

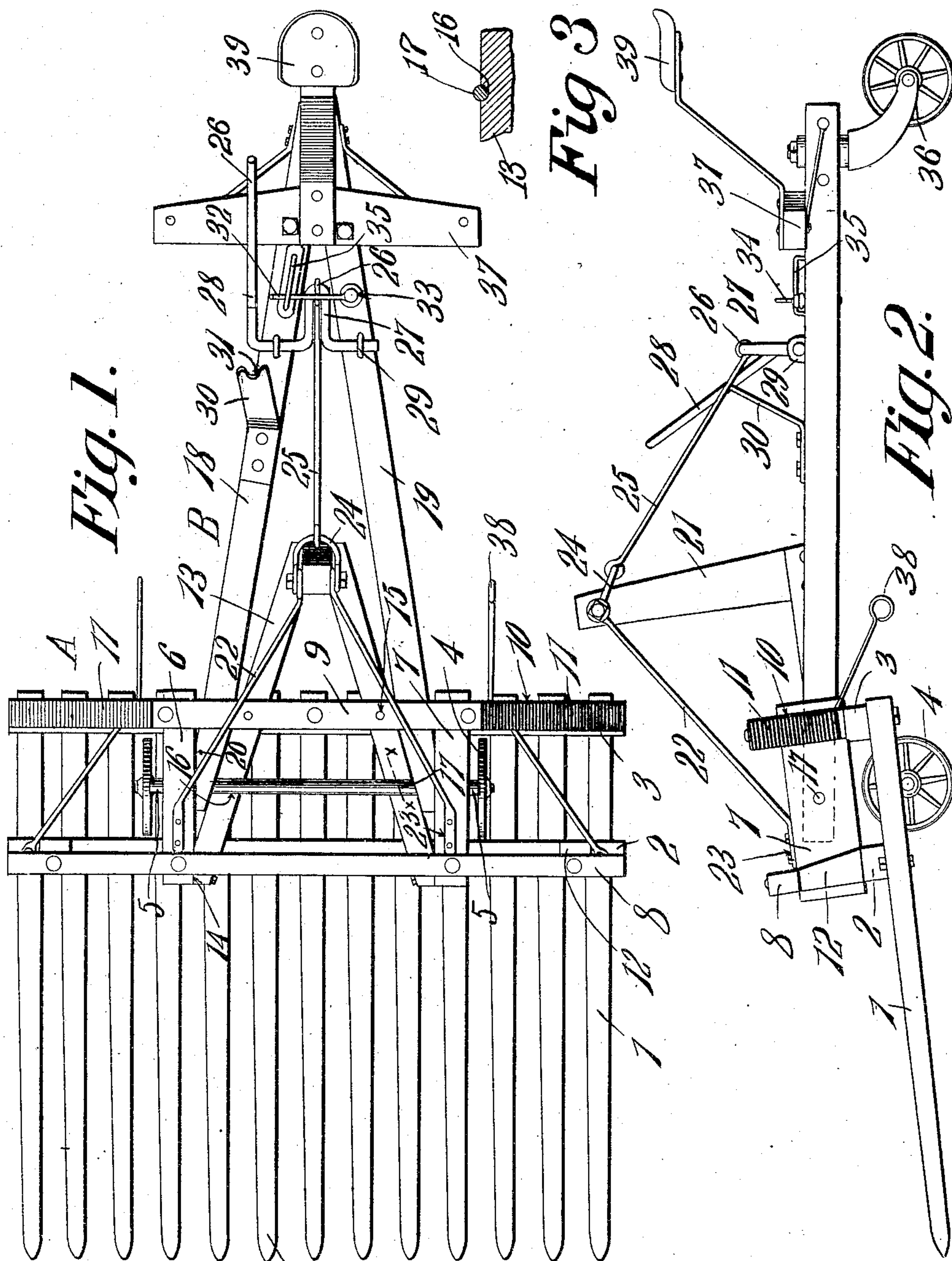
No. 842,234.

PATENTED JAN. 29, 1907.

J. H. NEEB.

HAY RAKE.

APPLICATION FILED AUG. 9, 1906.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

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## HAY-RAKE.

No. 842,234.

Specification of Letters Patent.

Patented Jan. 29, 1907.

Application filed August 9, 1906. Serial No. 329,928.

*To all whom it may concern:*

Be it known that I, JACOB H. NEEB, a citizen of the United States, residing at Unionville, in the county of Putnam and State of Missouri, have invented a new and useful Hay-Rake, of which the following is a specification.

This invention relates to the class of hay-rakes commonly known as "sweep-rakes," wherein the rake-teeth project in advance of the draft-animals.

The objects of the invention are to improve and simplify the construction of such devices; furthermore, to increase their efficiency in operation and to decrease the expense attending their manufacture.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of the following claims without departing from the spirit of the invention or sacrificing any of its advantages.

In the accompanying drawings, forming part of this specification, Figure 1 is a plan view of a rake constructed in accordance with the present invention. Fig. 2 is a side elevation thereof; and Fig. 3 is an enlarged section on line *xx*, Fig. 1.

Like reference characters indicate corresponding parts in the different figures of the drawings.

The improved rake of this invention preferably comprises a rake-frame, which is indicated generally by A, and a supporting-frame, which is indicated generally by B.

The rake-frame A preferably comprises a plurality of rake-teeth 1, which are suitably connected with each other by means of a forward cross-bar 2 and a rear cross-bar 3. The carrying-wheels 4 preferably are journaled upon short axles 5, which are suitably connected with the rake-teeth 1, as shown, the upper ends of said carrying-wheels being adapted to rotate between the forward and rear cross-bars 2 and 3. Suitably mounted upon the forward and rear cross-bars 2 and 3 is a pair of longitudinally-extending spacing-blocks 6 7, which are connected at their up-

per ends by forward and rear bracing members 8 9. The ends of the rear bracing member 9 are beveled, as indicated at 10, and are connected with the ends of the rear cross-bar 3 by means of inclined braces 11. The ends of the forward bracing member 8 are connected with the ends of the forward cross-bar 2 by means of suitable standards 12. Mounted between the spacing-blocks 6 and 7 is a V-shaped structure 13, the forward ends of which are connected with the spacing-blocks 6 and 7, as indicated at 14, and the intermediate portions of which are connected with the rear cross-bar 3, as indicated at 15, by means of bolts or equivalent devices. The V-shaped structure 13 is formed in its sides with semicylindrical channels or grooves 16 to receive a pivot-rod 17, which is suitably mounted at its ends in the spacing-blocks 6 and 7.

The supporting-frame B preferably is V-shaped and consists of the side bars 18 19, which extend at their forward ends between the rear cross-bar 3 and the rear bracing member 9 of the rake-frame. The forward ends of said side bars 18 and 19 are beveled, as indicated at 20, and project into the V-shaped spaces between the structure 13 and the spacing-blocks 6 and 7, said side bars 18 and 19 being pivotally connected with the pivot-rod 17, as shown, whereby the rake-frame A can be swung upward or downward upon the pivot-rod 17, so as to regulate the position of the rake-teeth 1 with respect to the ground.

For the purpose of effecting proper pivotal movement of the rake-frame A the V-shaped structure 13 at its rear end is provided with an upright 21, which is held rigid by means of the brace-rods 22, connected at their forward ends with the spacing-blocks 6 and 7, as indicated at 23. At its upper end the upright 21 is provided with a pivotally-mounted bail 24, with which is connected a link 25, the rear end of which is provided with an eye 26, engaged with the crank portion 27 of an operating-lever 28, said operating-lever 28 and crank portion 27 being preferably formed integral with each other by bending a single bar of metal, as shown. The lever 28 is suitably journaled upon the supporting-frame B by means of journal eyes or brackets 29. It will be obvious that by rocking the



lever 28 rearward the forward ends of the rake-teeth 1 will be raised above the ground, and by swinging said lever forward said rake-teeth will be lowered into proximity with the ground. In order to limit the downward movement of the rake-teeth 1, the supporting-frame B is provided with an inclined rest member 30, formed in its upper end with a notch 31, adapted to engage the lever 28 so as to limit its forward movement, and consequently limit the downward movement of the rake-teeth. For the purpose of holding the rake-teeth in raised position a locking device is mounted upon the supporting-frame B, said locking device consisting of a latch 32, pivoted upon the frame B at one end, as indicated at 33, and provided at its other end with an upwardly-bent handle 34, said latch 32 adjacent the handle 34 extending through a traveler 35, which serves to brace the free or handle end thereof. When the operating-lever 28 is thrown rearwardly to elevate the forward ends of the rake-teeth 1, the crank portion 27 moves down into parallelism with the upper surfaces of the side bars 18 and 19, so that by shoving the latch member 32 forward with the foot it will be disposed over said crank portion 27 and will prevent any upward movement thereof, whereby to lock the rake-teeth securely in raised position.

At its rear end the supporting-frame B is provided with a pivotally-mounted guide-wheel 36 and a draft member 37, adapted to hold the whiffletrees of the draft-animals, the collars of which animals will be connected with the eyebolts 38 upon the rake-frame A. The driver's seat 39 preferably is mounted upon the draft member 37, as shown.

It will be observed that the V-shaped structure 13 serves to dispose the upright 21 a considerable distance in rear of the rake-frame A, whereby said frame is more evenly balanced upon the pivot-rod 17 and the operation of lowering and raising the same by means of the lever 28 is made easier, this operation being also facilitated by reason of the fact that the pivot-points or axles 5 of the carrying-wheels 4 are located below the pivot-rod 17, so as to give the rake-frame a pair of fulcrum-points, one on the axles 5 and the other on the pivot-rod 17.

The improved rake of this invention is strong, simple, durable, and inexpensive in construction, as well as thoroughly efficient in operation.

What is claimed is—

1. A device of the character described comprising a rake-frame having wheels supporting the same, a supporting-frame, a pivotal connection between the supporting-frame and the rake-frame at points adjacent

the wheels, a rearward extension upon the rake-frame and projecting into the supporting-frame, an upwardly-projecting portion upon the rearward extension, braces between said portion and the rake-frame, an operating-lever upon the supporting-frame, and means for transmitting motion from the lever to the upwardly-projecting portion.

2. A device of the character described comprising a rake-frame having carrying-wheels, an approximately V-shaped structure connected at its forward ends to said rake-frame and extending rearwardly therefrom, an upright connected with the rear end of said V-shaped structure, a supporting-frame pivotally connected with said rake-frame, and an operating-lever mounted upon said supporting-frame and having a link connection with said upright for rocking the said rake-frame.

3. A device of the character described comprising a rake-frame consisting of a plurality of rake-teeth, a forward cross-bar, a rear cross-bar, longitudinally-extending spacing-blocks connected with said cross-bars, a V-shaped structure located between said spacing-blocks and connected therewith at its forward ends, the rear end of said V-shaped structure extending rearwardly from said rake-frame, an upright connected with the rear end of said V-shaped structure, a supporting-frame pivotally connected with said spacing-blocks, and an operating-lever mounted upon said supporting-frame and having a link connection with said upright.

4. A device of the character described comprising a rake-frame having rake-teeth, forward and rear cross-bars connecting said rake-teeth, longitudinally-extending spacing-blocks mounted upon said cross-bars, forward and rear bracing members connecting the upper ends of said spacing-blocks, a V-shaped structure connected at its forward ends with said spacing-blocks and at the intermediate portion with said rear cross-bar, the rear end of said V-shaped structure extending rearwardly from said rake-frame, an upright connected with the rear end of said V-shaped structure, brace-rods connected at their rear ends with said upright and at their forward ends with said spacing-blocks, a bail pivotally connected with the upper end of said upright, a V-shaped supporting-frame having beveled ends extending into the spaces between the said V-shaped structure and said spacing-blocks, a pivot-rod extending through said spacing-blocks and supporting-frame and fitting into semicylindrical grooves in said V-shaped structure, an operating-lever mounted upon said supporting-frame and comprising a bar bent to form a crank portion, a link connecting said crank portion with the bail on said upright, a notched rest member for limiting the forward movement



of said lever, a latch member pivotally mounted on said supporting-frame for engaging said crank portion and holding it in rearmost position, means for guiding the free end of  
5 said latch member, a guiding-wheel connected with said supporting-frame, and carrying-wheels connected with said rake-frame.

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

JACOB H. NEEB.

Witnesses:

T. G. BEATTY,  
A. E. NEEB.