

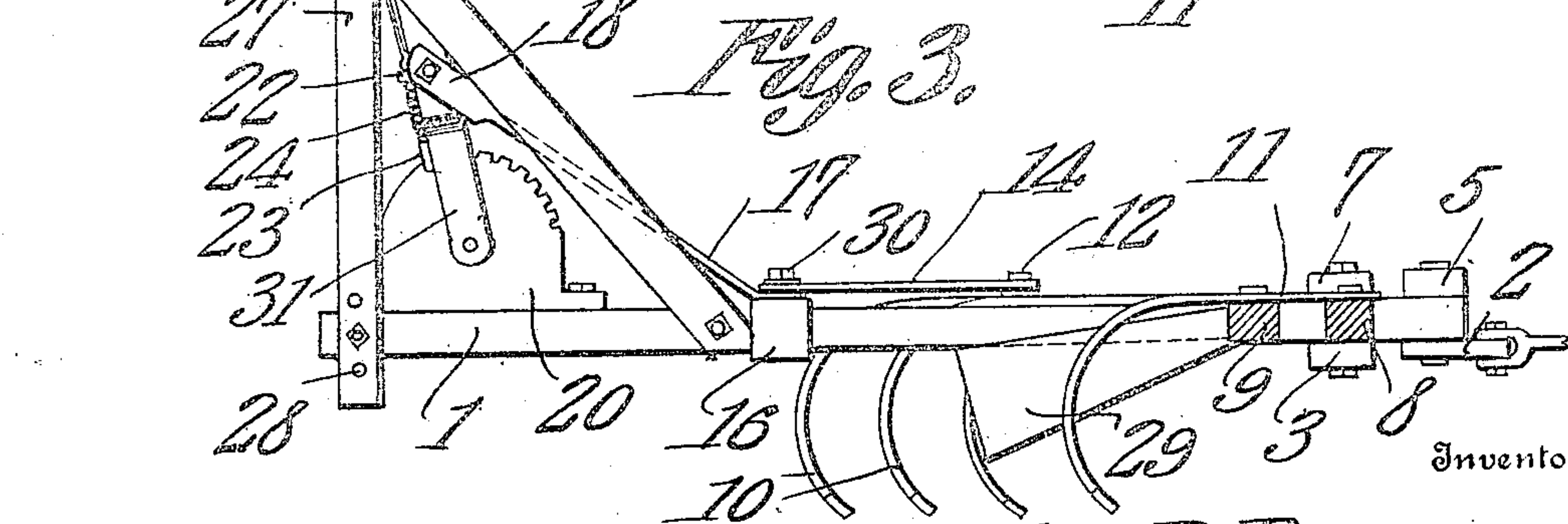
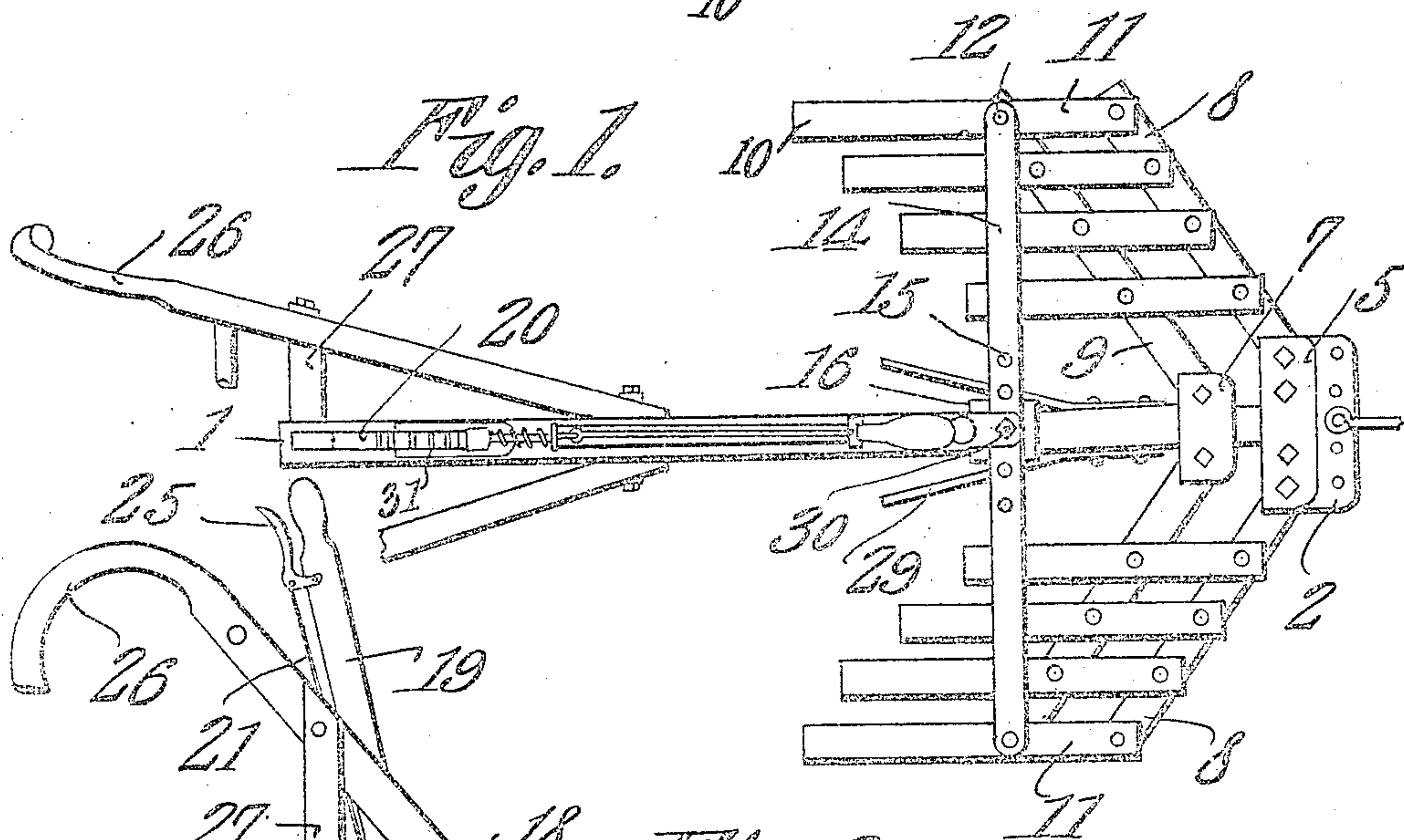
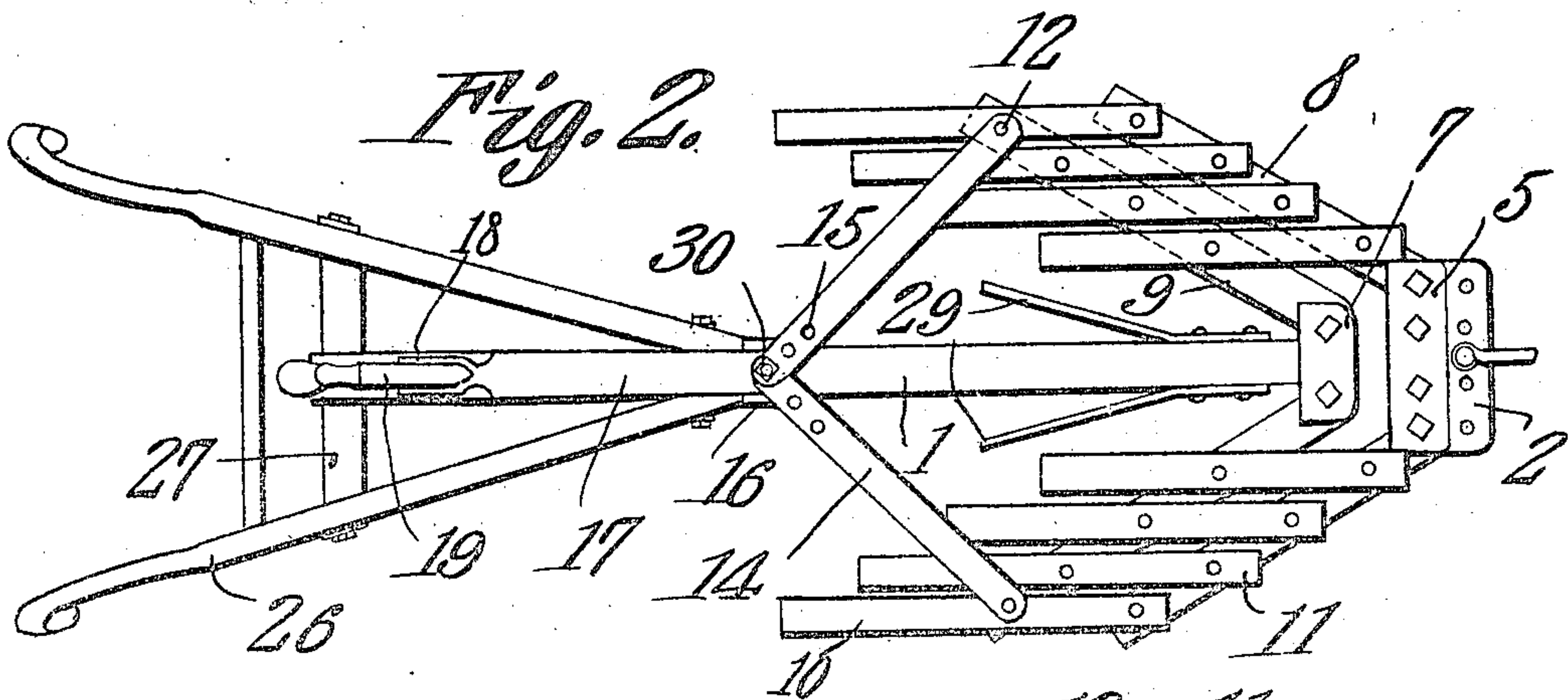
C. B. ROZAR.

HARROW.

APPLICATION FILED AUG. 19, 1909.

960,200.

Patented May 31, 1910.



Inventor

Charles B. Rozar.

By

Chas. B. Rozar.

Attorneys

Witnesses

E. J. Hunt  
Mason B. Lawton



# UNITED STATES PATENT OFFICE.

CHARLES B. ROZAR, OF EMPIRE, GEORGIA.

HARROW.

960,200.

Specification of Letters Patent.

Patented May 31, 1910.

Application filed August 19, 1909. Serial No. 513,618.

*To all whom it may concern:*

Be it known that I, CHARLES B. ROZAR, a citizen of the United States, residing at Empire, in the county of Dodge and State of Georgia, have invented a new and useful Harrow, of which the following is a specification.

The objects of the invention are, generally, the provision in a merchantable form, of a device of the above mentioned class, which will be inexpensive to manufacture, facile in operation, and devoid of complicated parts; specifically, the provision of novel means, whereby the implement may be adjusted to sweep zones of different widths; the provision of means whereby the space between the teeth of the harrow may be adjusted; and the provision of means whereby the maximum and minimum positions of the movable parts of the harrow may be determined as the harrow is expanded or contracted, respectively; other and further objects being made manifest hereinafter, as the description of the invention progresses.

The invention consists in the novel construction and arrangement of parts hereinafter described, delineated in the accompanying drawings, and particularly pointed out in that portion of this instrument wherein patentable novelty is claimed for certain distinctive features of the device, it being understood, that, within the scope of what hereinafter thus is claimed, divers changes in the form, proportions, size, and minor details of the structure may be made, without departing from the spirit or sacrificing any of the advantages of the invention.

Similar numerals of reference are employed to denote corresponding parts throughout the several figures of the drawings.

In the accompanying drawings:—Figure 1 is a top plan, the arms being extended; Fig. 2 is a top plan, the arms being retracted; Fig. 3 is a side elevation, parts being broken away.

The invention includes primarily, a plow beam 1, on the under side of which, at its forward end, is mounted a transversely disposed clevis 2. Mounted upon the lower face of the beam 1, to the rear of the clevis 2 is a transverse head 3. Located upon the upper face of the beam 1 in vertical alinement with the clevis 2, is a transverse head 5 securely assembled by means of bolts or the like, with the plow beam and with the

clevis 2. Mounted upon the upper face of the beam 1 to the rear of the head 5 and in alinement with the head 3, vertically, is a transverse head 7, secured in any suitable manner to the plow beam and to the head 3, preferably by means of bolts passing through the elements last above mentioned. Arms 8 extending laterally from the beam 1, upon each side thereof, are provided, the adjacent ends of these arms 8 being pivotally mounted between the head 5 and the clevis 2. Arms 9 disposed parallel to the arms 8, are provided, these last named arms being pivotally mounted at their adjacent ends, between the heads 3 and 7.

The invention includes a plurality of teeth 10 disposed to the rear of the arms 9 and provided with extensions 11 disposed upon the upper faces of the arms 8 and 9 and pivotally connected therewith.

Slidably mounted upon the beam 1, to the rear of the arms, and arranged to inclose the beam 1, is a rider 16. A connecting element, a bolt or the like, is carried by the rider 16 and arranged to upstand therefrom. This connecting element which is denoted by the numeral 30, is adapted to register in apertures 15 in the adjacent, overlapped ends of braces 14, the remote ends of which are pivotally mounted upon one of the members whereby the extensions 11 of the teeth 10 are assembled with the arms. In the present instance, the pivot bolts 12 whereby the outer of the teeth 10 are assembled with the rear arms 9, have been selected to serve as mountings for the remote ends of the braces 14, in order that the thrust whereby the arms 8 and 9 are operated, may be applied adjacent the ends of said arms, in order that the longest possible leverage for operating the arms 8 and 9 may be obtained.

Mounted at its forward end upon the bolt 30 is a rearwardly extending bar 17, spaced vertically at its rear end from the beam 1, and there bifurcated to form arms 18, disposed upon each side of a lever 19 and pivotally connected therewith, the lever 19 in its turn, being bifurcated at its lower extremity to form arms 31, disposed upon opposite sides of a segment 20 and pivotally connected therewith, the segment 20 being rigidly mounted upon the plow beam 1 adjacent the rear end thereof.

Mounted upon the rear face of the lever 19 is a bearing 22, in which is slidably mounted a pawl 21, provided at its lower ex-



tremity with a head 23 adapted to engage the teeth of the segment 20. A compression spring 24 is mounted upon the lever 19 between the head 23 and the bearing 22, and a hand lever 25 is pivoted to the upper extremity of the member 19 and operatively connected with the upper extremity of the pawl 21.

Handles 26 are pivoted at their lower ends to the beam 1 adjacent the rear end thereof and to the intermediate portions of these handles 26 are pivoted the upper ends of depending braces 27, provided at their lower ends with a series of apertures 28, adapted to receive, successively, a connecting element, whereby the braces 27 may be assembled with the rear end of the beam 1, to adjust vertically the handles 26. Mounted upon opposite sides of the beam 1 adjacent the arms 9 and to the rear thereof, are depending mold boards 29.

When it is desired to narrow or to broaden the zone which is to be swept by the harrow, or to adjust the spaces intervening between the teeth 10, the lever 19 may be moved, and when the desired adjustment has been secured, the lever may be retained in place by the engagement between the head 23 and the teeth of the segment 20. The mold boards 29 are adapted to contact with the rider 16, thereby limiting the forward sliding movement thereof. The lower extremities of the handles 26 are adapted to receive the rider 16 to limit its rearward sliding movement, and thus, between the mold boards 29 and the lower extremities of the handles 26, the rider 16 is adapted to slide, the members 29 and 26 serving as stops to limit the movement of the rider 16 at the ends of its stroke.

By means of the apertures 15 in the braces 14, the relative positions of the arms 8 and 9 and the spaces between the teeth 10 may be adjusted independently of the movement of the rider 16.

Having thus described my invention, what I claim as new and desire to protect by Letters Patent is:—

1. A device of the class described comprising a beam; arms disposed upon each side of the beam and pivoted at their adjacent ends thereto; teeth carried by said arms; a mold board mounted upon the beam adjacent its forward end; a handle mounted upon the beam adjacent its rear end; a rider slidably mounted upon the beam between the handle and the mold board and arranged to contact therewith; braces pivoted at their remote ends to the arms, and at their adjacent ends pivoted to the rider; and means for operating the rider and for holding the same in a predetermined position.

2. A device of the class described comprising a beam; arms disposed upon each side of the beam and pivotally connected therewith at their adjacent ends; teeth carried by the arms; a rider slidably mounted upon the beam to the rear of the arms; braces pivotally connected at their remote ends with the arm; means for adjustably mounting the adjacent ends of the braces upon the rider; and means for operating the rider and for holding the same in a predetermined position.

3. A device of the class described comprising a beam; parallel arms disposed upon each side of the beam and pivotally connected therewith at their adjacent ends; teeth located to the rear of the arms and having extensions disposed upon the upper faces of the arms; pivot elements uniting the extensions with the arms; a rider to reciprocate upon the beam; braces having their adjacent ends assembled with the rider, their remote ends being mounted upon certain of the pivot elements; means for operating the rider; and means for holding the rider in a predetermined position.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

CHARLES B. ROZAR.

Witnesses:

JNO. L. CROVEY;

W. C. ROZAR.