

No. 698,927.

Patented Apr. 29, 1902.

A. GALE.
SEED PLANTER.

(Application filed July 31, 1901.)

(No Model.)

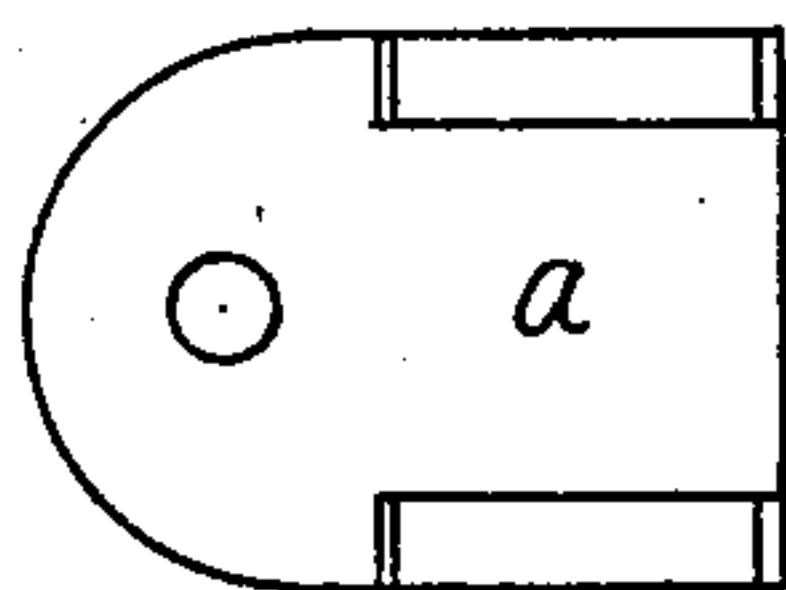
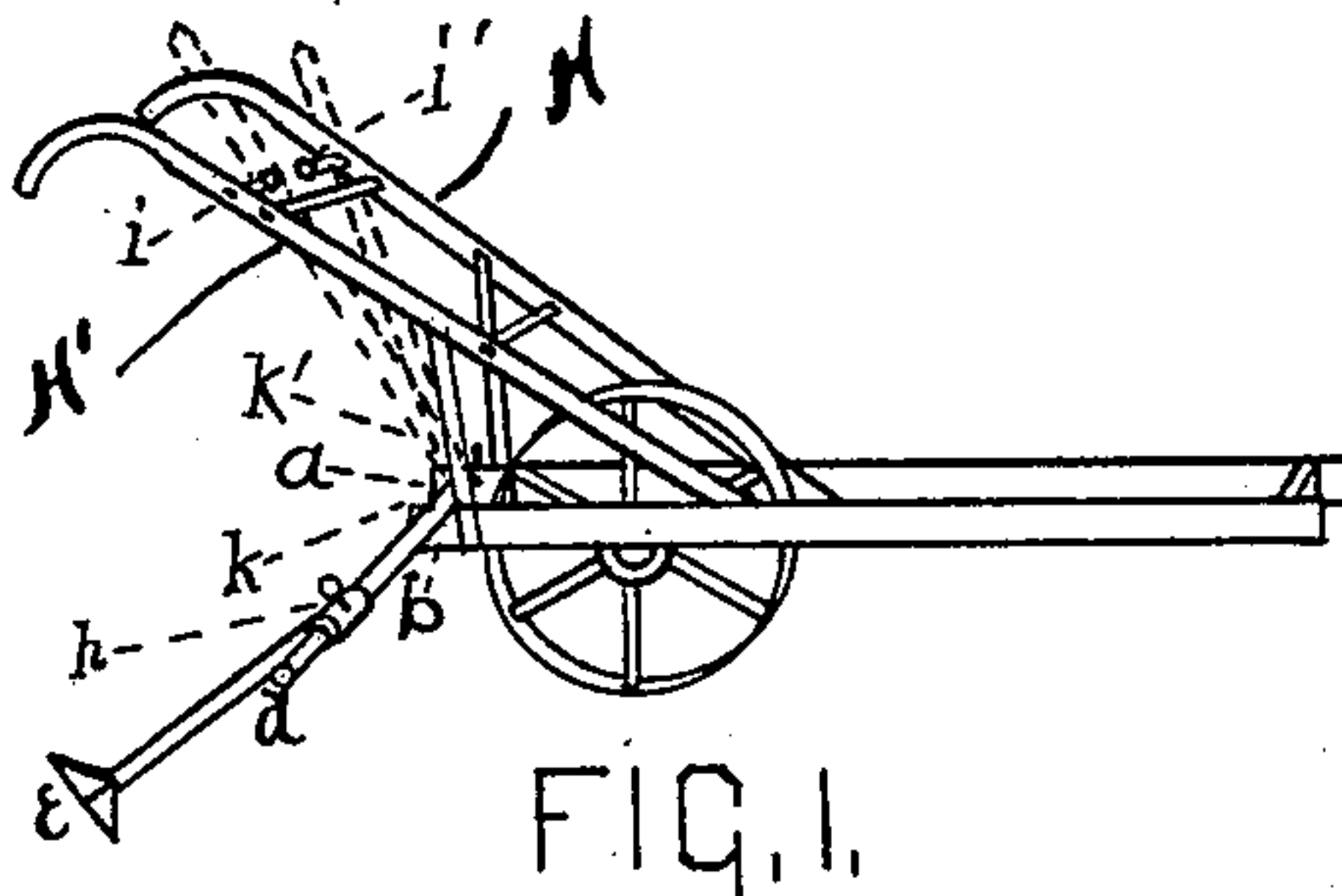


FIG. II.

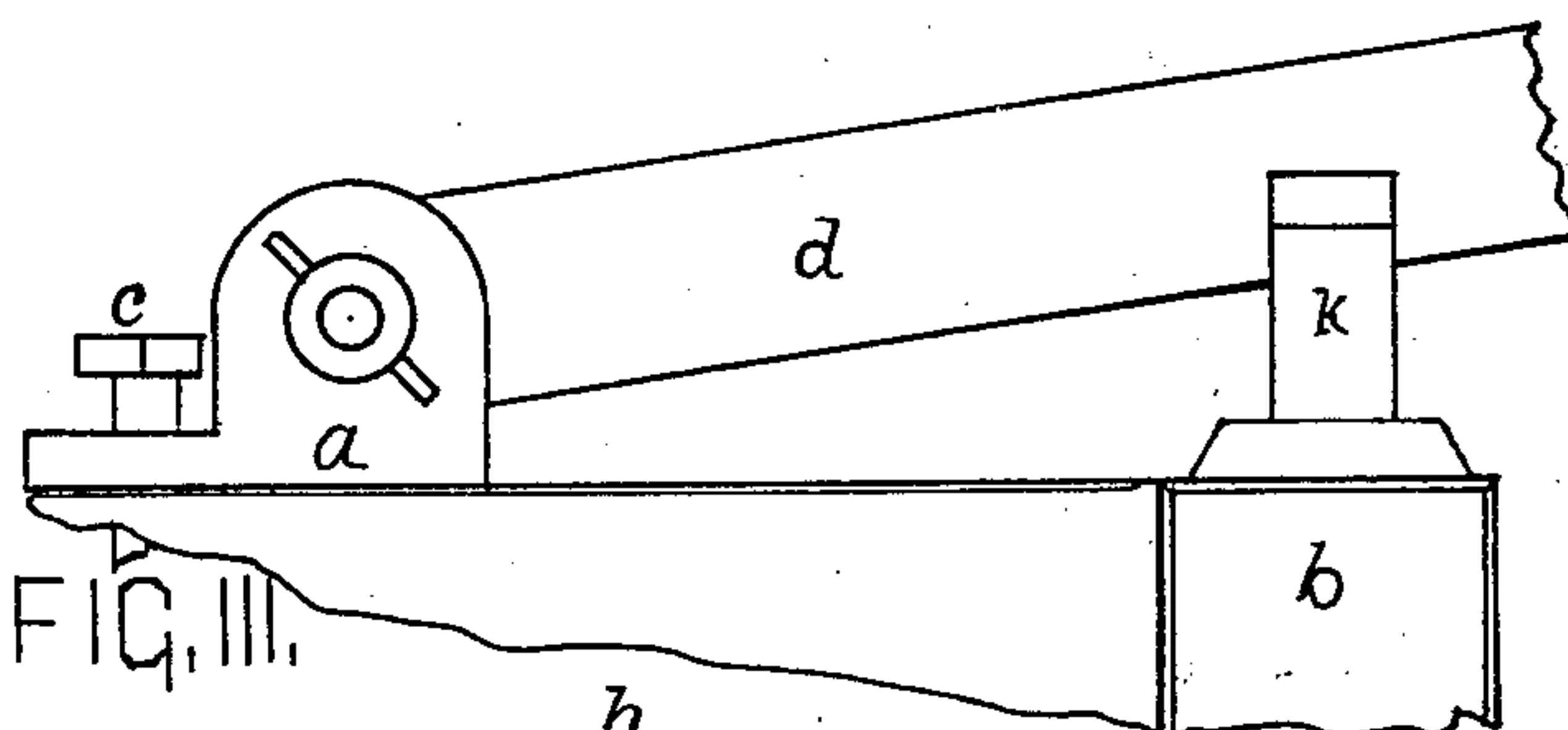


FIG. III.

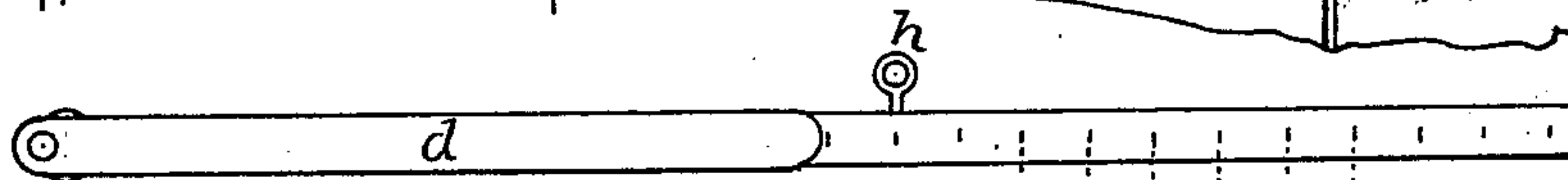


FIG. IV.

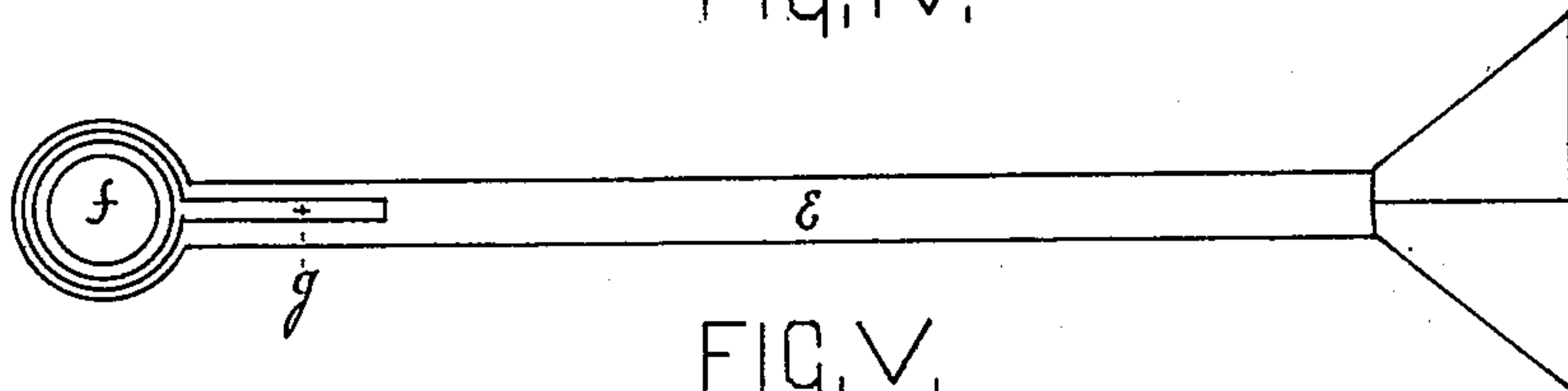


FIG. V.

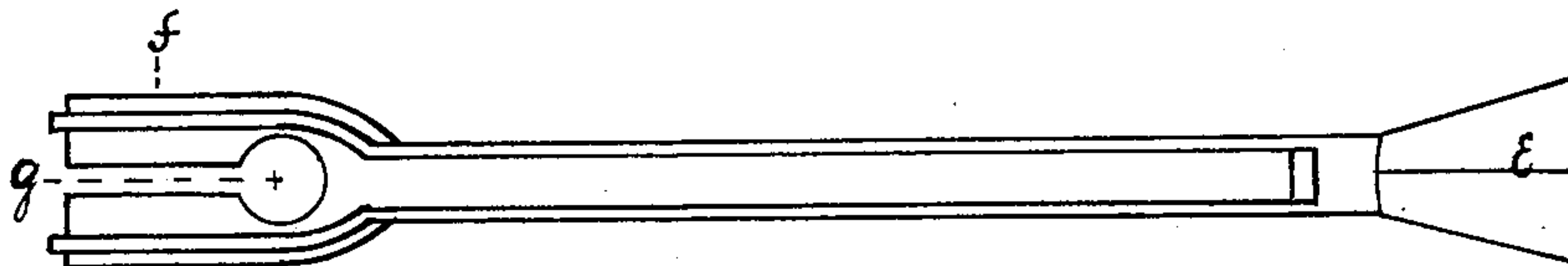


FIG. VI.

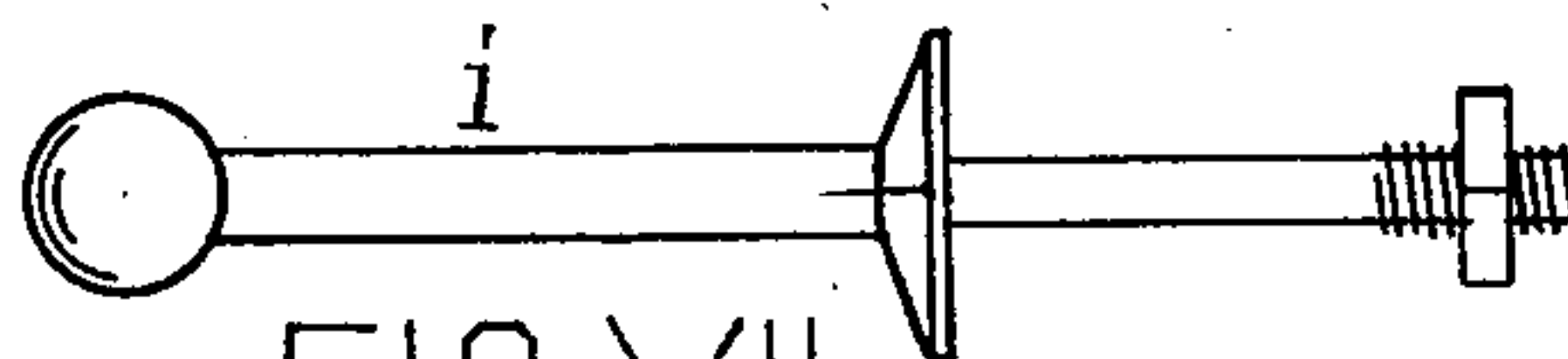


FIG. VII.

WITNESSES:

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SEED-PLANTER.

SPECIFICATION forming part of Letters Patent No. 698,927, dated April 29, 1902.

Application filed July 31, 1901. Serial No. 70,400. (No model.)

To all whom it may concern:

Be it known that I, ANDREW GALE, a citizen of the United States, residing at Chicopee, in the county of Hampden and State of Massachusetts, have made and invented certain new and useful Improvements in Seed-Planters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of my said improvements; Fig. 2, a top elevation of the spacing-bar step; Fig. 3, a side elevation of such step and a portion of the bar; Fig. 4, an elevation of the spacing-bar; Fig. 5, a side elevation of the marker; Fig. 6, an edge elevation of the same, and Fig. 7 the lugs for holding the marker in an elevated position.

The object of my invention is to provide means for spacing or marking the rows of corn or other kinds of seed to be planted, so as to make such rows parallel and equidistant at all points and to do this and the planting at one and the same operation.

In carrying out my invention I provide what I term the "step" *a*, which is attached to the center of the rear part of the planter-frame *b* by means of a bolt *c* in such a way that said step readily turns or whirls horizontally on bolt *c* as a pivot. I also provide a spacing-bar *d* of suitable length always to cover the distance from center to center of the rows. One end of bar *d* is jointed to step *a*, as shown in Fig. 3. The other end of the bar *d* I make round and space or graduate into inches or other suitable degrees. I also provide the same with holes for spacing-pin *h*. I also provide the double-pointed marker *e*, of iron, steel, or other suitable material, provided with an eye *f*, adapted to turn on the spacing-bar *d*, and also with a slot *g*, through which passes the pin *h*, which holds the marker at any given point on the bar *d*.

i i' are lugs or shoulders attached to either handle *H H'* of the planter-frame, inside which the bar *d* may be held or rested while turning at ends of rows or traveling from field to field. The spacing-bar may also be held in the operator's hand while turning the ma-

chine or moving from field to field. I also provide the pins or shoulders *k k'*, which I attach to or make a part of the planter-frame and arrange in such a manner that the spacing-bar *d* when in operation shall rest in front of and against one or the other of such pins *k k'*, thereby holding the bar *d* at right angles to the moving direction of the planter.

In operation, having determined the distance desired between rows, the marker *e* is moved to the point desired on bar *d* and there secured by pin *h*, the eye *f* and the slot *g* being of sufficient size to allow the marker to turn on the bar and so accommodate itself to the unevenness or irregularity of the ground. In turning at the ends of rows the bar *d* is raised and held inside lugs *i i'* or in the hand of the operator, and when the turn is made the bar and marker are again let down on the opposite side of the machine, where it is held in place alternately by pins *k k'*. All these movements of the bar *d* are permitted and provided for by means of its hinge-joint to step *a* and the pivoting of step *a* to frame *b*.

Thus, having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a seed-planter or analogous machine, a marker-arm connected at its inner end to a suitable part of the machine by a universal joint and free to be moved in any direction on said joint, a row-marker carried by said arm, means preventing rearward movement of the marker-arm when it is brought to operative position, handles on the machine, and means on the handles in engagement with which the marker-rod is adapted to be moved to hold the same in an elevated position.

2. In a seed-planter or analogous machine, the combination with the frame of the machine, of a marker-arm connected to an intermediate part of the frame by a universal joint and adapted to rest at a point between its ends upon one side or the other of the frame, said arm being free to be moved in any direction upon the universal joint, a row-marker carried by said arm, projecting stops one at each side of the frame in front of which the arm is adapted to be engaged when rest-

ing on the frame to prevent rearward movement thereof when brought into either of its two operative positions, handles projecting upwardly from the frame, and means on the
5 handles with which the rod is adapted to be engaged to hold the same in an elevated position.

In testimony whereof I have signed my name to this specification in the presence of two witnesses.

ANDREW GALE.

Witnesses:

SIDNEY SANDERS,
WILLIAM P. NOBLE.