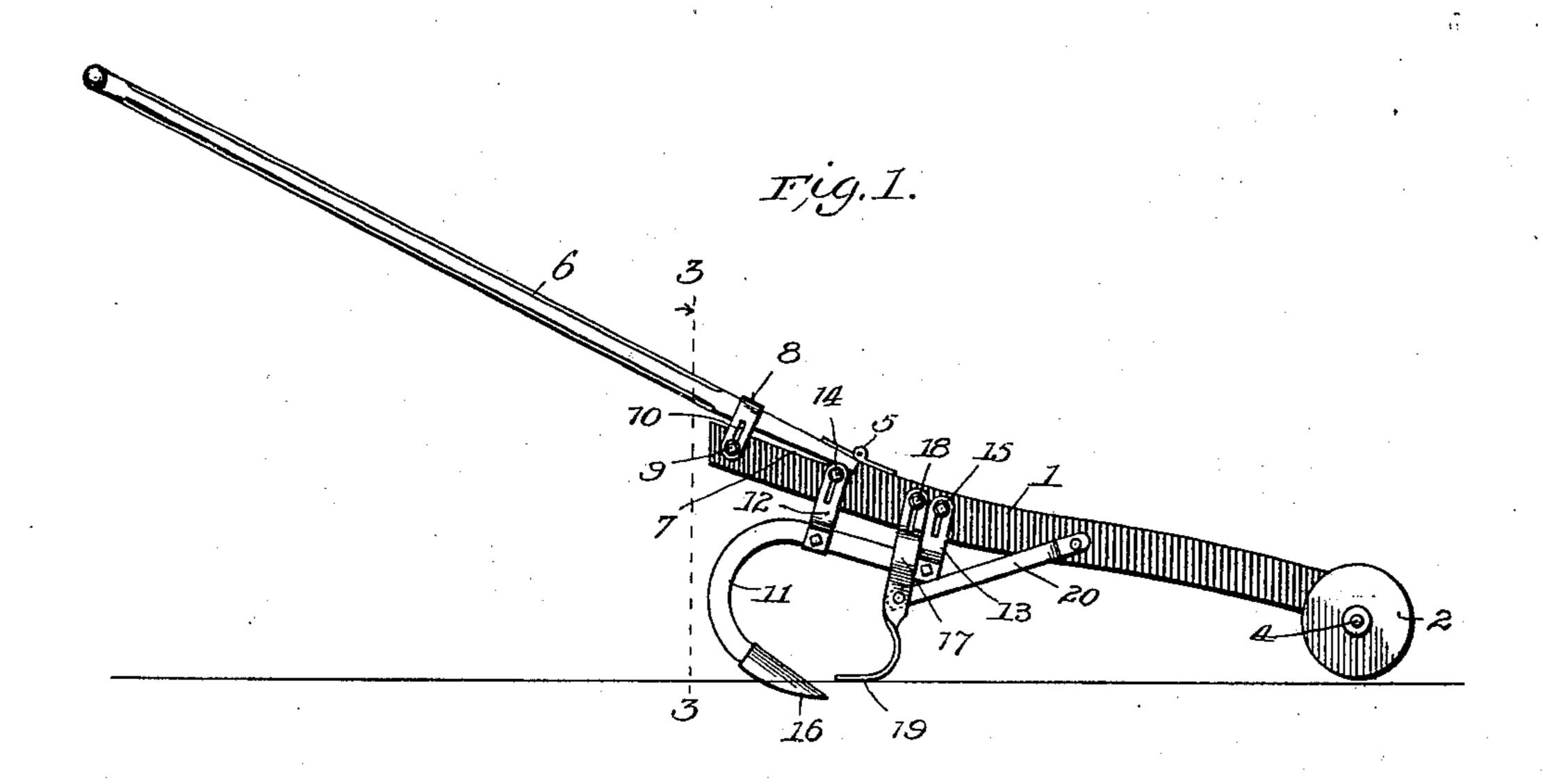
No. 658,048.

Patented Sept. 18, 1900.

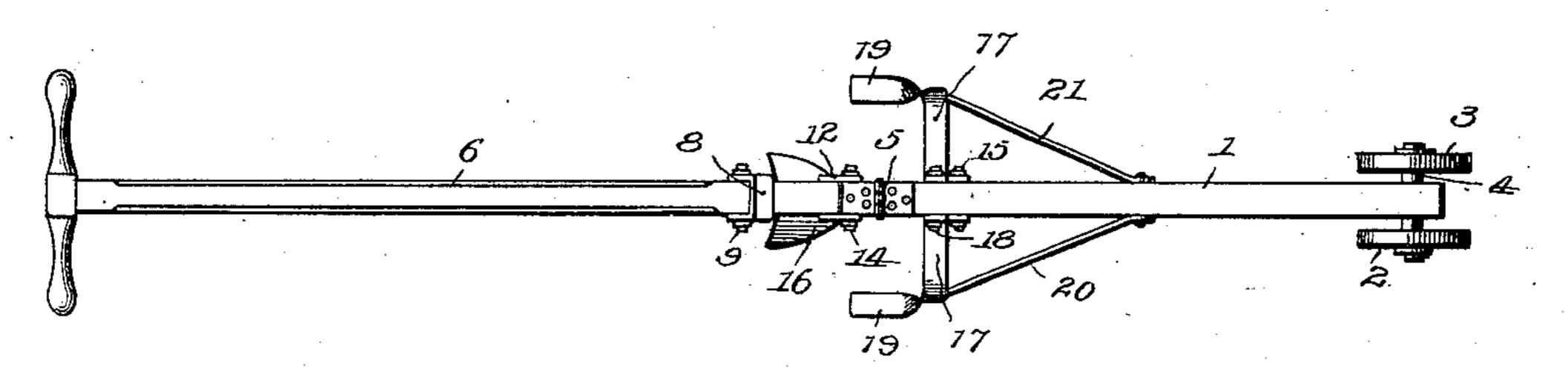
R. H. SMITH. ONION PULLING MACHINE.

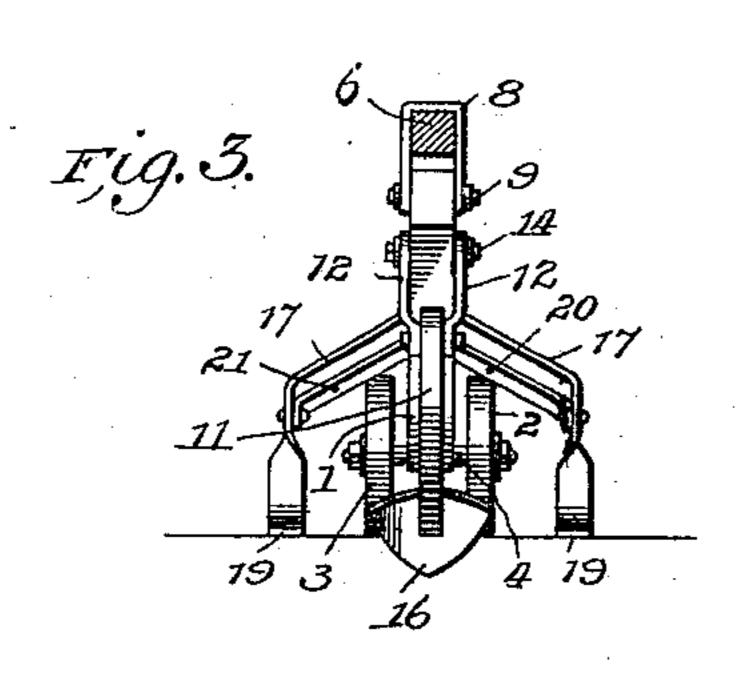
(Application filed Jan. 30, 1900.)

(No Model.)



Tig. 2.





Witnesses: Havy S. Robins. F.D.M. Cleary. Anventor
Rufus II. Smith

By Victor J. Evans

Attorney

United States Patent Office.

RUFUS H. SMITH, OF SCHUYLER, NEW YORK.

ONION-PULLING MACHINE.

SPECIFICATION forming part of Letters Patent No. 658,048, dated September 18, 1900.

Application filed January 30, 1900. Serial No. 3,318. (No model.)

To all whom it may concern:

Be it known that I, RUFUS H. SMITH, a citizen of the United States, residing at East Schuyler, in the county of Herkimer and State of New York, have invented certain new and useful Improvements in Onion-Pulling Machines, of which the following is a specification.

My invention relates to diggers or pullers, and is particularly adapted to harvesting onions and vegetables of a bulbous nature.

The primary object of this device is to improve and simplify the structure of onion-harvesting machines; and to this end my invention consists in certain novel parts and details of construction which will be specifically described hereinafter, pointed out in the claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a device constructed in accordance with my invention. Fig. 2 is a top plan view of the same, and Fig. 3 is a transverse section on the line 3 3 of Fig. 1.

The beam 1 is provided at its lower end with two wheels 2 and 3, carried by the axle 4, while to the upper end is hinged at 5 a handle 6, which normally lies flush with the cut-out portion 7 of said beam, but can be adjusted vertically to suit persons of different heights by means of the strap-iron 8, which is secured to said handle and engages the bolts 9 through the medium of the slots 10.

The plow-standard 11 is adjustably held with relation to the beam by two parallel braces 12 and 13, one on each side of the standard and beam. It will be noticed that these braces project upwardly and are slotted longitudinally a short distance, so that they can engage bolts 14 and 15, whereby the angle at which the plow-point 16 enters the ground can be regulated.

In practice it is found that devices of this kind which are provided with a single standard and plow point have a tendency to "jump" out of the furrow, owing to their unsteadiness, and to overcome this undesirable state I arrange guiding-runners immediately in front of the point 16, which are constructed as follows:

On each side of the beam 1 and adjacent to one of the standard-braces heretofore referred to I arrange a slotted runner-bar 17, adjustably held to the beam by a bolt 18. This bar runs parallel with the beam for about 55 the length of the slot, and thence projects outwardly a sufficient distance to clear the furrow, then is bent downwardly, and terminates in the rearwardly-projecting curved runner 19, which lies flat upon the ground 60 and supports the structure already described. To add rigidity to the runners and their supports, two oppositely-arranged braces 20 and 21 are provided, which are connected to the bars 17 and to the beam.

It is obvious from the construction shown and described that the handle is on the rear of the machine and that the same is propelled from the posterior portion, the front wheels acting in a measure as a guide and support. 70

From the foregoing it will readily be seen that I have provided a cheap, simple, and durable device of the character described and one which will effectually perform the office for which it is intended.

I claim—

1. The combination with a beam provided with wheels on its front end, of an adjustable plow carried by said beam, and adjustable runners positioned in front of said standard 80 and having rearwardly-projecting flat bearing-surfaces adapted to lie on each side of the furrow.

2. The combination with a beam provided with wheels at its front end, and carrying a 85 plow-standard, of a handle hingedly connected to the rear of said beam, a strap-iron secured on said handle and provided with slots, and means carried by said beam for engagement with slots to regulate the angle of the handle, 90 substantially as described.

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

RUFUS H. SMITH.

Witnesses:

Mrs. R. H. SMITH, A. D. FAULKNER.