

(No Model.)

J. R. VALENTINE.
ATTACHMENT FOR SEED DRILLS.

No. 356,340.

Patented Jan. 18, 1887.

Fig. 1.

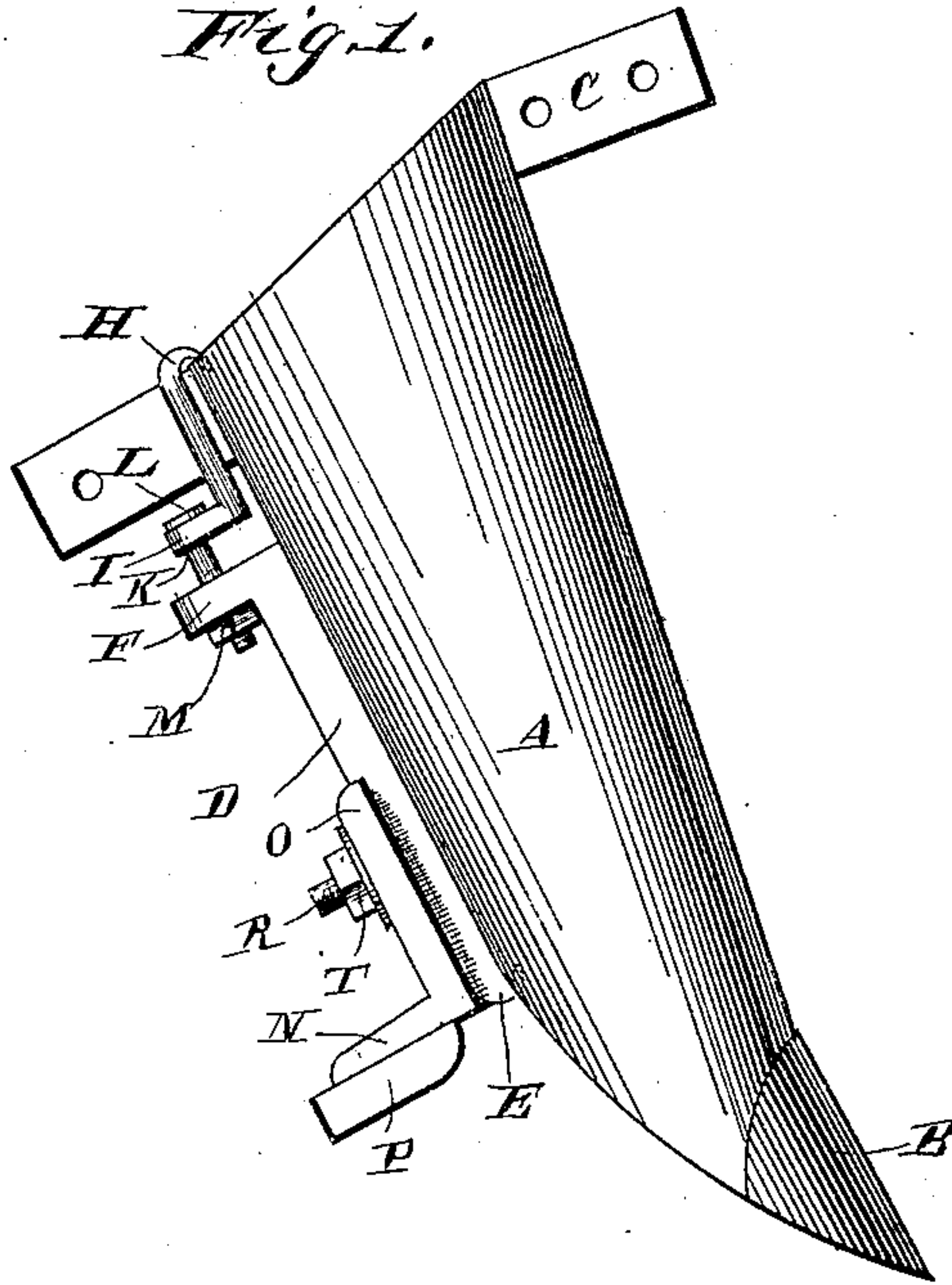


Fig. 2.

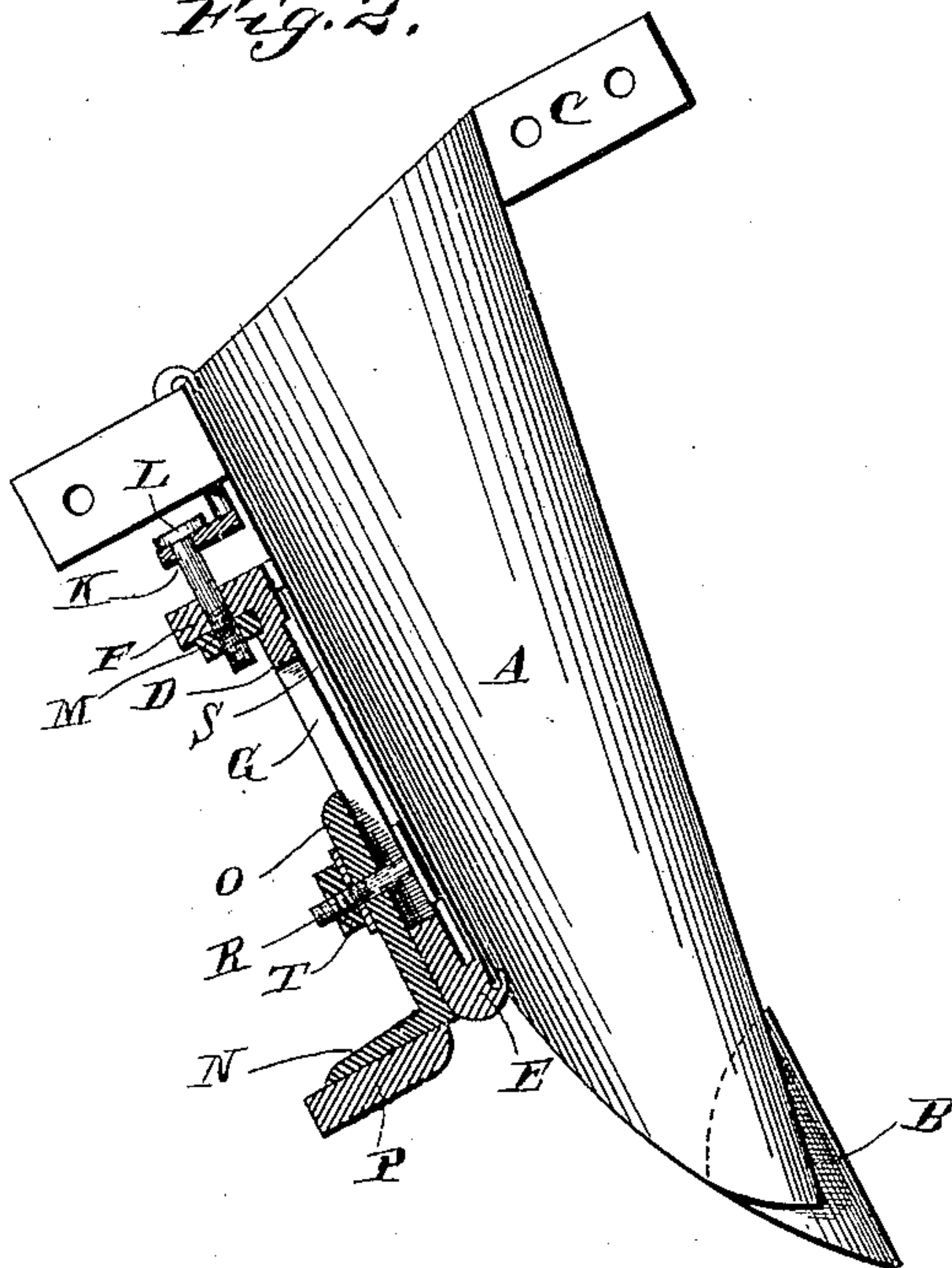
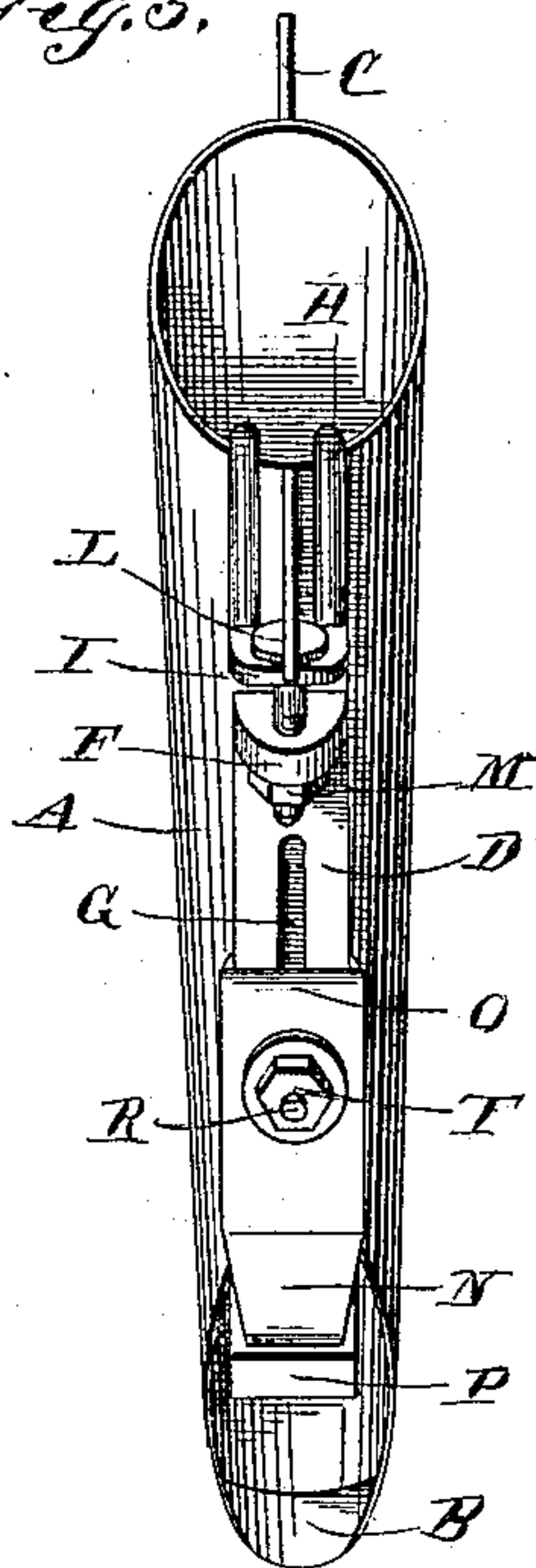


Fig. 3.



Witnesses

Charles L. Taylor
J. W. Garner

Inventor
John R. Valentine
By his Attorneys
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UNITED STATES PATENT OFFICE.

JOHN RAPHAEL VALENTINE, OF MOUNT JACKSON, VIRGINIA, ASSIGNOR OF
ONE-HALF TO SAMUEL MOORE, OF SAME PLACE.

ATTACHMENT FOR SEED-DRILLS.

SPECIFICATION forming part of Letters Patent No. 356,340, dated January 18, 1887.

Application filed September 30, 1886. Serial No. 214,983. (No model.)

To all whom it may concern:

Be it known that I, JOHN RAPHAEL VALENTINE, a citizen of the United States, residing at Mount Jackson, in the county of Shenandoah and State of Virginia, have invented a new and useful Improvement in Attachments to Seed-Drills, of which the following is a specification.

My invention relates to an improvement in seed-drills; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claims.

The object of my invention is to provide a vertically-adjustable covering-foot, which is attached to the boot of a drill-hoe, whereby the depth to which the hoe runs in the furrow may be regulated, and whereby the seeds may be planted at any desired depth in the ground. These objects I attain by the construction hereinafter described, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the boot and hoe of a grain-drill provided with my improvements. Fig. 2 is a similar view of the same, partly in section. Fig. 3 is a rear elevation.

A represents the boot of a grain-drill.

B represents the hoe or furrow-opener at the lower end of the boot.

C represents the ears, which project from the front and rear sides of the boot at the upper ends thereof, to provide means whereby it may be attached to the drilling-machine.

D represents a link, which is provided at its lower end with a hook, E, adapted to engage the lower edge of the boot, on the rear side thereof. The upper end of the said link is provided with a rearwardly-extending lug or ear, F, and in the said link is made a vertical elongated slot, G.

H represents a pair of hooks, which engage the upper edge of the boot on opposite sides of the rear ear, C, and the lower ends of the said hooks are united together by a plate, I, having a vertical opening, K.

L represents a screw, which passes downwardly through the opening K, and has the head that bears upon the plate I, the lower end of the said screw passing through a vertical opening which is made in the lug F of

the link. On the lower end of the said screw is a nut, M, the function of which is to bear against the under side of the lug F, and when the said nut is turned in one direction to draw the hook H and the lug D toward each other, and thereby firmly secure the said link and hooks on the rear side of the boot.

N represents a ledge-plate, which is provided with a vertical arm, O, that bears against the rear side of the link. To the under side of the ledge-plate is secured a covering-foot, P, the front edge of which is rounded, as shown, and is thereby adapted to slide freely over the ground. A set-screw, R, has its head secured in a groove, S, on the front side of the link, and the shank of the said screw passes rearwardly through the slot G, and also through an opening which is made in the arm O. A clamping-nut, T, is screwed onto the said screw, and bears against the rear side of the arm O.

By this construction it will be readily understood that the covering-foot may be adjusted vertically on the rear side of the boot. The covering-foot rests normally on the ground when the drill is in operation, and thus gages the depth at which the hoe operates in the ground, and also covers the furrow which is opened by the hoe and enables the seed to be planted uniformly and at any desired depth.

I am aware of the patent to Barber, No. 324,805, dated August 25, 1885.

Having thus described my invention, I claim—

1. The combination, in an attachment to seed-drills, of the slotted link D, having the hook E at its lower end to engage the lower edge of the boot, and the lug or ear F at its upper end, the hook H separate from the link to engage the upper edge of the boot, the bolt L, connecting lug F and the hook H, and having the nut M, whereby the link may be clamped on the rear side of the boot, the ledge-plate having the vertical arm O, bearing against the link and secured thereto by a clamping-screw working in the slotted link, and the coverer P, attached to the ledge-plate, all combined and arranged to operate for the purpose set forth, substantially as described.

2. In an attachment to seed-drills, the link

D, provided with lug or ear F, and having the integral hook E at its lower end to engage the lower end of the boot or spout, in combination with the hook H, for claspings the upper end, 5 and having plate I, the bolt L, separate from the link connecting the lug F of hook H with the link D, and the coverer P, adjustably attached to the link, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 10 presence of two witnesses.

JOHN RAPHAEL VALENTINE.

Witnesses:

L. TRIPLETT, Jr.,
SAML. MOORE.