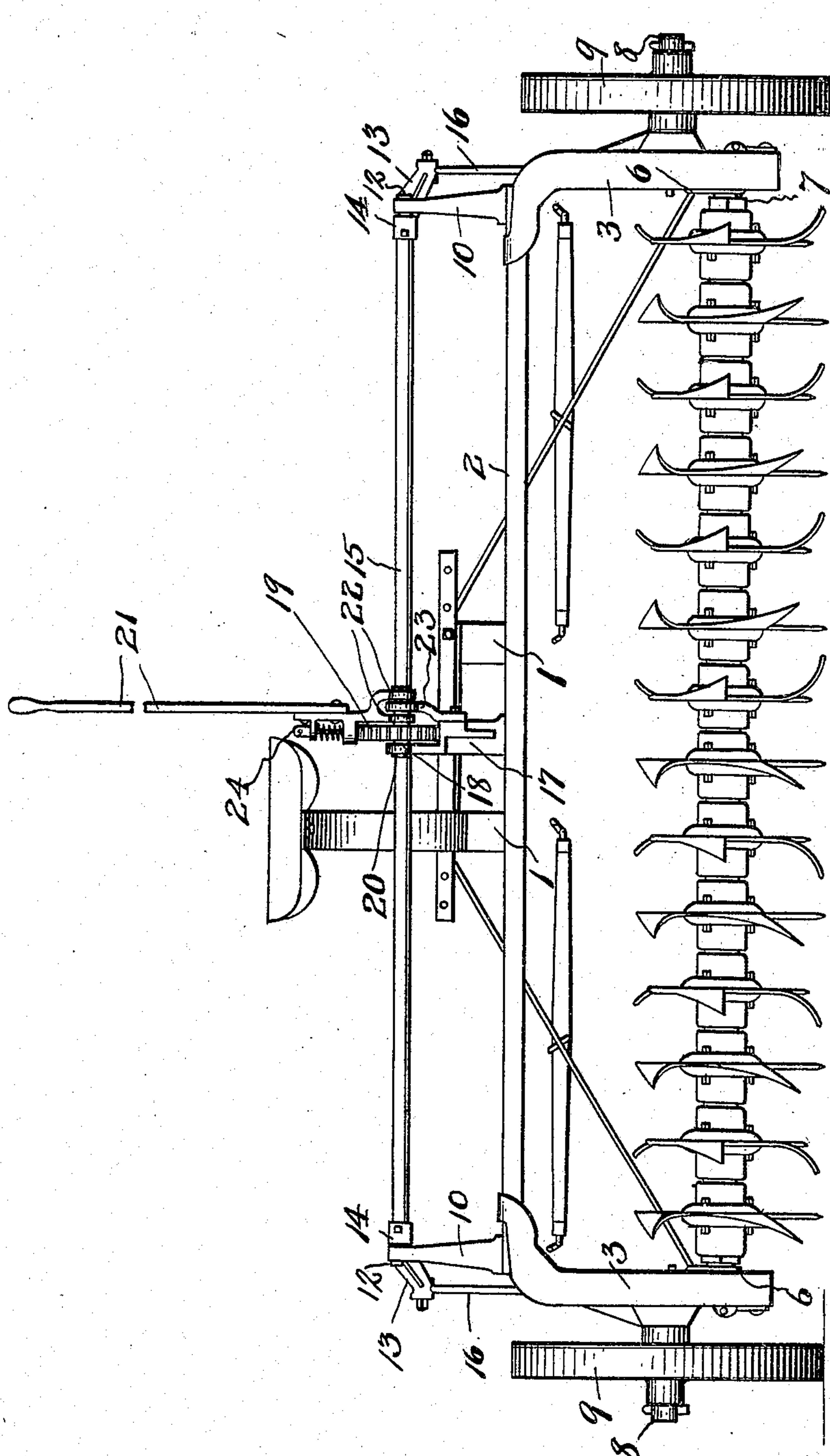


Fig. 2.

WITNESSES

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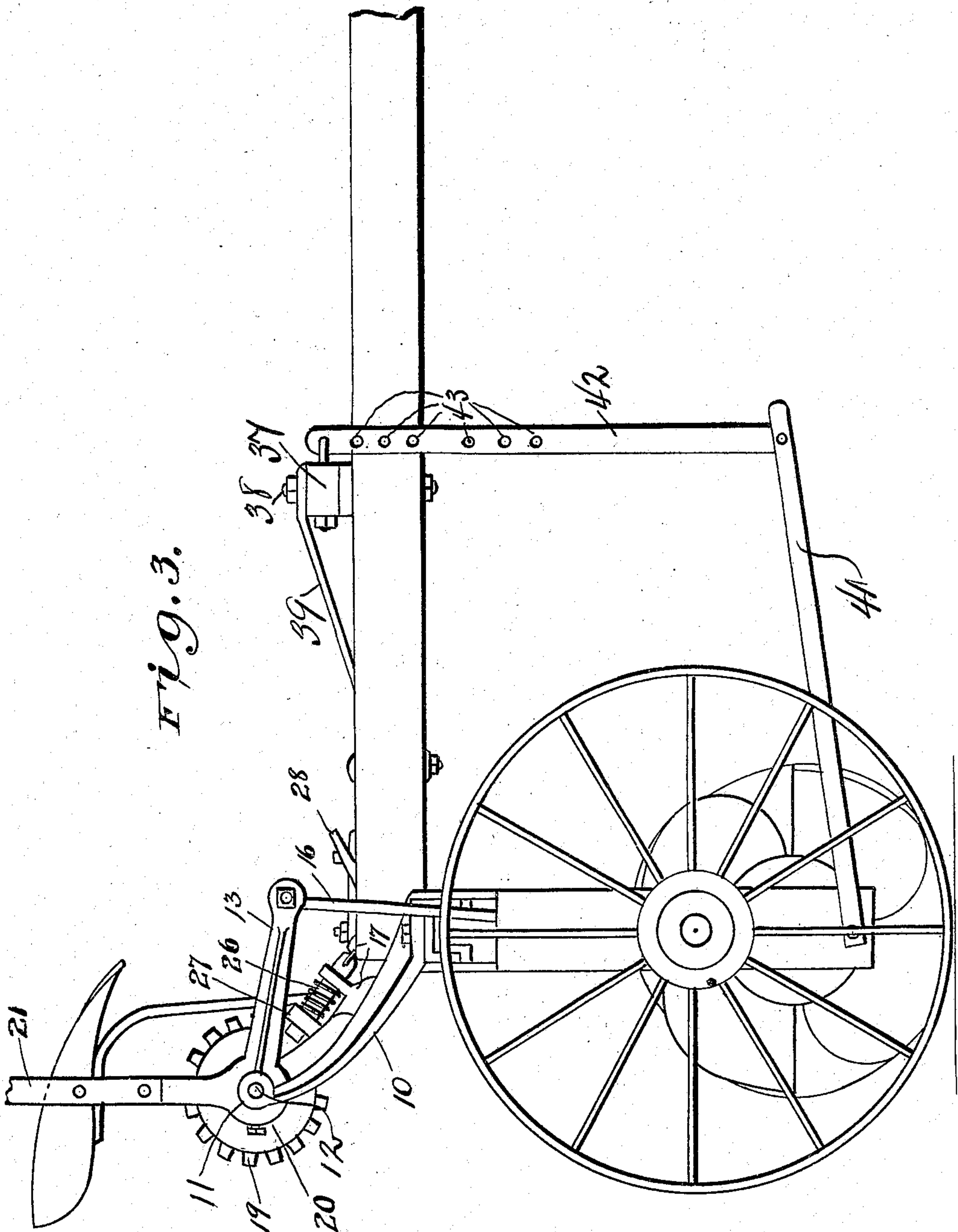
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3 SHEETS—SHEET 3.

930,466.



WITNESSES

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UNITED STATES PATENT OFFICE.

ALFRED E. FOX AND GEORGE M. REEVES, OF REDKEY, INDIANA, ASSIGNORS OF ONE-FOURTH
TO WILLIAM WILLIAMS AND BENJAMIN W. WHITEHAIR, OF REDKEY, INDIANA.

DISK HARROW.

No. 930,466.

Specification of Letters Patent.

Patented Aug. 10, 1909.

Application filed September 29, 1908. Serial No. 455,271.

To all whom it may concern:

Be it known that we, ALFRED E. FOX and GEORGE M. REEVES, citizens of the United States, and residents of Redkey, in the county of Jay and State of Indiana, have invented certain new and useful Improvements in Disk Harrows, of which the following is a full and complete specification.

Our invention relates to disk harrows and has for one of its objects the provision of a novel construction of frame mounted on traction wheels, the axle carrying the disks being adjustably mounted in said frame so that the disks can be adjusted for deep or shallow breaking or raised out of contact with the ground when being transported to and from the field.

Still another object of our invention consists in the provision of a draft attachment consisting of a doubletree, rods secured to the lower ends of the frame aforesaid, links connecting the doubletree and said rods, and the whiffletrees secured to the aforesaid links.

The construction and operation of our improved harrow will be described in detail hereinafter and illustrated in the accompanying drawings, in which—

Figure 1 is a top plan view of our improved frame and draft attachment; Fig. 2, a rear view showing the disks in position; Fig. 3, a side view; Fig. 4, a central vertical sectional view of one of the end pieces of the frame. Fig. 5, an end view of said end piece; and Fig. 6, a detail view of the ratchet wheel and mounting.

In the drawings, similar reference characters indicate corresponding parts in all of the several views.

The draft-pole 1 is V-shaped, as shown in Fig. 1, and has secured to the ends of its two arms an inverted channel beam 2. Secured at each end of the channel-beam 2 is a vertical end post 3, formed with a channeled socket 4 at its upper end to receive said beam 2, each end post being provided with a channeled slide 5 in which is mounted a journal-block 6, to receive the disk-shaft 7, that is rotatably mounted therein. A stud-shaft 8 extends from the outer face of each post 3 and has a traction-wheel 9 journaled thereon.

10 indicates an upright and rearwardly-extending bracket secured at each end of

beam 2 by means of bolts extending through the base of said bracket 10, beam 2 and socket 4. The upper ends of brackets 10 are formed with journals 11, in which are mounted trunnions 12 on arms 13, said arms 13 being provided with sockets 14, in which are secured the ends of shaft 15, made preferably rectangular in cross-section. The free ends of arms 13 and blocks 6 are connected by links 16, so that when the shaft 15 is rocked by the instrumentalities hereinafter described the blocks are raised or lowered in slides 5 to adjust the disk-shaft 7 relative to the ground.

17 indicates a bracket secured to beam 2 between the arms of draft-pole 1, having a perforated ear 18, mounted on shaft 15.

19 indicates a toothed wheel having a hub 20, provided with a rectangular bore to receive shaft 15, one side of the hub 20 being journaled in ear 18, while the other side of the hub is longer and acts as the journal of lever-arm 21, said journaled portion being bifurcated, as shown at 22, to accommodate an ear 23, secured to bracket 17. Lever-arm 21 is provided with a spring-actuated pawl 24, controlled by hand-lever 25, to position the lever on hub 20 as desired by the operator for ease in manipulating the adjusting apparatus, while the wheel 19 is held from rotation when adjusted by means of a spring-actuated pawl 26, slidably mounted in ears 27 on bracket 17 and actuated by foot-lever 28, fulcrumed on said bracket.

It will be understood from this description that the shaft 15 is rocked to raise and lower arms 13 and blocks 6 by means of lever 21, and is held in an adjusted position by means of pawl 26.

The doubletree 37 is secured in its middle by pin 38, engaging draw-bar 39, secured to bracket 17, and plate 40, secured to the arms of draft-pole 1. 41 indicates a rod secured to the lower end of each post 3, and 42 a link connecting the free end of each rod 41 with the adjacent end of doubletree 37. Links 42 are provided with a series of holes 42, in one of which holes is secured the whiffletree 44.

Having thus described our invention, what we claim is—

In a disk-harrow, a horizontal beam, end posts secured to the beam and provided with slides, journal-blocks mounted in said slides,

brackets secured to said beam, arms jour-
naled in said brackets, links connecting said
arms and journal-blocks, a shaft connecting
said arms, a bracket secured intermediate of
5 the ends of the horizontal beam, a toothed
wheel secured to said shaft and journaled in
the last mentioned bracket, a lever fulcrumed
on said wheel and having a spring-actuated
pawl thereon to engage said wheel, and a
10 spring-pawl mounted on the bracket and en-

gaging said wheel, substantially as shown
and described.

In witness whereof, we have hereunto set
our hands in presence of two subscribing
witnesses.

ALFRED E. FOX.
GEORGE M. REEVES.

Witnesses:

ADELMA DRAGOO,
OTA E. WHITTINGHILL.