(No Model.)

A. FOURNIER.

HAY RAKE.

No. 589,384. Patented Aug. 31, 1897.

Fig. 1.

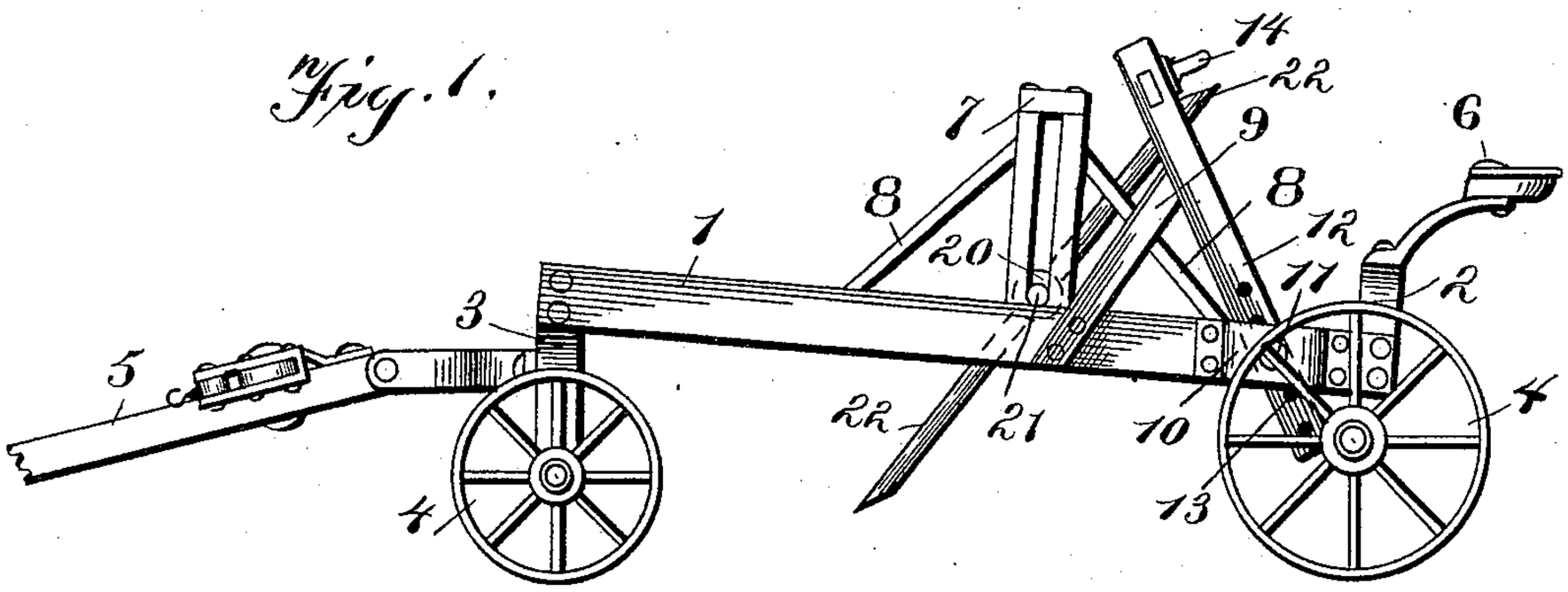


Fig. 2.

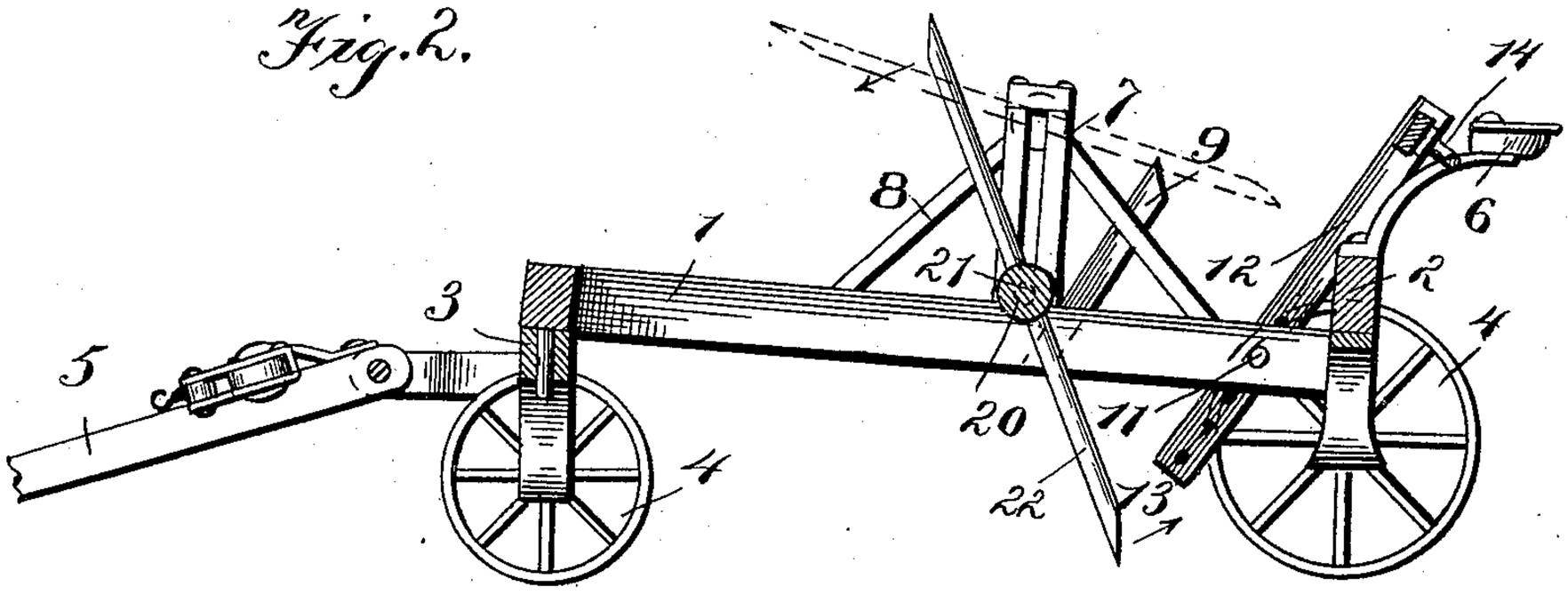
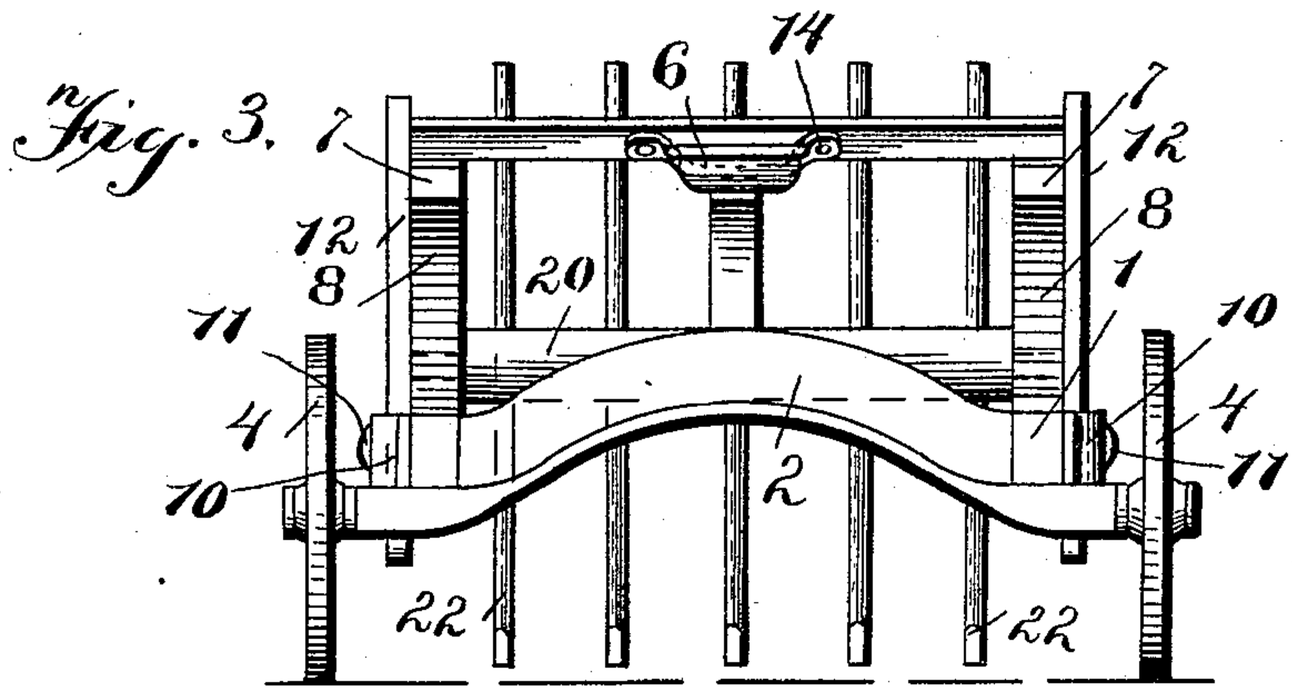


Fig. 3.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ARTHUR FOURNIER, OF IRISH BEND, LOUISIANA.

HAY-RAKE.

SPECIFICATION forming part of Letters Patent No. 589,384, dated August 31, 1897.

Application filed November 16, 1896. Renewed August 4, 1897. Serial No. 647,098. (No model.)

To all whom it may concern.

Be it known that I, ARTHUR FOURNIER, a citizen of the United States, residing at Irish Bend, in the parish of St. Mary and State of Louisiana, have invented certain new and useful Improvements in Hay-Rakes; and I do 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 relates to farm-machines, and more especially to devices of that character known as "horse-rakes;" and the object of the same is to produce certain improvements in machines of this character.

To this end the invention consists in the specific details of construction hereinafter described and claimed, and as more fully shown in the accompanying drawings, wherein—

Figure 1 is a side elevation of this machine with its parts in position for use. Fig. 2 is a central longitudinal section showing the yoke as adjusted lower and the rake-head in the act of rotating to permit the dump. Fig. 3 is a rear elevation.

Referring to the said drawings, the numeral 1 designates a wagon-body, which preferably consists of a rectangular frame without a bottom.

2 is the rear (and preferably upwardly-bowed) axle, secured beneath the rear side of said frame.

3 is the front axle, pivoted under the front side of said frame.

4 are the wheels; 5, the tongue or shafts, and 6 the driver's seat, mounted upon or supported by the rear of the frame.

Rising from each side-bar of the frame about midway of their length is an upright slotted guide 7, preferably braced, as seen at 8, and at the rear of these guides are stops 9, standing at an angle, as shown.

All the parts thus far are preferably of wood, with metal bolts and connections, as usual, and their precise construction is immaterial.

Secured to the outer face of each side-bar of the frame near its rear end is a cleat 10, through which passes a bolt or pin 11 into the frame, and 12 is a yoke whose cross-bar extends across the machine, and whose upright members each pass downward through one of said cleats and is provided with a series of holes 13 to adjustably receive the bolt 11. 14 is a handle or other similar device on the rear of the cross-bar of the yoke, just forward of the driver's seat and within his reach. When this yoke is thrown forward, its upright parts rest against the stops 9, as seen in Fig. 1, but by grasping the handle the operator, who also acts as the driver for the team or horse, can draw the yoke to the rear toward himself for a purpose to appear below. This yoke is preferably of light material, possibly also wood, although it must have sufficient strength for the work it is to do.

20 is the rake-head, which is preferably a cylindrical bar of some considerable weight, and 21 are stub-shafts at its extremities, which loosely enter the slots in the guides 7, so that they may rotate or rise and fall therein, and 22 are the rake-teeth proper, which preferably consist of stout rods of steel, passing completely through the rake-head and projecting an equal distance from opposite sides thereof, as seen.

The entire rake thus formed is of a size to make a rotation within the frame 1 and forward of the driver.

With the above construction of parts the operation of this improved rake is as follows: The horse or team having been hitched to the front of the frame the driver takes his seat and drives to the field, holding the rake in a horizontal position by placing one foot against one of the teeth. When he has reached the scene of operations, he throws the yoke forward against the stops and swings the rake on its stub-shafts until it stands in an oblique position, as seen in Fig. 1, the rear teeth resting beneath the cross-bar of the yoke and the front teeth being inclined to and standing slightly above the ground. By driving forward the hay is then gathered in front of the lower half of the rake until a windrow is reached, and by drawing the yoke to the rear, so as to free it from the upper teeth, the lower ones are permitted to pass to the rear as the machine advances and thus leave the accumulated hay in the position desired. The entire rake then makes a rotation or revolution, as seen in Fig. 2, under the impetus given it, and the

opposite set of teeth come up under the cross-bar of the yoke which the operator has meanwhile again pushed forward. If in making this rotation the lower teeth should strike the earth or any obstruction, the entire rake rises, as will be clear, the stub-shafts sliding upward in the slots of the guides. The holes in the lower ends of the arms of the yoke are obviously for the purpose of adjusting the height of the yoke, so that its cross-bar will stand over the rear teeth at a higher or lower point. This will cause the rake to be inclined at a greater or less angle, as may be desired.

I do not limit myself to the precise details of construction, as considerable change may be made therein without departing from the principle of my invention. Neither are the sizes, shapes, proportions, or materials of parts matters of especial moment, as the construction of the machine should be left to a great degree to the experience of the manufacturer.

What is claimed as new is—

1. In a rake, the combination with a frame mounted on wheels and having a seat at its rear end, a rake-head having stub-shafts journaled in the sides of the frame, and rake-teeth passing completely through said head and to equal distances on opposite sides thereof; of cleats on the sides of the frame, bolts passing through said cleats and into the frame, and a yoke whose cross-bar extends across the machine in front of the seat and is adapted to be engaged by one set of teeth and whose upright arms have sets of holes adjustably pivoted on said bolts, as and for the purpose set forth.

2. In a rake, the combination with a frame mounted on wheels and having a seat at its rear end, guides supported at opposite sides of the frame and having upright slots, and stops also carried by the frame; of a yoke whose cross-bar extends across the machine in front of said seat and whose upright arms are pivoted to the side-bars of the frame in rear of said stops, a rake-head having stub-shafts at its ends loosely mounted in said slots, and straight rake-teeth passing completely through said rake-head and extending an equal distance on opposite sides thereof, the rearmost set being adapted to strike under the cross-bar of the yoke when the latter rests with its arms against the stops, as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ARTHUR FOURNIER.

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