

**No. 688,336.**

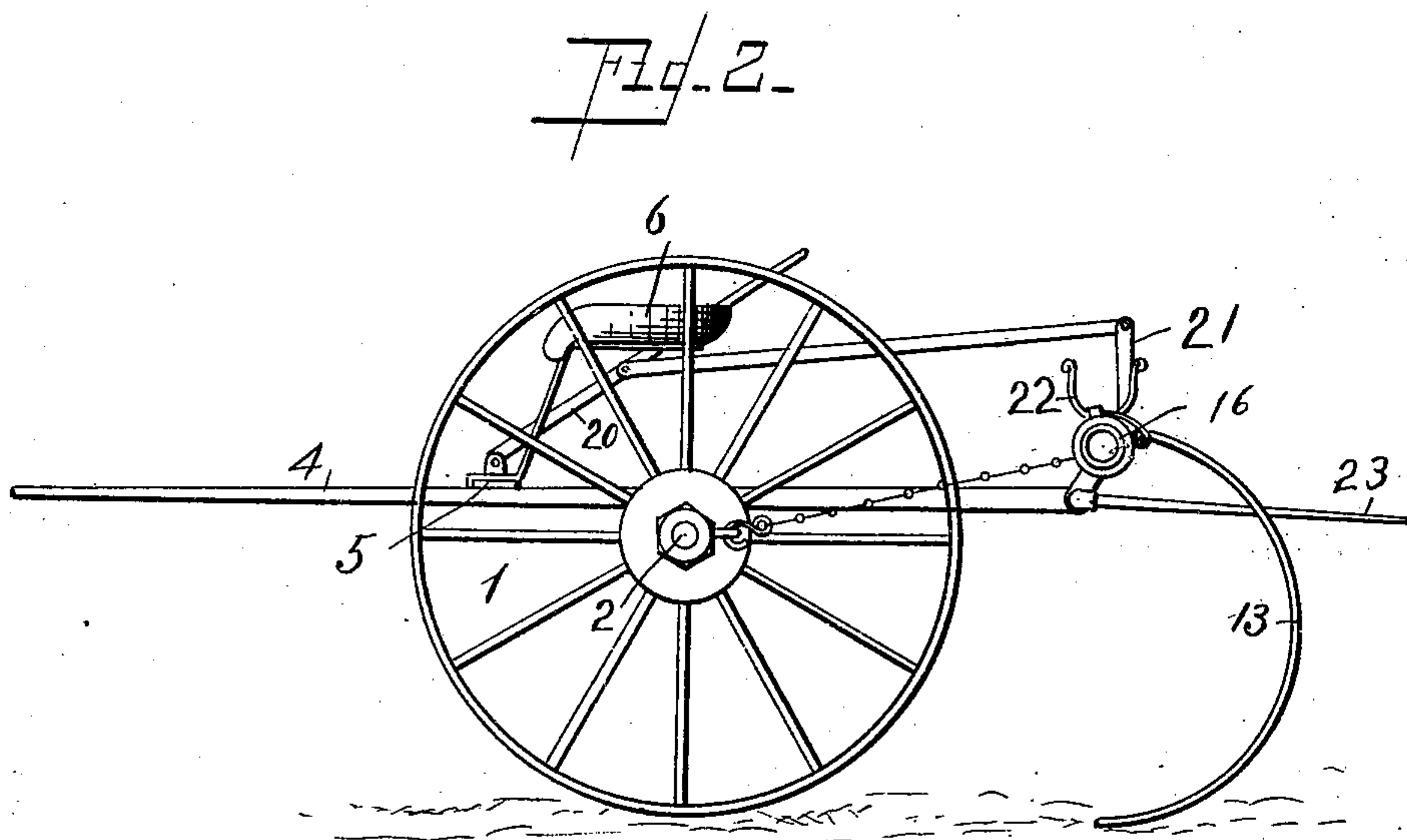
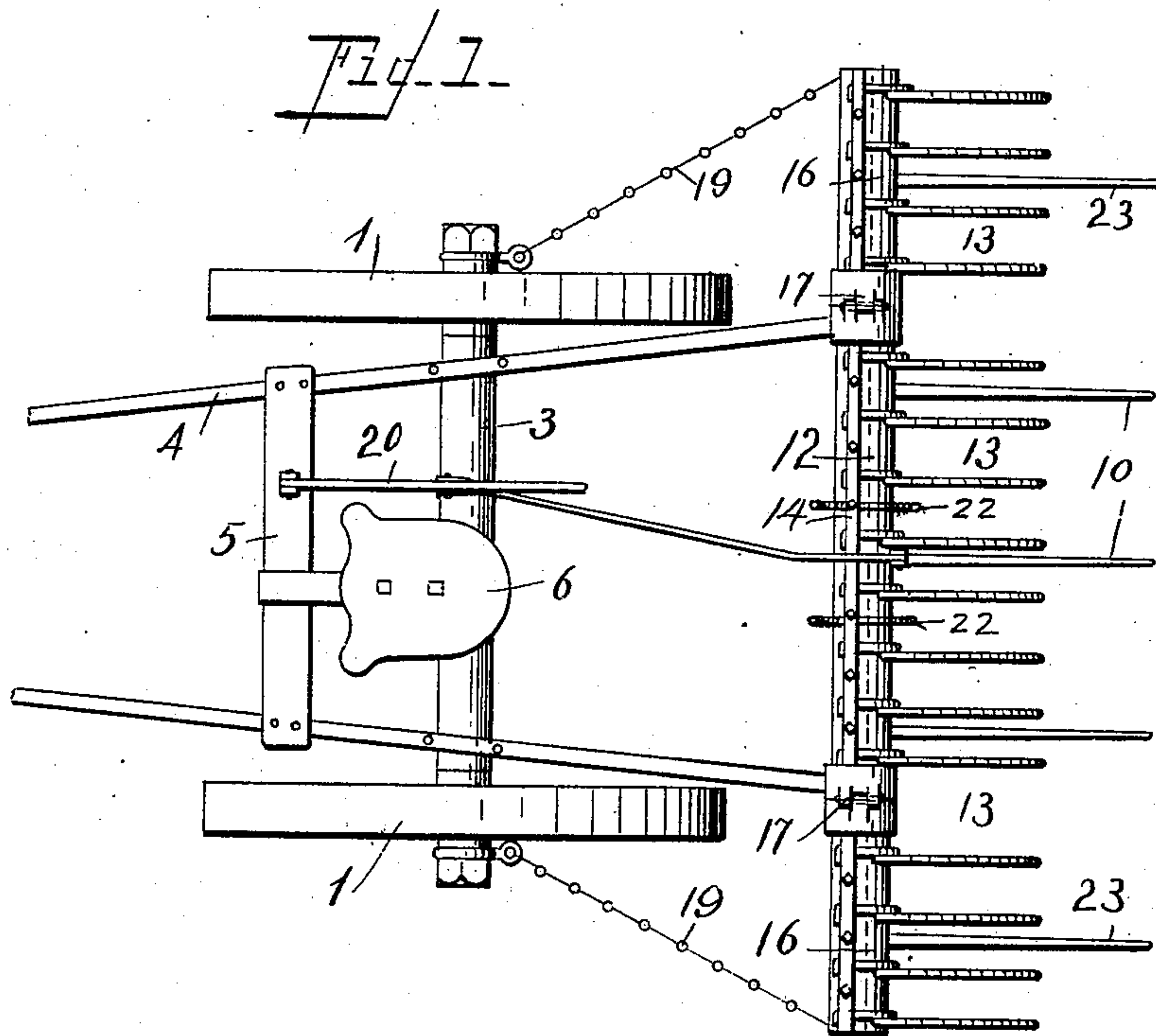
Patented Dec. 10, 1901.

**W. F. REED.**  
**ADJUSTABLE HAY RAKE.**

(Application filed Sept. 7, 1900.)

(No Model.)

**2 Sheets—Sheet 1.**



Witnesses  
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Walter H. Reed <sup>Inventor</sup>  
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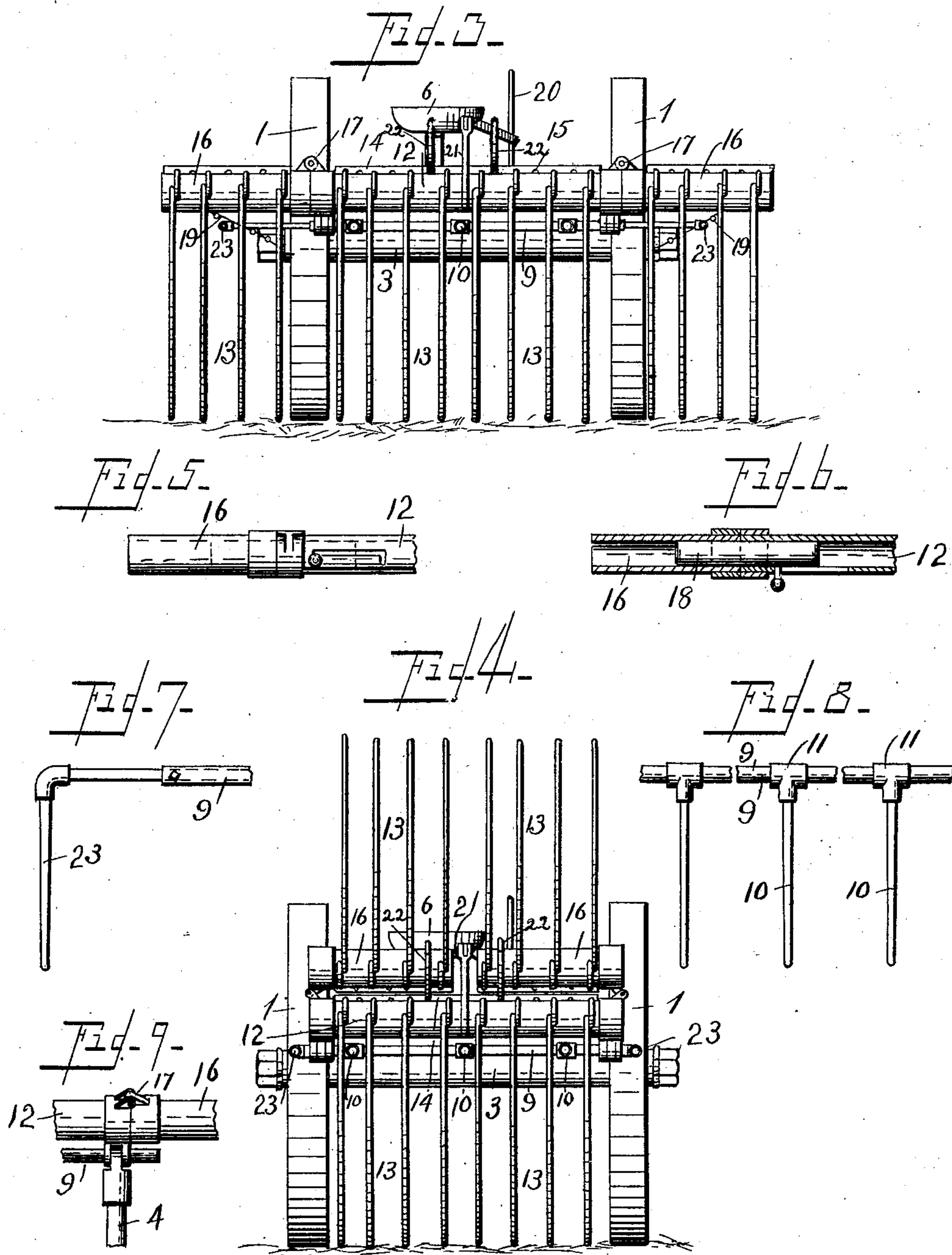
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# UNITED STATES PATENT OFFICE.

WALTER F. REED, OF CAMDEN, SOUTH CAROLINA.

## ADJUSTABLE HAY-RAKE.

SPECIFICATION forming part of Letters Patent No. 688,336, dated December 10, 1901.

Application filed September 7, 1900. Serial No. 29,264. (No model.)

*To all whom it may concern:*

Be it known that I, WALTER F. REED, a citizen of the United States, residing at Camden, in the county of Kershaw and State of South Carolina, have invented new and useful Improvements in Adjustable Hay-Rakes, of which the following is a specification.

My invention relates to improvements in adjustable hay-rakes, and has for its object to so construct the same that it may be easily manufactured, be efficient in operation, and not only contracted when it is necessary to transport the device, but may be worked in its contracted position when desired.

In the drawings forming a part of my specification, and in which like symbols of reference represent corresponding parts in the several views, Figure 1 is a plan view of the device. Fig. 2 is a side view of the same; Fig. 3, a rear view; Fig. 4, a rear view of the machine in its contracted position; Fig. 5, a view of the hinge and locking-bolt for the rake-bar; Fig. 6, a sectional view of the locking-bolt; Fig. 7, a view of one of the end clearing-fingers; Fig. 8, a view of the clearing-fingers, and Fig. 9 a view of the hinge in the rake-bar and shaft.

1 indicates the wheels of the device; 2, the axle of the same; 3, the bearing in which the axle turns; 4, thills supported upon the bearing; 5, a cross-piece supported upon the thills, and 6 the driver's seat.

9 is a tubular rod rigidly connected or journaled on the rear of the thills, said rod carrying the clearing-fingers 10, and 11 represents T-joints connecting the sections of the rod and the teeth to the same.

12 is a tubular rake-bar, and 13 the rake-teeth connected thereto, said teeth being attached by means of a rod 14, engaging the rear of the same. The rod 14 has slots formed in the same to receive the teeth and is connected to the rake-bar by means of bolts or the like, the object being to make the same detachable, so that a greater or less number of teeth may be inserted, as desired.

16 represents the adjustable ends of the rake-bar, being hinged at 17 to said bar and having bolts 18 so arranged as to slide in and out of said rake-bar, the object being to retract the bolt when the same is to be folded

and project the same when it is desired to lock the sections.

19 represents chains connecting the thills with the adjustable portions of the rake-bar, the object of the same being to strengthen said rake-bar and act as a guard to protect the rake-bar against obstructions.

20 is a hand-lever pivotally connected to the cross-piece 5 and having a linked connection with the finger 21, connected with the rake-bar, the object being to throw the rake out of operation or otherwise manipulate it, as desired.

22 represents rests formed on the rake-bar for the adjustable arms to rest in when contracted.

23 is one of the end clearing-fingers, so constructed as to slide in and out of the tubular rod 9, and thus conform to the adjustable pieces of the rake-bar, and being provided with a set-screw to hold it in position.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an adjustable hay-rake, the combination with the main frame, of a bar rigidly connected to the thills of the same, adjustable telescoping ends for said bar, clearing-fingers connected to the bar, a rake-bar having a hinged connection with the rigid bar, adjustable hinged ends connected to the rake-bar, and a lever having a linked connection with the rake-bar, so that by manipulating the same the teeth are cleared of the material.

2. In an adjustable hay-rake, the combination with the tubular rake-bar having a hinged connection with the main frame, of a bar carrying clearing-fingers to work in conjunction with the rake-teeth, adjustable ends for the clearing-finger bar, adjustable ends for the rake-bar, sliding bolts working in the rake-bar to lock the same in its extended position, and rests to receive the adjustable ends when retracted or folded.

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

WALTER F. REED.

Witnesses:

J. A. SAUL,

H. M. PACKARD.