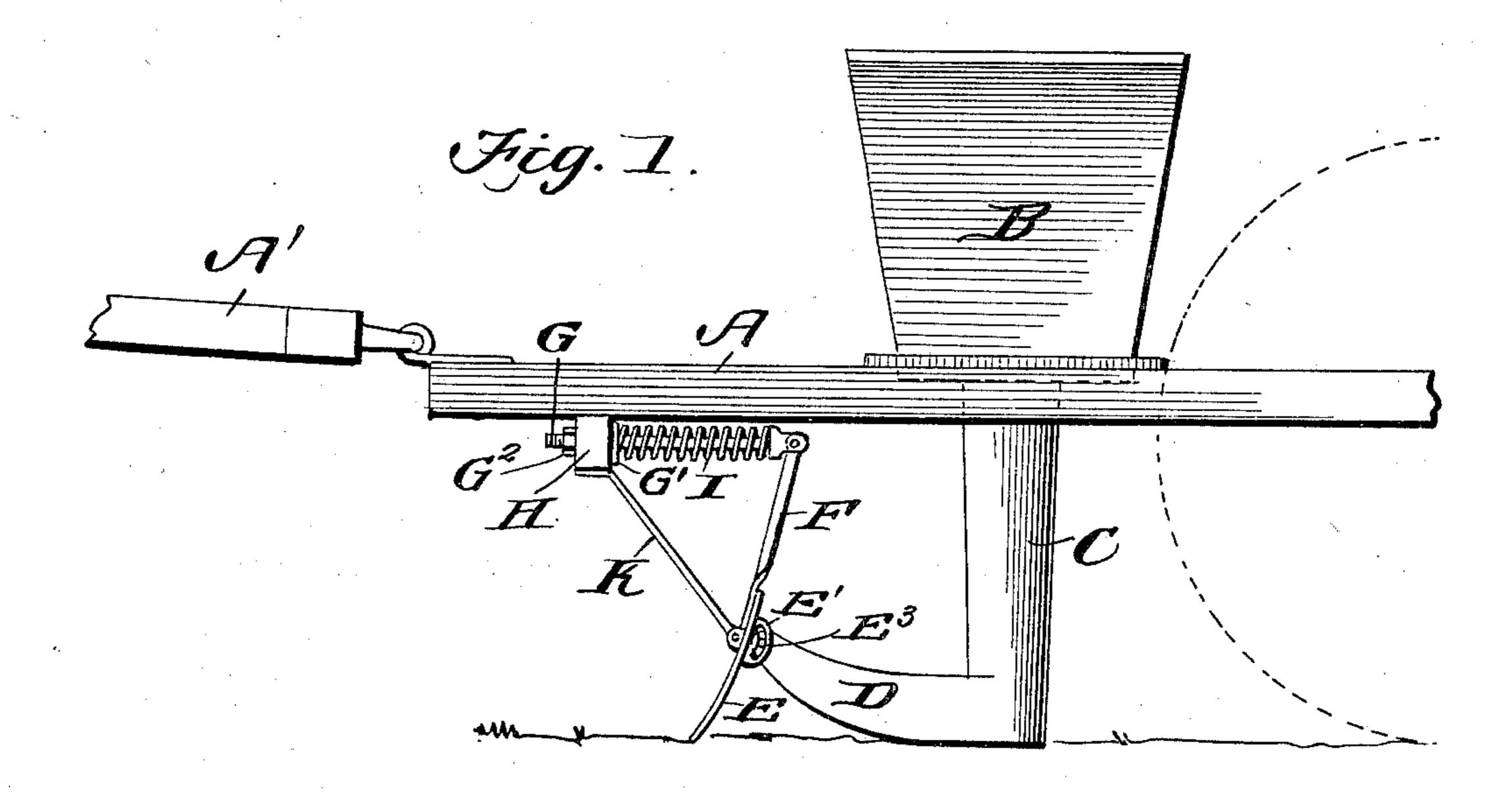
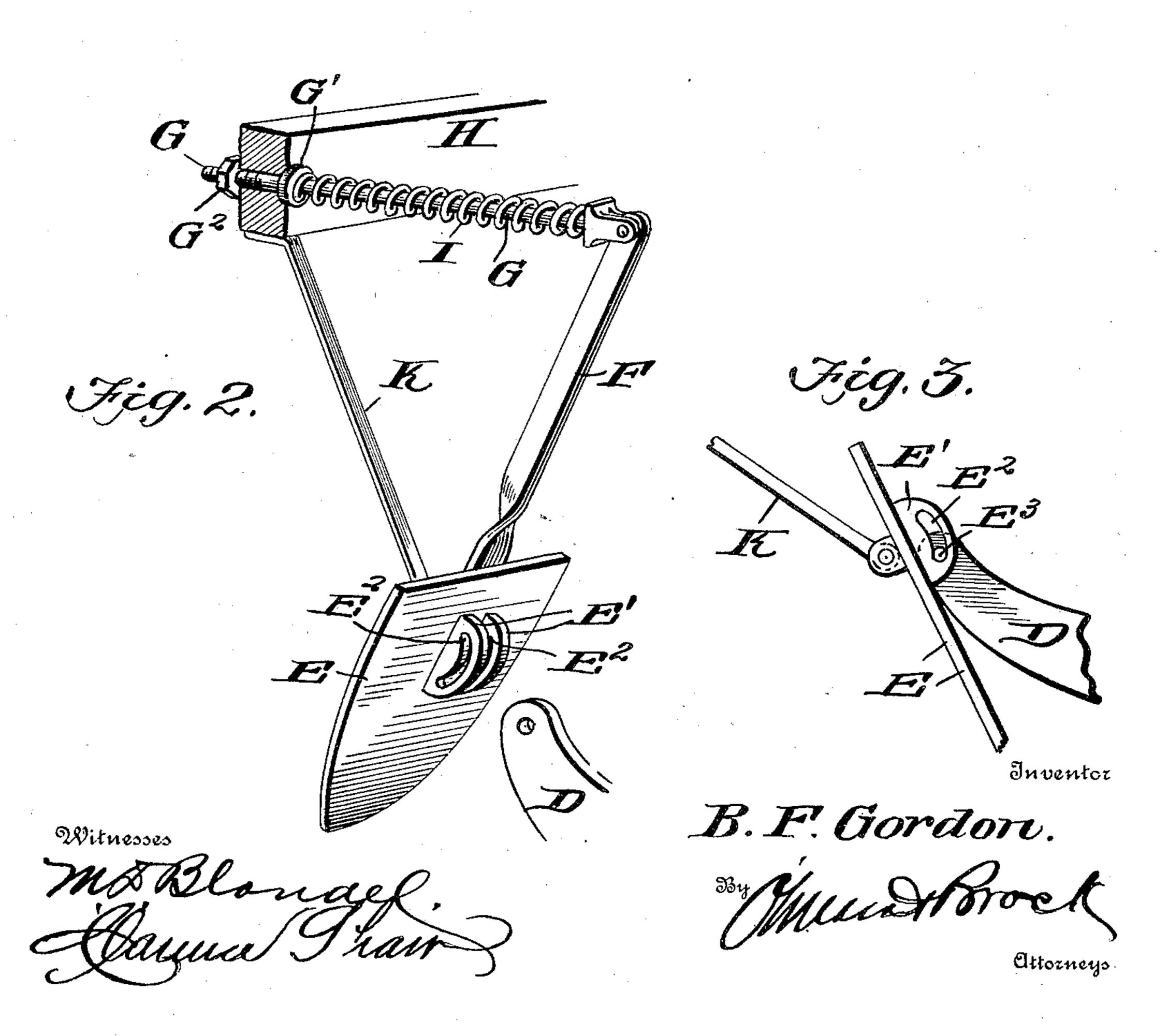
### B. F. GORDON.

## CORN PLANTER ATTACHMENT.

APPLICATION FILED SEPT. 20, 1902.

NO MODEL.





# United States Patent Office.

## BENJAMIN F. GORDON, OF DEODATE, PENNSYLVANIA.

### CORN-PLANTER ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 726,423, dated April 28, 1903.

Application filed September 20, 1902. Serial No. 124,218. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. GORDON, a citizen of the United States, residing at Deodate, in the county of Dauphin and State of 5 Pennsylvania, have invented a new and useful Improvement in Corn-Planter Attachments, of which the following is a specification.

This invention relates generally to cornplanters, and more particularly to the conto struction and arrangement of the furrowopener arranged in advance of the shoe connected to the delivery-chute; and the object of the invention is to provide a furrow-opener which shall be normally held in operative po-15 sition and which will readily yield whenever an obstruction is encountered, thereby avoiding breaking any of the parts.

With these objects in view the invention consists in the novel features of construc-20 tion, combination, and arrangement, all of which will be fully described hereinafter and pointed out in the claims.

fication, Figure 1 is a side elevation of a por-25 tion of the corn-planter, showing my invention connected thereto. Fig. 2 is a detail perspective view with my improvement, and Fig. 3 is an enlarged detail showing the manner of connecting the furrow-opener to the 30 shoe.

Referring to the drawings, A indicates the main frame, to which the draft attachment A' is connected.

B indicates the seedbox, and C the chute 35 or tube leading therefrom and having the shoe D projecting forwardly from its lower end.

The furrow-opener E may be of any desired construction, provided it terminates at a point at its lower end. This furrow-opener E is 40 provided with parallel lugs E' upon the rear face thereof, said lugs having curved slots E<sup>2</sup>. The forward end of the shoe D is inserted between the slotted lugs, and a pin E<sup>3</sup> is passed through the said slotted lugs and the forward 45 end of the shoe, thereby pivotally connecting the furrow-opener to the forward end of the shoe. A standard F is rigidly connected to the furrow-opener and projects upwardly therefrom, said standard being pivotally con-50 nected to the rear end of a rod G, which passes horizontally through a beam H, arranged upon

the under side of the main frame A. A collar

| G' is arranged upon the rod G upon the inner side of the beam H, and a nut G<sup>2</sup> is secured upon the outer end of the rod upon the forward side 55 of the beam H. A spiral spring I surrounds the rod G and bears against the head of the same at the rear end and against the collar G' at the forward end.

K designates the rearwardly-extending 60 brace-bar, which is secured at its upper end to the beam H and is pivotally connected at its lower end to the forward side of the furrow-opener. This construction serves to hold the furrow-opener in its proper position and 65 relieves the shoe from lateral and longitudinal strain. The spring I will hold the furrow-opener in its normal position, as indicated in Figs. 1 and 2. When, however, an obstruction is encountered, the furrow-opener 70 will turn upon its pivots, compress the spring, and force the rod G through the beam H, and the moment the obstruction is passed the spring G will return all the parts to their In the drawings forming a part of this speci- | normal position. By having the lugs E' 75 slotted it is obvious that the furrow-opener can move back and forth without interfering with the position of the tube.

> It will thus be seen that I provide a simple and efficient attachment which can be used 80 in connection with the corn-planters now in use and which will serve to open the furrow in advance of the shoe, and will prevent the shoe coming in contact with obstructions, and will thereby avoid damage to the depending 85 portions of the corn-planter.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination with a shoe of a fur- 90 row-opener pivotally connected to the forward end of said shoe and spring-actuated means for holding the furrow-opener in its normal position, as specified.

2. The combination with a shoe, of a fur- 95 row-opener pivotally connected thereto, a depending brace-bar to which the furrow-opener is also pivoted and spring-actuated means for holding the furrow-opener in its normal position, as specified.

3. The combination with a shoe, of a furrow-opener pivotally connected thereto, a standard projected upwardly from the said furrow-opener, and a spring-actuated horizontally-movable rod to which the upper end of the standard is connected, as specified.

4. The combination with the main frame, delivery tube and shoe of the furrow-opener, baving parallel slotted lugs upon the rear side, the standard connected to the furrow-opener, the rod pivotally connected to the said standard, the beam through which the rod passes, the nut and collar and the spiral

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spring arranged as described and the depend- 10 ing brace-bar rigidly connected to the beam and pivotally connected to the front side of the furrow-opener, as specified.

BENJAMIN F. GORDON.

Witnesses:
CYRUS E. SHENK,
JACOB BOWMAN.