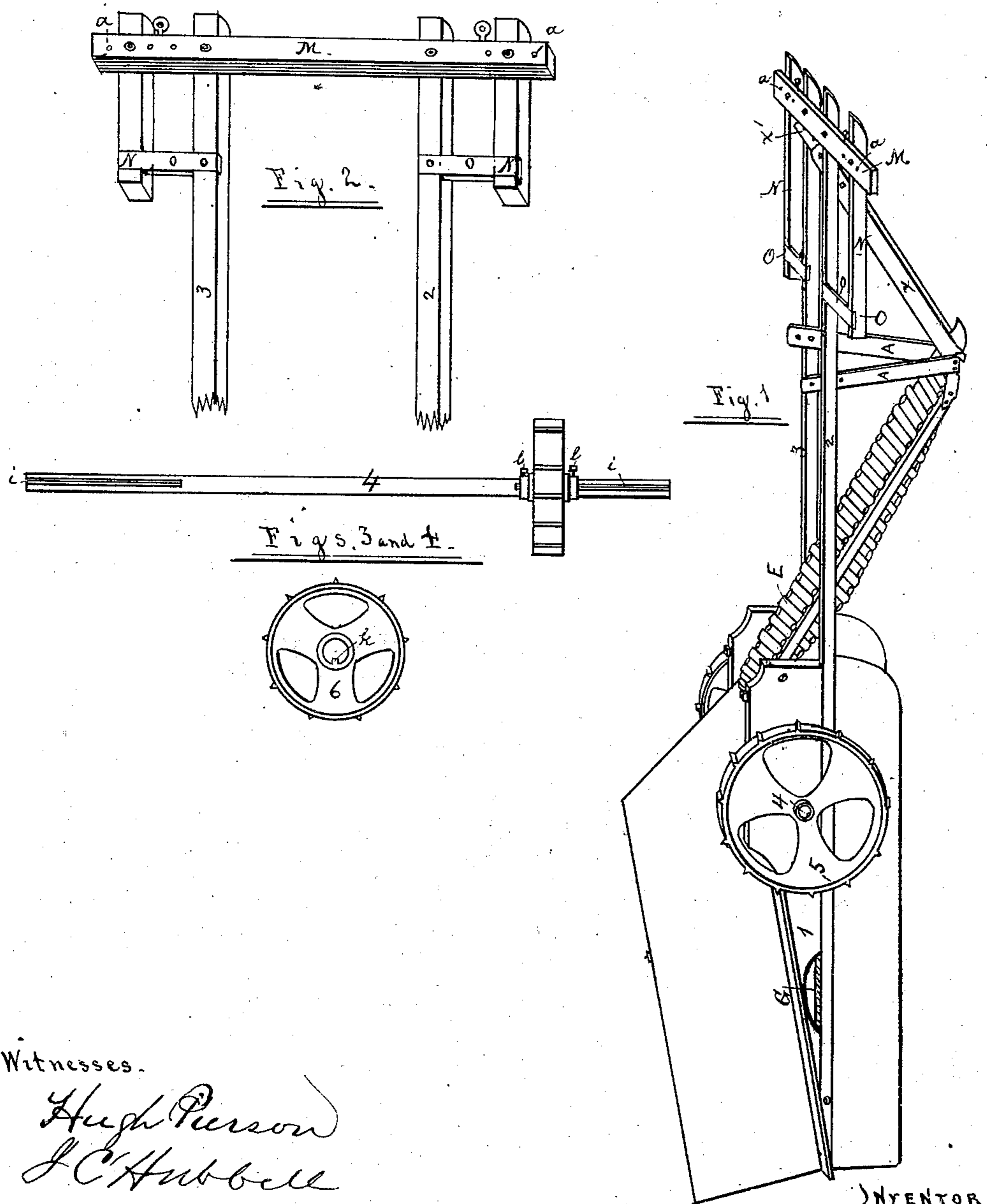


W. P. SMITH.
Machine for Cleaning Ditches.

No. 225,198.

Patented Mar. 2, 1880.



Witnesses.

Hugh Pierson
J. C. Hubbell

INVENTOR
W. P. Smith
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UNITED STATES PATENT OFFICE.

WILLIAM P. SMITH, OF NEW ORLEANS, LOUISIANA.

MACHINE FOR CLEANING DITCHES.

SPECIFICATION forming part of Letters Patent No. 225,198, dated March 2, 1880.

Application filed April 26, 1879.

To all whom it may concern:

Be it known that I, WILLIAM P. SMITH, a resident of the city of New Orleans, parish of Orleans, and State of Louisiana, have invented
5 a certain new and useful Improvement in Machines for Cleaning Ditches; and I do hereby declare the following to be a full, clear, and correct description of the same, reference being had to the annexed drawings, making a
10 part of this specification.

This invention relates to certain improvements whereby the ditching-machine patented by Charles Skinner and W. B. McClure, May 23, 1876, No. 177,758, can be adapted for cleaning out old ditches.
15

My invention will be readily understood by reference to the accompanying drawings, whereon—

Figure 1 represents a perspective view of
20 same. Fig. 2 is a similar view of a portion of the machine-frame, and Figs. 3 and 4 views of the main axle and ground-wheels.

The machine, as secured by the above-mentioned Letters Patent, consists of a frame, 1,
25 with horizontal side strips, 2 3, an axle, 4, and side wheels, 5 and 6. The forward ends of the side strips are provided with adjustable vertical cutters A and braces *x x'*. An inclined endless carrier, E, extends back of the cutters A, in the manner shown in said patent above
30 referred to and in Fig. 1 of accompanying drawings.

The top roller of the carrier is furnished with a pinion which is geared in a cog-wheel that
35 is keyed or otherwise secured upon the axle 4. The rear portion of the frame is provided with a platform, G, having an open side for delivering the excavations on one side of the ditch.

My improvements on the above machine consist in lengthening the axle, so that its
40 ends may extend for some distance beyond the sides of the frame. In these ends I cut grooves, as shown at *i*, so as to receive the feathers *k* of the wheels 5 6, the said wheels being furnished with set-screws *l l*, whereby they may
45 be rigidly secured at the requisite distance apart to straddle the ditch to be cleaned.

In order to support the forward ends of the strips 2 3, I provide the same with a cross-tie, M, the length of which is about equal to that
50 of the axle 4. In the outer ends of this cross-tie is constructed a number of bolt-holes, *a a*, which provides a means whereby side runners, N N, may be adjustably secured thereto, the runners, like the wheels, to straddle the ditch
55 to be cleaned.

O O are braces, also provided with bolt-holes in order to adjustably secure the rear ends of the runners.

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

In a machine for cleaning ditches of the character substantially as herein described, the combination, with the frame 1, of the side
65 strips 2 3 and cross-tie M, the adjustable side runners, N N, and the lengthened axle 4, having its outer ends provided with grooves *a* to receive the wheels 5 and 6, substantially as
70 and for the purposes herein set forth.

In testimony whereof I have hereunto signed my name.

W. P. SMITH.

In presence of—

A. L. DELESDERNIER,
J. C. CLARKE.