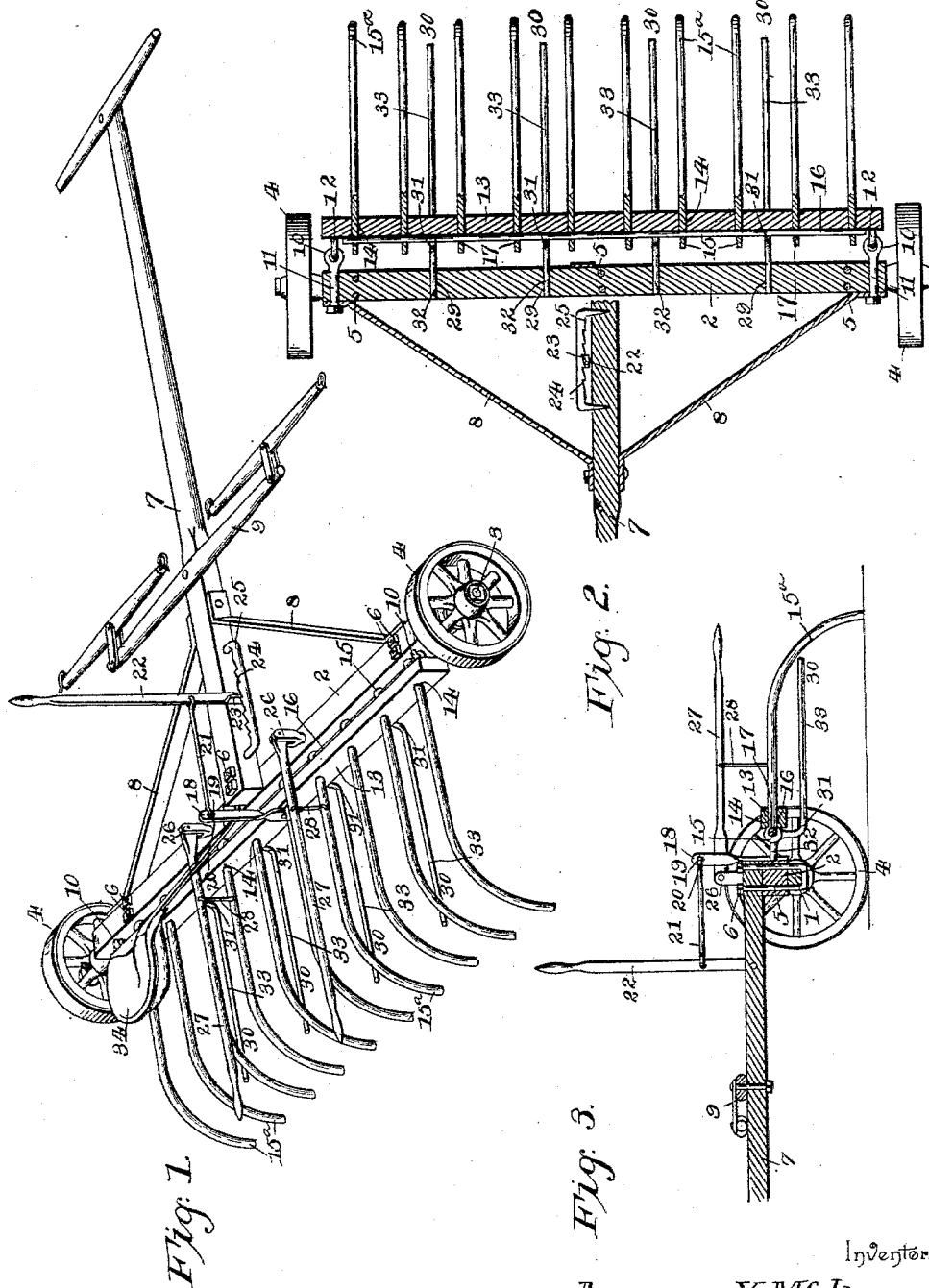


(No Model.)

A. Y. & J. L. McILROY.
RAKE.

No. 569,654.

Patented Oct. 20, 1896.



Witnesses

Chas. Ford

J. R. O'Brien

By their Attorneys,

Archibald Y. McIlroy,

Joseph L. McIlroy.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

ARCHIBALD YELL MCILROY AND JOSEPH LEE MCILROY, OF TOLAR, TEXAS.

RAKE.

SPECIFICATION forming part of Letters Patent No. 569,654, dated October 20, 1896.

Application filed June 9, 1894. Serial No. 514,093. (No model.)

To all whom it may concern:

Be it known that we, ARCHIBALD YELL MCILROY and JOSEPH LEE MCILROY, citizens of the United States, residing at Tolar, in the county of Hood and State of Texas, have invented a new and useful Rake, of which the following is a specification.

The invention is particularly related to a machine for raking loose stumps, brush, and similar trash from fields; and it consists of certain novel features of construction and combination and arrangement of parts that will be more fully described hereinafter and finally embodied in the claim.

In the accompanying drawings, Figure 1 represents a perspective view of a rake constructed after the manner of our invention; Fig. 2, a horizontal section of the machine; Fig. 3, a vertical longitudinal section.

The reference-numeral 1 indicates the axle of the machine, which is formed of an iron bar provided with the wooden strengthening-beam 2. Formed in the ends of the iron bar are the journals 3, upon which the carrying-wheels 4 are mounted, so that the machine will be capable of easy transportation. The two sections of the axle are secured to each other by means of the yokes 5, which embrace the iron bar and are provided with nuts 6, by which they are secured in place. These yokes are preferably three in number, and the middle yoke is extended up through the rear end of the tongue 7 and bolted to the upper side thereof to the end that the tongue be rigidly secured to the axle. Connected to the front of the axle and to the sides of the tongue 7 are the hounds or braces 8, which operate to give rigidity and secureness to the tongue.

9 indicates a whiffletree which is affixed to the tongue and to which the team is to be hitched.

Rigidly secured to the rear side of the axle 1 and equidistant from each other are the sections of the knuckle-joints 10, which have one section, 11, fixed to the axle, while the remaining sections, 12, are similarly secured to the transverse beam 13, whereby the beam 13 is attached to the axle, so as to be capable of swinging thereon. Formed in the beam 13 and extending longitudinally therein are the openings 14, through which the rake-teeth 15^a pass and in which they are secured by

forming the enlargements or heads 15, thereby allowing the openings 17 to be formed, while the teeth are prevented from moving rearwardly by means of the rod 16, which passes through openings 17 in the heads or enlargements 15 and operates to hold them incapable of independent movement.

The teeth 15^a extend rearwardly and curve down to the level of the ground, so as to form devices capable of grasping and retaining the stumps and other matter with which our machine operates. Rigidly secured to the rear of the beam 13 and arising vertically therefrom is the arm 18, which is provided with the openings 19, adapted for the reception of the eye 20 of the rod 21. The rod 21 proceeds forwardly from the arm 18 and is connected at its rear end to the lever 22, which is in turn fulcrumed to the tongue 7 and provided with an edge or point 23, adapted to engage with the ratchet-teeth 24, formed on the bar 25.

The bar 25 is U-shaped and secured to the tongue at its ends, so that the lever 22 may be secured in any position on the bar. Thus by swinging the lever forward the arm 18 will be moved correspondingly and the beam 13, with its attached teeth, raised, so that the teeth will disengage the ground. Rigidly secured to the upper side of the axle are the arms 26, which are bifurcated and provided to form a fulcrum for the forward end of the levers 27. The levers 27 are two in number, one for each arm 26, and extend rearwardly from the axle to a point beyond the rear ends of the teeth 15^a.

Pivotally connected to the levers 27 are the links 28, which extend downwardly from the levers and are pivotally connected to those of the teeth 15^a which occur directly beneath. The purpose of these levers is to permit the teeth 15^a to be raised from behind the machine, and by a person following it. Thus it will be seen that the teeth may be raised by two different devices, the levers 22 and 27, according to the convenience of the operator. By reason of the particular arrangement of the levers 27 and 22 and the connections between said levers and the rake when the lever 27 is lifted for elevating the rake the lever 22 is moved forward, and on account of the engagement between the lever 22 and the rack on the tongue the rake will

be held in its raised position until released by the operator vibrating said lever 22 rearward. The rake may thus be manipulated either by the operator in his seat on the machine or by an attendant walking behind the rake. Formed in the wooden portion of the axle and extending longitudinally therein are the openings 29, which are preferably four in number, and which are respectively provided for the reception of the arms 30.

The arms 30 are one for each opening 29, and are formed with the bends 31 therein, whereby the front end is provided with a straight portion 32, adapted to fit into the opening 29, and the rear end formed with a straight portion 33, which lies below the plane of the beam 13 and projects horizontally to a point near the rear end of the teeth 15^a. The function of the arms 30 is to keep the matter being raked from becoming entangled in the teeth 15^a. Thus by their means the brush, stumps, &c., are kept from engagement with the teeth at their upper side and allowed to engage only at the rear ends, so that upon raising the teeth the brush, &c., will be free to slide out from the straight portions 33 unobstructed.

34 indicates a seat which is secured to the axle and upon which the driver of the rake should be seated.

In the use of our machine the team is

hitched, as usual, to the pole or tongue and the machine drawn over the ground to be cleared, as in the usual rake, whereupon the debris will be gathered and carried with the rake. When the teeth 15^a have been filled with debris, the levers should be raised, so as to lift the teeth and release the matter held thereby.

Having described our invention, what we claim is—

In a horse-rake, a stationary axle, and a swinging rake hinged thereto, in combination with a horizontal rake-lifting lever fulcrumed on said axle and projecting rearward over and connected to the rake, a second rake-lifting lever fulcrumed in advance of the axle, a rack for engaging and holding said second lever, and connection between said second lever and the rake, whereby the rocking of the horizontal lever will effect a rocking of the second lever, causing the latter to lock with the rack and uphold the rake, substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

ARCHIBALD YELL McILROY.

JOSEPH LEE McILROY.

Witnesses:

H. H. COOPER,

H. M. McILROY.