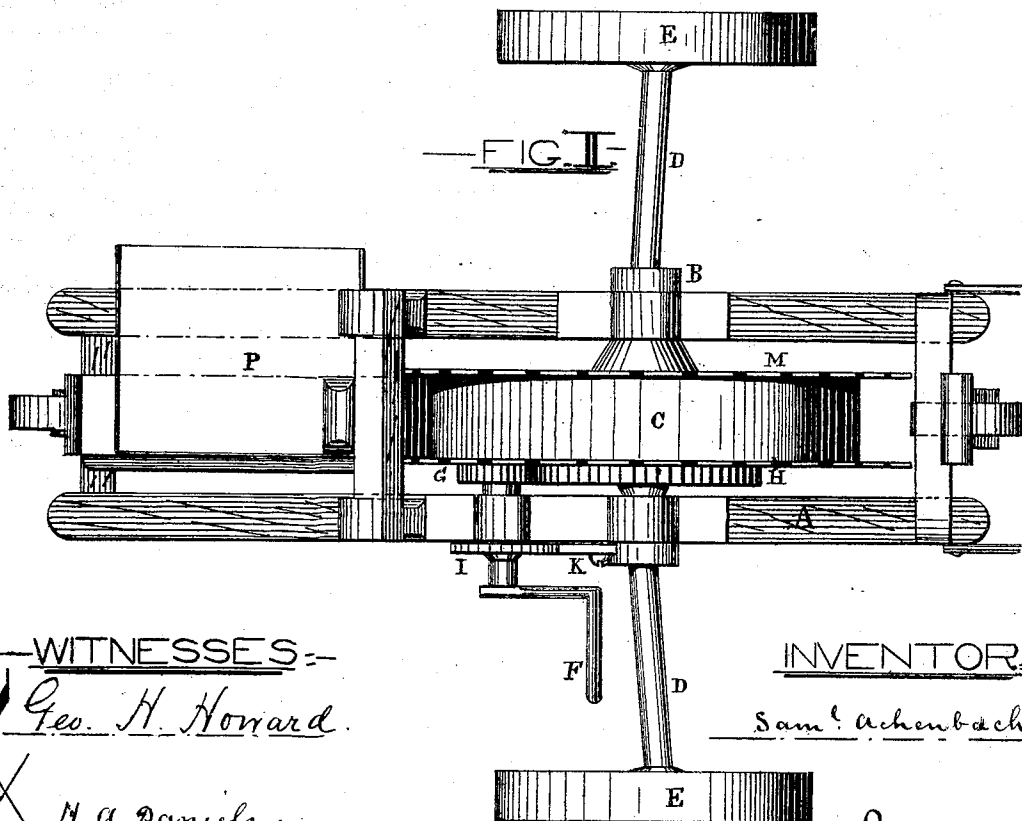
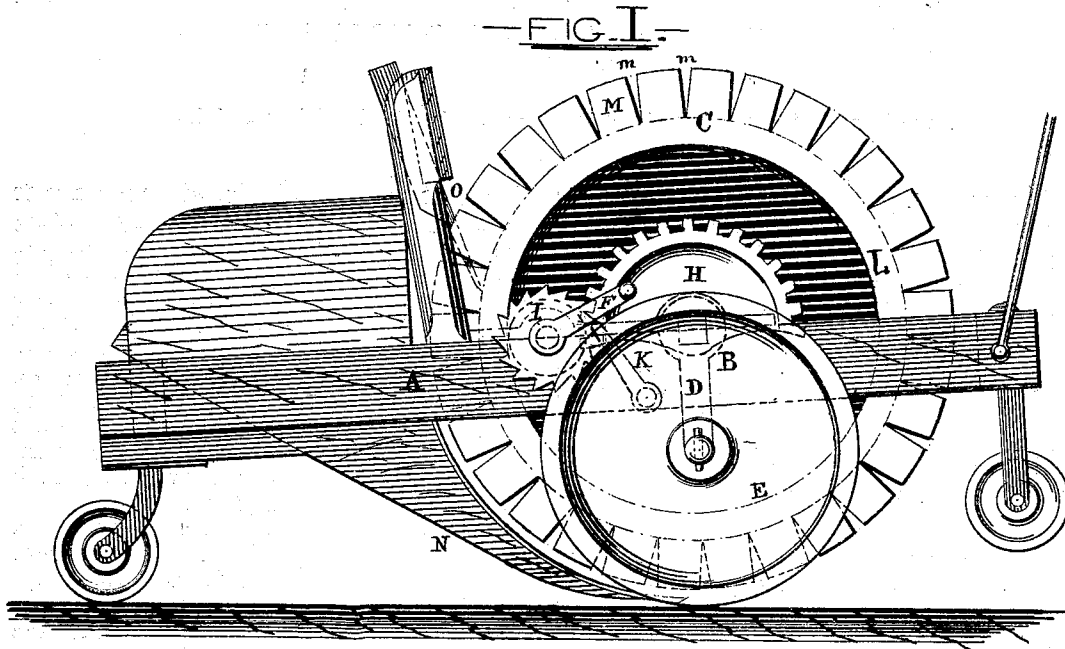


SAMUEL ACHENBACH.

Improvement in Excavating-Machines.

No. 127,671.

Patented June 11, 1872.



WITNESSES:

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SAMUEL ACHENBACH, OF ORANGEVILLE, PENNSYLVANIA.

IMPROVEMENT IN EXCAVATING-MACHINES.

Specification forming part of Letters Patent No. 127,671, dated June 11, 1872.

To all whom it may concern:

Be it known that I, SAMUEL ACHENBACH, of Orangeville, in the county of Columbia, in the State of Pennsylvania, have invented certain Improvements in Machines for Ditching, Subsoiling, and Excavating; and do hereby declare that the following description, taken in connection with the accompanying drawing, hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature of my said improvement, by which my invention may be distinguished from others of a similar class, together with such parts as I claim and desire to secure by Letters Patent.

My invention relates to that class of agricultural implements which are made use of for the purpose of cutting and excavating ditches; and the nature thereof consists in certain modifications and improvements in the details of the construction of the same, hereinafter described and shown.

In the accompanying drawing, which illustrates my invention and forms a part of the specification thereof, Figure 1 is a lateral elevation of the machine. Fig. 2 is a plan view.

The construction, operation, and relative arrangement of the component parts of my invention are as follows:

In the drawing referred to, letter A designates the frame, on which the axle B, about which revolves the wheel C, has its bearings. To the said axle are rigidly attached the arms D, upon which rotate the wheels E. The rel-

ative height of said wheels, with reference to the frame, is accurately adjusted by rotating the axle B by means of the crank F, a pinion, G, on the end of which takes into the toothed sector H. The said crank is held permanently, in any desired position, by means of the ratchet-wheel I attached to shaft of the same, and the pawl K. Rigidly secured to a flange, L, forming the circumference of the wheel C, are the annular cutters M, in which are cut notches, *m*. Within and between the said annular cutters is the plow or excavator N, which is rigidly attached to the frame.

As the wheel revolves the flanges or cutters cut the sides of the ditch, and the plow cuts the bottom and the dirt is forced upward upon the inclined surface of the plow and between the said annular cutters until it reaches the scraper O, at which point it is discharged into the chute P, from whence it falls to the side of the ditch.

Having described my invention, I state my claim herein as follows:

In a ditching-machine, the combination of the crank F provided with a ratchet-wheel, I, and pinion G, the axle B, to which is rigidly attached the toothed sector H, the arms D, and the wheels E, all operating together as and for the purposes described.

SAMUEL ACHENBACH.

Witnesses:

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