(No Model.)

R. P. LUDWIG.

DRILL TOOTH REGULATOR AND COMPRESSOR FOR SEEDERS.

No. 312,873. Patented Feb. 24, 1885.

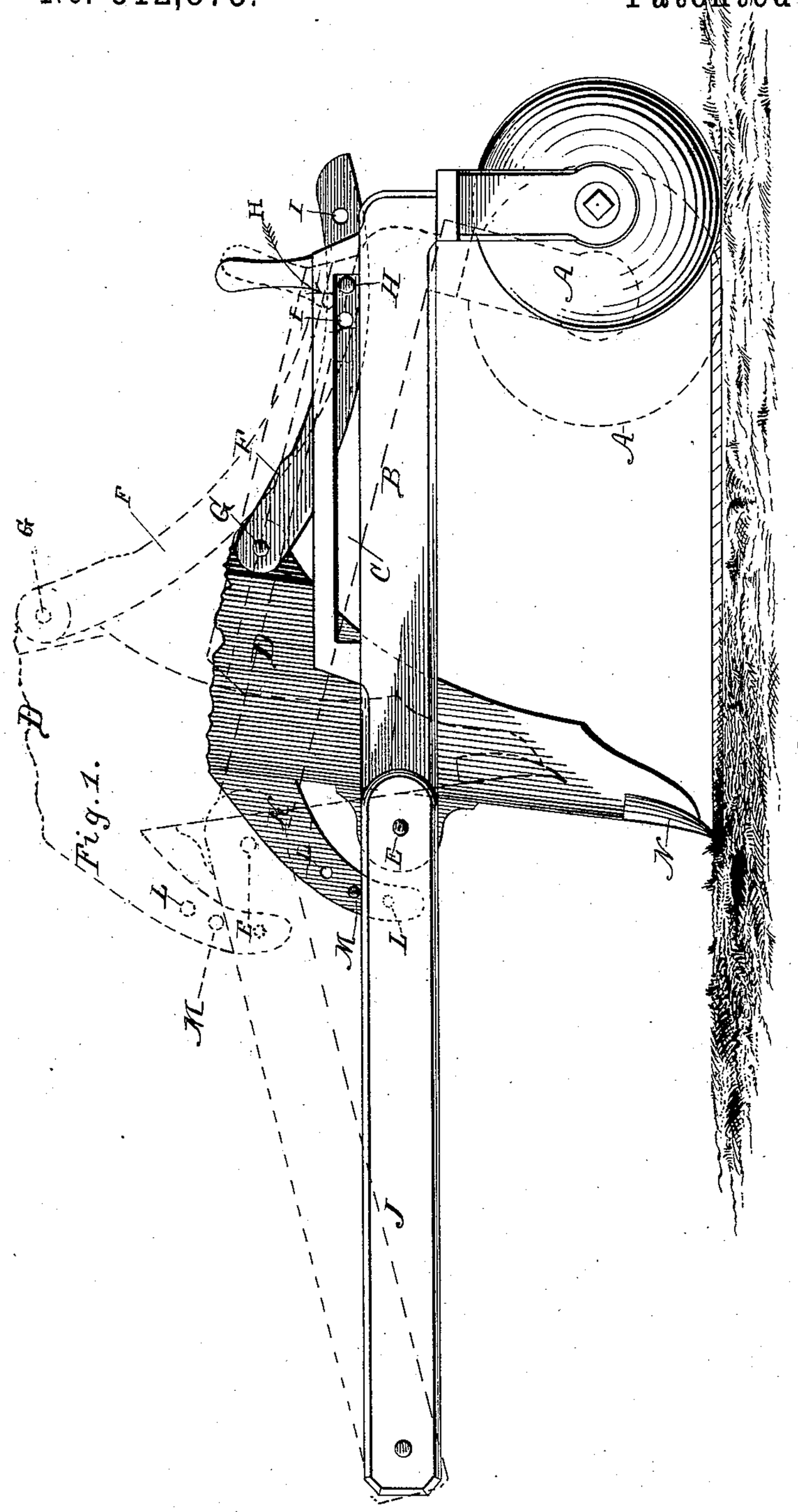

Fig. 1.

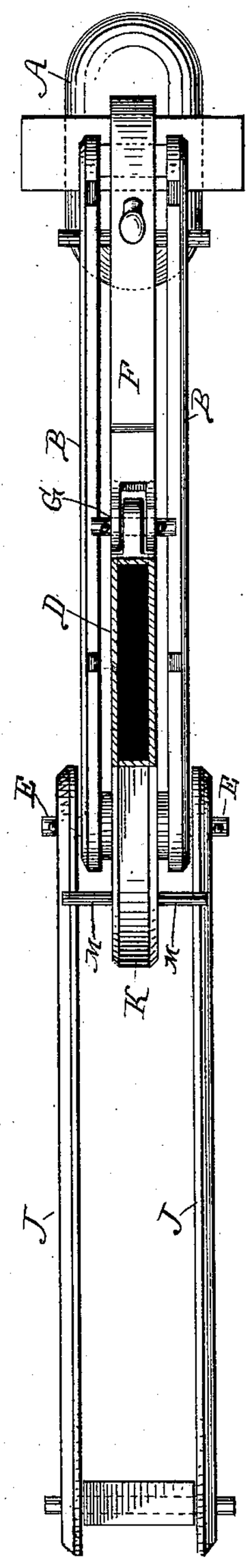

Fig. 2.

WITNESSES:
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UNITED STATES PATENT OFFICE.

ROMULUS P. LUDWIG, OF SAUMSVILLE, ASSIGNOR OF ONE-HALF TO SAMUEL M. LANTZ, OF EDENBURG, VIRGINIA.

DRILL-TOOTH REGULATOR AND COMPRESSOR FOR SEEDERS.

SPECIFICATION forming part of Letters Patent No. 312,873, dated February 24, 1885.

Application filed October 4, 1884. (No model.)

To all whom it may concern:

Be it known that I, ROMULUS P. LUDWIG, a citizen of the United States, residing at Saumsville, in the county of Shenandoah and State of Virginia, have invented certain new and useful Improvements in Drill-Tooth Regulators and Compressors for Seeders, of which the following is a description.

This invention relates to that class of devices used to plow shallow furrows in the ground, to drop seed, such as wheat, therein, and to cover and press the earth thereon; and its object is to raise the drill or plow point at will, and to mechanically hold it raised while traveling and not in use, and to set the drill to plow deep or shallow, as may be required.

To this end my invention consists in the construction and combination of parts forming a drill-tooth for seeders, including the supports therefor, hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of my invention, and Fig. 2 is a plan view thereof.

D represents the boot or drill-tooth, down through the interior of which the grain is dropped, as usual. The toe N of this boot is a plow-point capable of parting the earth to receive the grain. I hang this boot on a pivot, E, nearly vertically over the point N between two bars, B, which are supported at their rear ends upon a wheel or roller, A.

F is a brace pivoted to the drill at G, which is a point on the upward arm of the drill, and provided with a series of holes, I, along its rear end. A pin, H, is placed in one of these holes to extend its ends into slots C in the bars B.

J represents two links, by which the device is drawn. The rear ends of these links are pivoted upon the pin E, and their forward ends are loosely attached to the seed-drilling machine.

K is a fixed portion of the tooth D, extending forward from the top thereof in the form of a brace, and acting as such by means of the pin M, located in any one of a series of holes, L, in the brace K and resting on the links J.

The action is as follows: The pin M is of some material—such as wood—easy to be broken, and when the plow-point meets any obstacle which it cannot pass the pin M breaks, allowing the upper end of the drill to swing forward on its pivot and the lower end consequently to swing backward and drag over the obstacle. When it is desired to hold the drill out of the ground while the machine is traveling from place to place, the rear brace, F, is pushed forward and its pin H is placed in the rear one of the holes I. The drill being secured in fixed relation to the links J by means of the pin M resting thereon, the forward motion of the brace F raises the drill upward, as shown in dotted lines, and the pin H, fixed in the rear hole, I, rests in the rear end of the slots, thus holding the whole central portion of the device raised. Were it not for the pin M resisting forward motion of the drill by resting on the links J, the forward motion of the brace F would merely tip the drill forward without raising it; but the forward ends of the links J being supported, any push forward at G tends to raise the central portion of the whole device bodily. I change the pitch of the drill or plow-point by placing the pin M in different holes of the brace K.

I am aware that a seed-drill tooth has before been hung to a horizontal bar by a pivot, the said bar being supported at its rear end on a roller, and provided with a horizontal slot and a brace pivoted to the drill at one end, the other end having a pin to slide in said slot; but I am not aware that there has been used with that device a fulcrum like my forward links and pin, whereby the pushing forward of the said brace pivoted to the drill will raise the drill bodily.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with an earth-roller, a pair of horizontal slotted bars supported at their rear ends upon the journal thereof, and a seed-drill tooth hung vertically between the forward ends of the said bars on a horizontal pivot, of a brace pivoted at its forward end to an upward arm of the drill-tooth, and provided with a series of pin-holes at its rear end, a pin to be placed in any one of the said holes and through the slot in the said bars, a pair of connecting-links pivoted at their rear ends on the same pivot on which the drill-tooth is hung and extending forward to be attached to a seed-

ing-machine, and a brace extending forward from the upper arm of the drill-tooth, and a pin through the brace adapted to rest on the forward links, substantially as described, for the purpose set forth.

2. The combination, with the roller A, the bars B, supported thereon, and provided with the slots C, of the drill-tooth D, pivoted at E between the bars B, the brace F, pivoted to the drill-tooth at G, and provided with the holes I, and pin H, engaging the slots C and said holes I, the links J, pivoted at their rear ends at E, and the brace K, attached to the tooth D, and provided with a series of holes, L, and the pin M, adapted to engage the said holes and to rest on the links J, as and for the purpose specified.

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Witnesses:
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SOLON C. KEMON.