

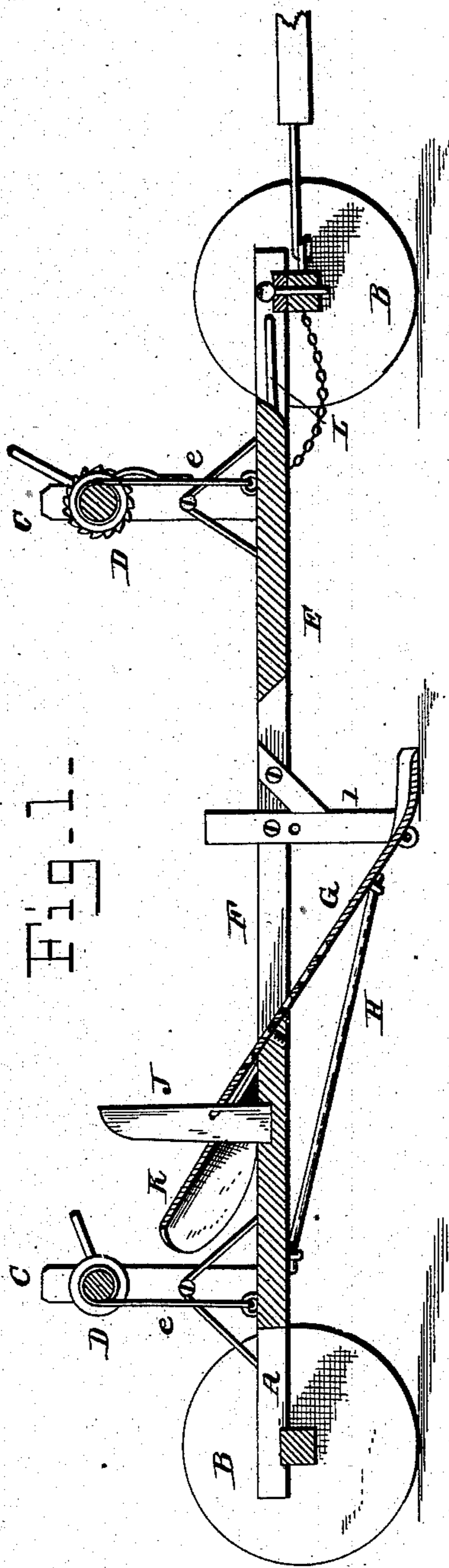
(No Model.)

A. J. SNIDER & A. L. KULP.

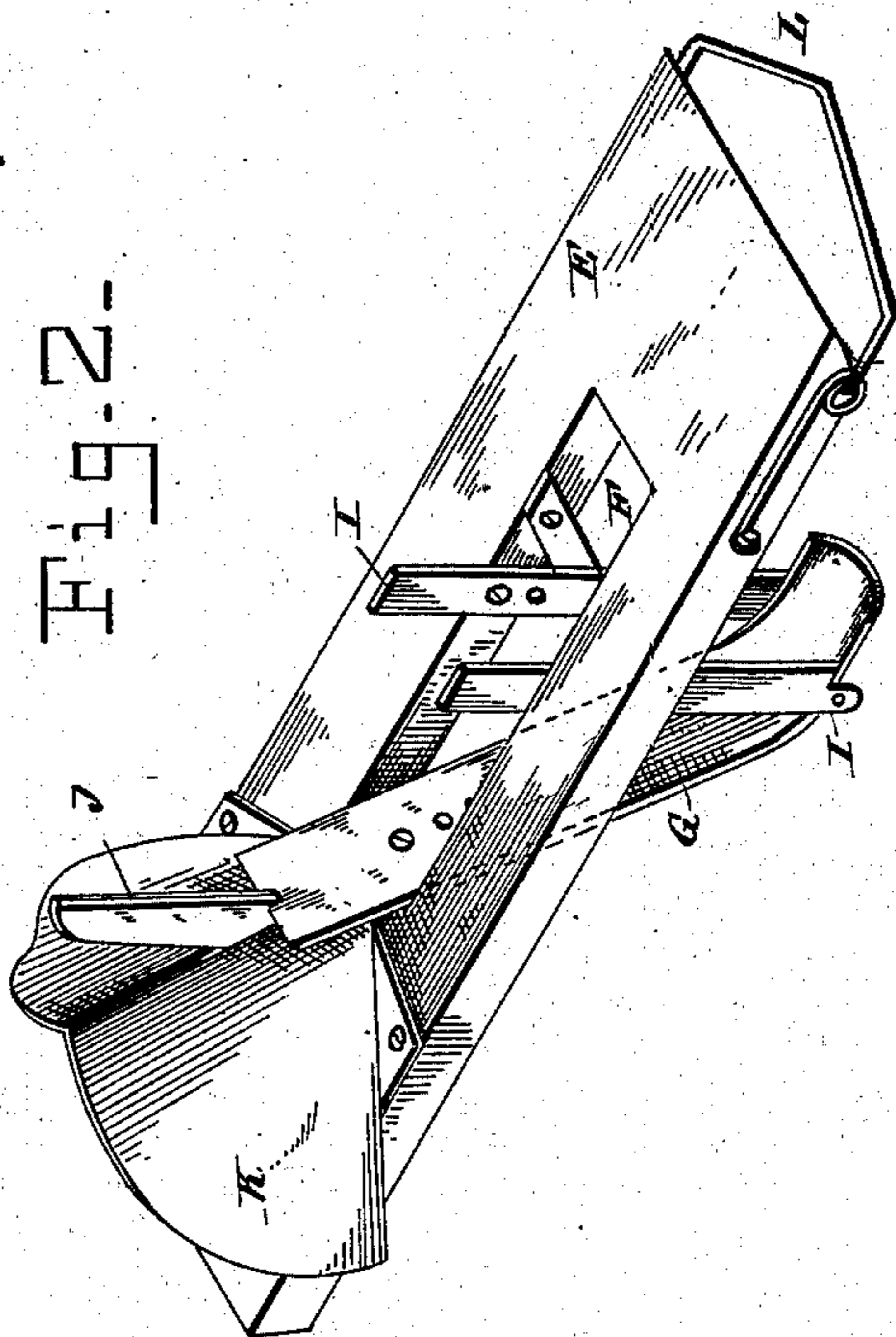
EXCAVATOR.

No. 295,451.

Patented Mar. 18, 1884.



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WITNESSES

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UNITED STATES PATENT OFFICE.

ALLEN J. SNIDER AND ALVIN L. KULP, OF KEOTA, IOWA.

EXCAVATOR.

SPECIFICATION forming part of Letters Patent No. 295,451, dated March 18, 1884.

Application filed January 17, 1884. (No model.)

To all whom it may concern:

Be it known that we, ALLEN J. SNIDER and ALVIN L. KULP, citizens of the United States, residing at Keota, in the county of Keokuk and State of Iowa, have invented certain new and useful Improvements in Excavators, of which the following is a specification, reference being had therein to the accompanying drawings.

Our invention relates to machines for making ditches in the earth for drainage or other purposes, the peculiar nature of which will be hereinafter fully set forth.

In the accompanying drawings, making part of this specification, Figure 1 represents a longitudinal section, and Fig. 2 a perspective, of a portion of our machine.

In the figures, A represents the two sides of a frame, which are secured upon axles carried by the wheels B B. Upon the frame, and near each end, are erected standards C C. Journaled in these standards are two windlass-bars, D D, which lie crosswise of the frame, and which have connected to them suitable pawls and ratchets and handles, by means of which they are operated and held in position.

Within the frame A is located a platform, E. To this platform, at each end, are connected cords *e e*, which pass around the windlass-bars D D, and by means of which it is raised or lowered, as circumstances may require in regulating the depth to which the ditch is to be cut.

Through the platform E is cut an opening, F, up and through which the earth is intended to pass in its removal.

G represents an inclined excavating-plate, which is secured and suitably braced in the opening F. This plate is at an angle of about

forty-five degrees, or less, with reference to the platform, and its forward end is formed into a cutting-scoop. The forward end of this plate is supported by the bars I I and braced by the brace H. At the upper extremity of the plate is a vertical cutter, J, and two wings, K K, for the purpose of cutting and dividing the earth, so that it will be thrown off to each side after being carried up.

The wings for throwing the earth to the sides may form a part of the plate, or may be independent of it.

In using this machine the platform E is lowered by means of its connections, so that the point of the plate G will cut to the required depth in the earth. The frame is then drawn forward, the bail L being first secured to the frame.

The earth passing up the inclined plate and through the opening F is divided by the cutter J and passes off to each side of the machine upon the wings K K.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The platform E, provided with the opening F, inclined cutting-plate G, cutter J, and wings K K, in combination with a frame on wheels, to which it is adjustably attached and rendered capable of vertical adjustment, substantially as and for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

A. J. SNIDER.
A. L. KULP.

Witnesses:

O. WILSON,
HENRY C. HANEY.