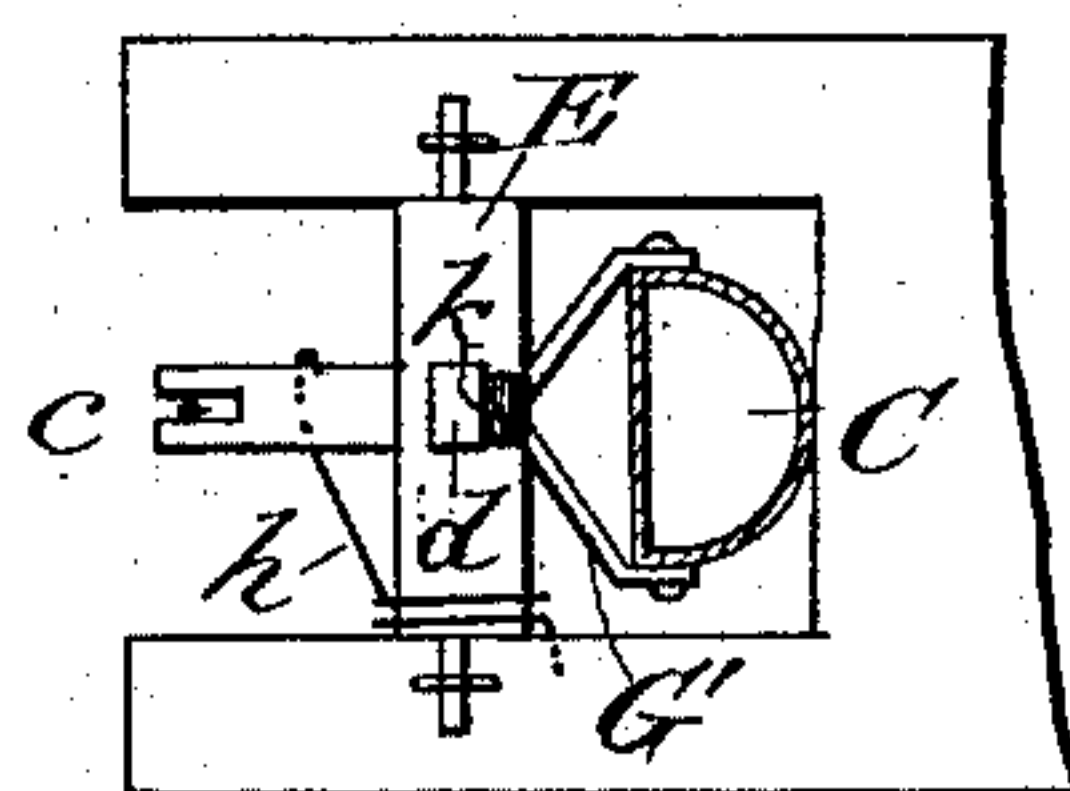
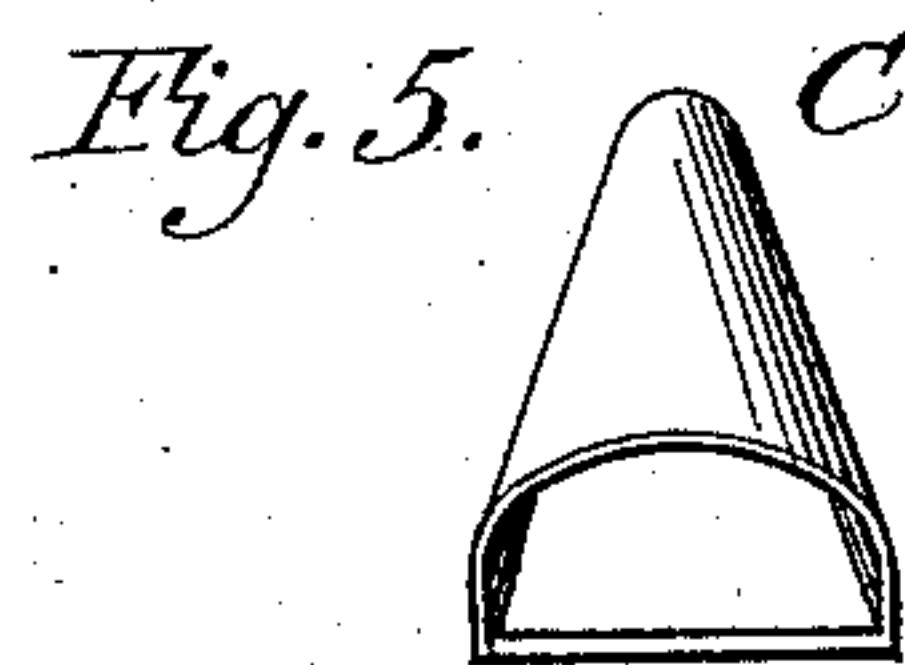
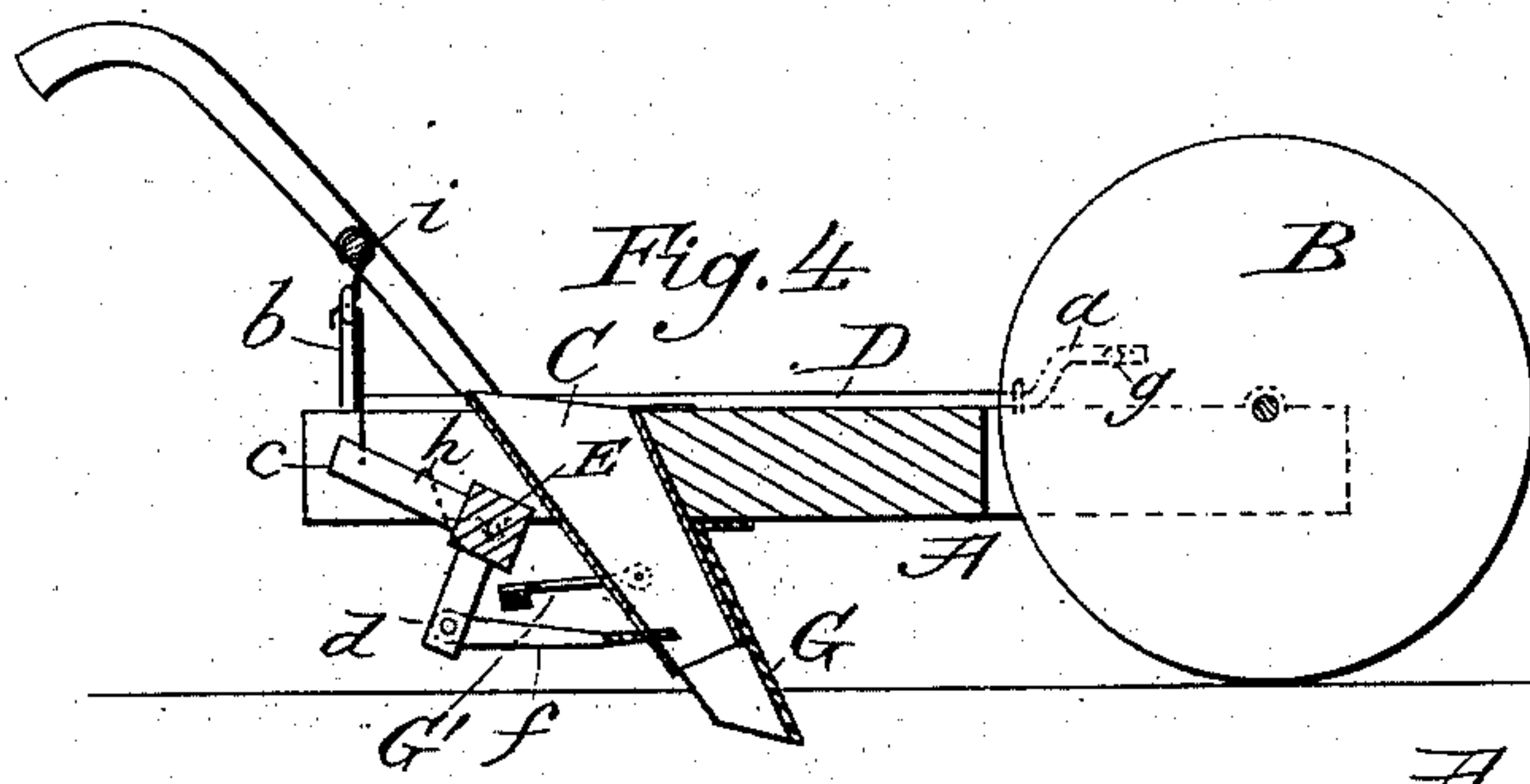
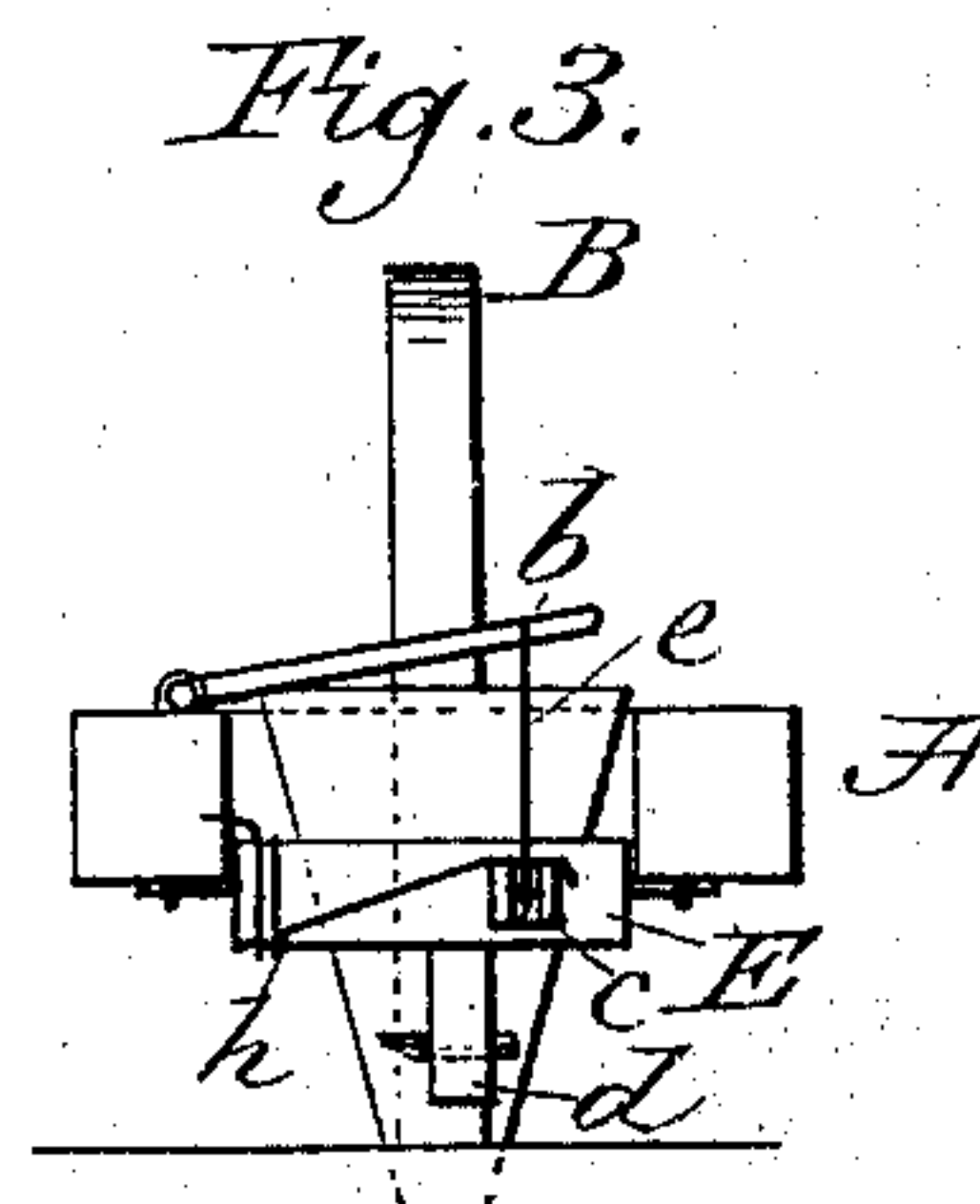
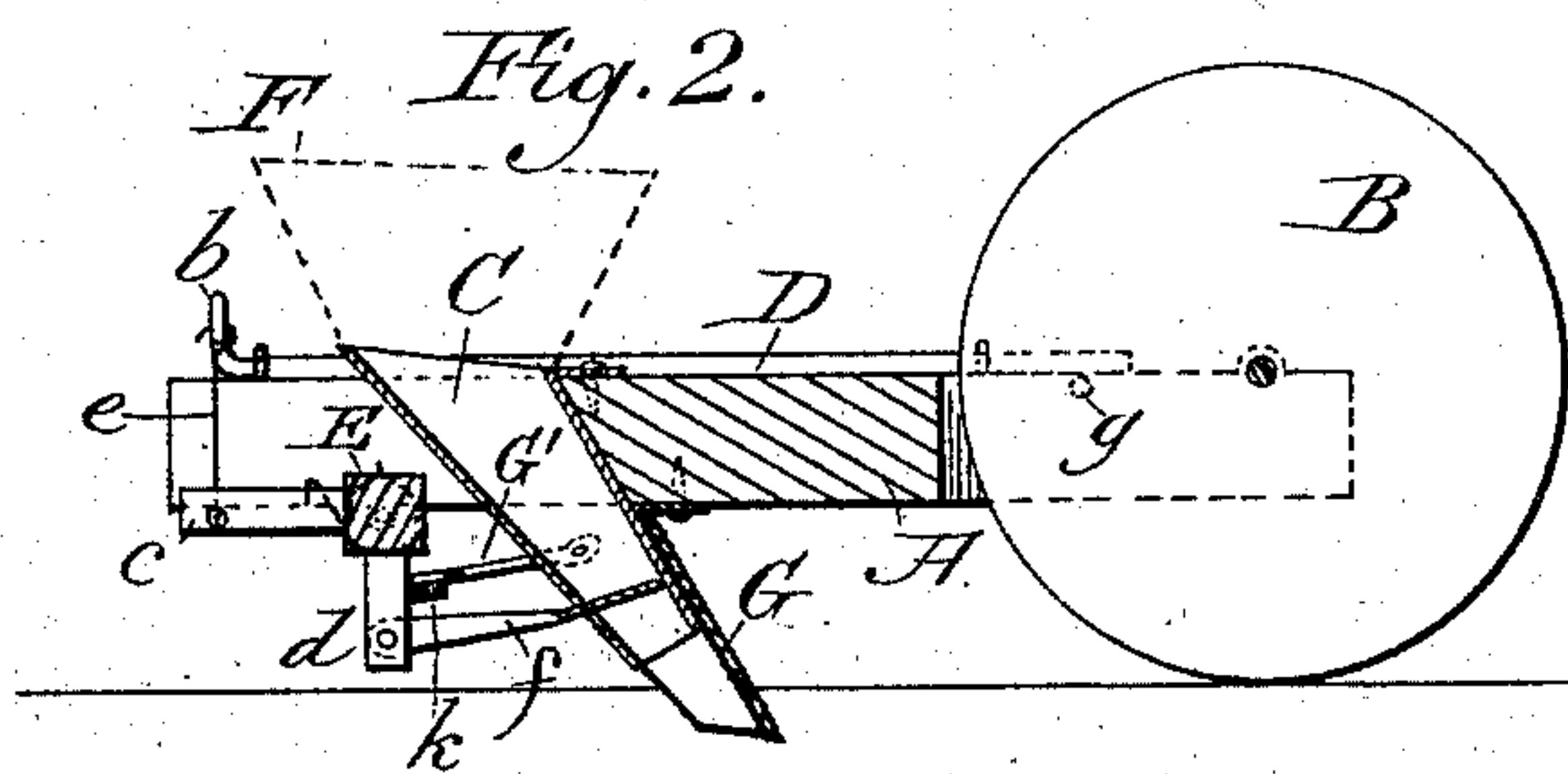
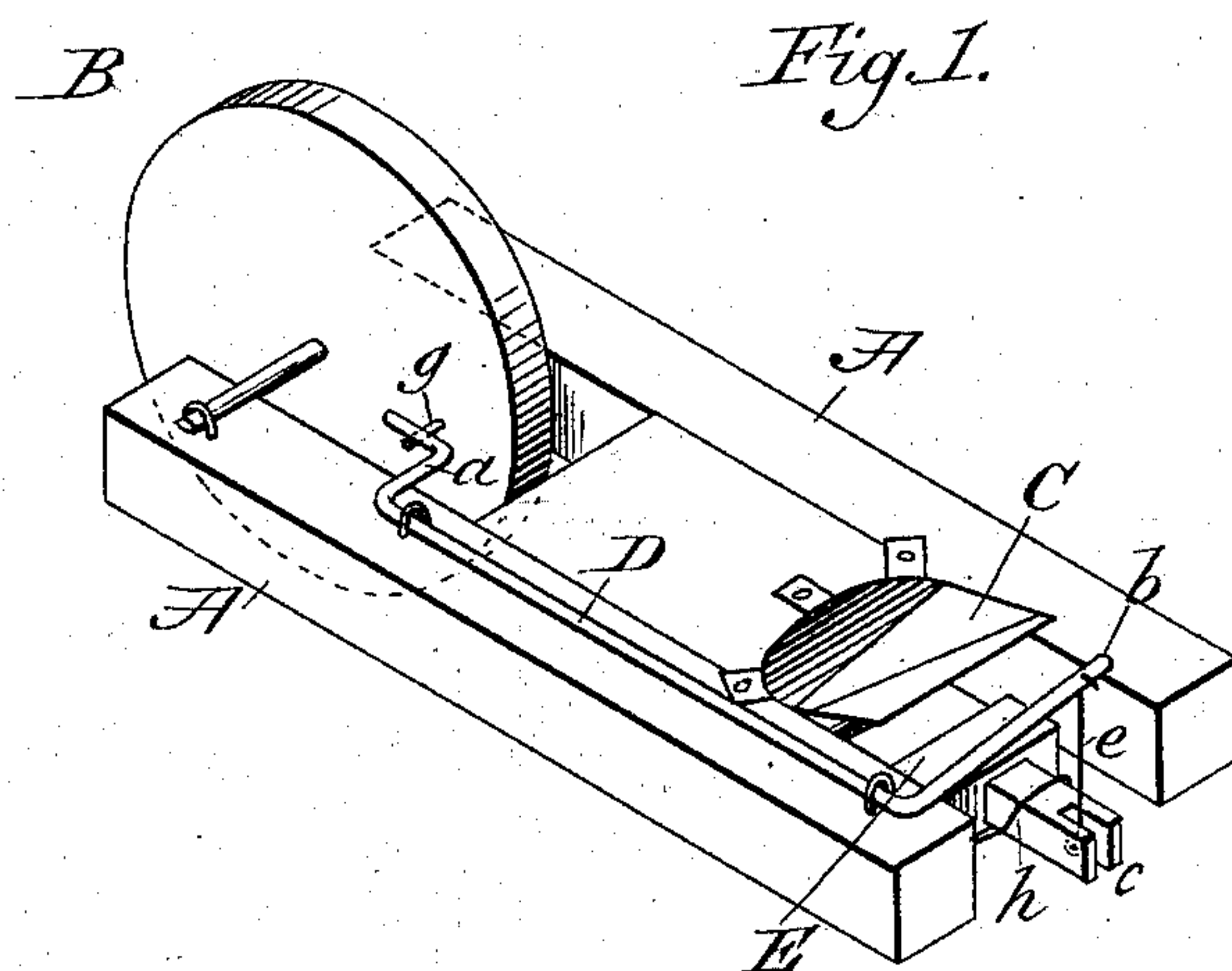


(No Model.)

P. DEVENING.  
SEED PLANTER.

No. 284,397.

Patented Sept. 4, 1883.



Attest:

J. H. Schott  
A. R. Brown.

Fig. 6.

Fig. 5.

*Inventor:*

Inventor:  
Philip Downing  
Cpr J. C. Parker  
att'y



# UNITED STATES PATENT OFFICE.

PHILIP DEVENING, OF RAY'S CROSSING, INDIANA.

## SEED-PLANTER.

SPECIFICATION forming part of Letters Patent No. 284,397, dated September 4, 1883.

Application filed May 22, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, PHILIP DEVENING, a citizen of the United States, residing at Ray's Crossing, in the county of Shelby and State of Indiana, have invented certain new and useful Improvements in Seed-Planters; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in dropping attachments for seed-planters; and it consists in the peculiar construction and arrangement of parts, as will be hereinafter more fully described and claimed.

In the annexed drawings, Figure 1 is a perspective view of my improved dropping mechanism as applied to a corn-planter. Fig. 2 is a longitudinal section. Fig. 3 is an end view. Fig. 4 is a longitudinal section, showing the seed-slide drawn back. Fig. 5 is a detail view of the seed-spout, and Fig. 6 a view in detail showing the forked brace and buffer.

The letter A indicates the frame of an ordinary walking corn-planter, provided with the usual guide-handles, and supported by the pilot or operating wheel B, which is journaled in bearings in a recess in the forward part of the frame.

C represents the seed-spout secured to the frame, and having three sides flat and one side oval, as seen in Fig. 5. It is tapering, and is placed at the rear of frame A between the side pieces, as shown. Above this spout is placed the seed-hopper F.

Secured on the under side of the frame is the share G, for opening the furrow. It extends around and in front of the seed-spout C.

A rod or rock-shaft, D, extends along the top of the frame on one side, and is journaled thereto. This rod is bent at its end nearest the wheel B, forming a crank, *a*, which is parallel with and a short distance from the face of said wheel B. The rear end of the rod D is bent, forming the arm *b*.

Extending across and pivoted to the under

side of the frame A is a rock bar or shaft, E, which has secured to it two short arms, *c* and *d*, at right angles to each other. The arm *c* is connected with the arm *b* of the rock-shaft D by the rod *e*, which is pivoted in a fork in said arm *c*. Pivoted to the arm *d* is the seed-slide *f*, which works or plays in the spout C through an aperture in the same.

On the face of the operating-wheel B is one or more pins or lugs, *g*, so arranged as to strike and raise the crank *a* when the wheel revolves in operating the planter-slide.

A spring, *h*, is attached to the frame A, and coiled around the shaft E at one end. The other end of said spring is hooked over the arm *c*, the purpose being to return the arm *c* to its normal position after it has been raised by the operating mechanism before described.

Between the arm *d* and the seed-spout C there is a forked iron brace, *G'*, connected to the spout C by rivets, as seen in Fig. 6. To the end of the fork is secured a rubber block or buffer, *k*, which affords a resting-place or brace for the arm *d* when the slide is closed, and thus prevents the slide from passing through the spout on the opposite side.

As the wheel B revolves, the pin *g* strikes the crank *a*, raising it and the rock-shaft arm *b*, which in its turn, by means of the rod *e*, turns the rock-bar E, which raises the arms *c* and *d*, thus drawing back the seed-slide, and allowing the corn to fall into the furrow two or more grains at a time, and at the required distance apart, according to the number of pins *g* on the wheel B. As soon as the pin *g* passes out of contact with the crank *a* the spring *h* returns the slide to its place in the spout, the arm *d* striking against the buffer *k*, and thereby preventing injury to the spout C.

In case it is desired to drill instead of drop corn, the dropping mechanism may be thrown out of gear with the pin *g*, and held so by means of a hook, *i*, on one of the rounds of the handle, as shown in Fig. 4, keeping the slide out of the way, and allowing the corn to drop continuously through the spout to the ground, one grain at a time, as usual.

It is obvious that the device may be used for sowing various kinds of seeds.

Having thus described my invention, what I



claim as new, and desire to secure by Letters Patent, is—

5 The combination of the frame A, wheel B, having pins *g*, the rock-shaft D, provided with arms *a b*, the seed-spout C, forked brace G', attached thereto, and carrying buffer *k*, the rock-bar E, having arms *c d* and spring *h*, the seed-slide *f*, attached to the arm *d*, and the

rod *e*, for connecting the arms *b c*, all substantially as shown and described. 10

In testimony whereof I affix my signature in presence of two witnesses.

PHILIP DEVENING.

Witnesses:

THOMAS B. ADAMS,  
L. T. MICHENER.