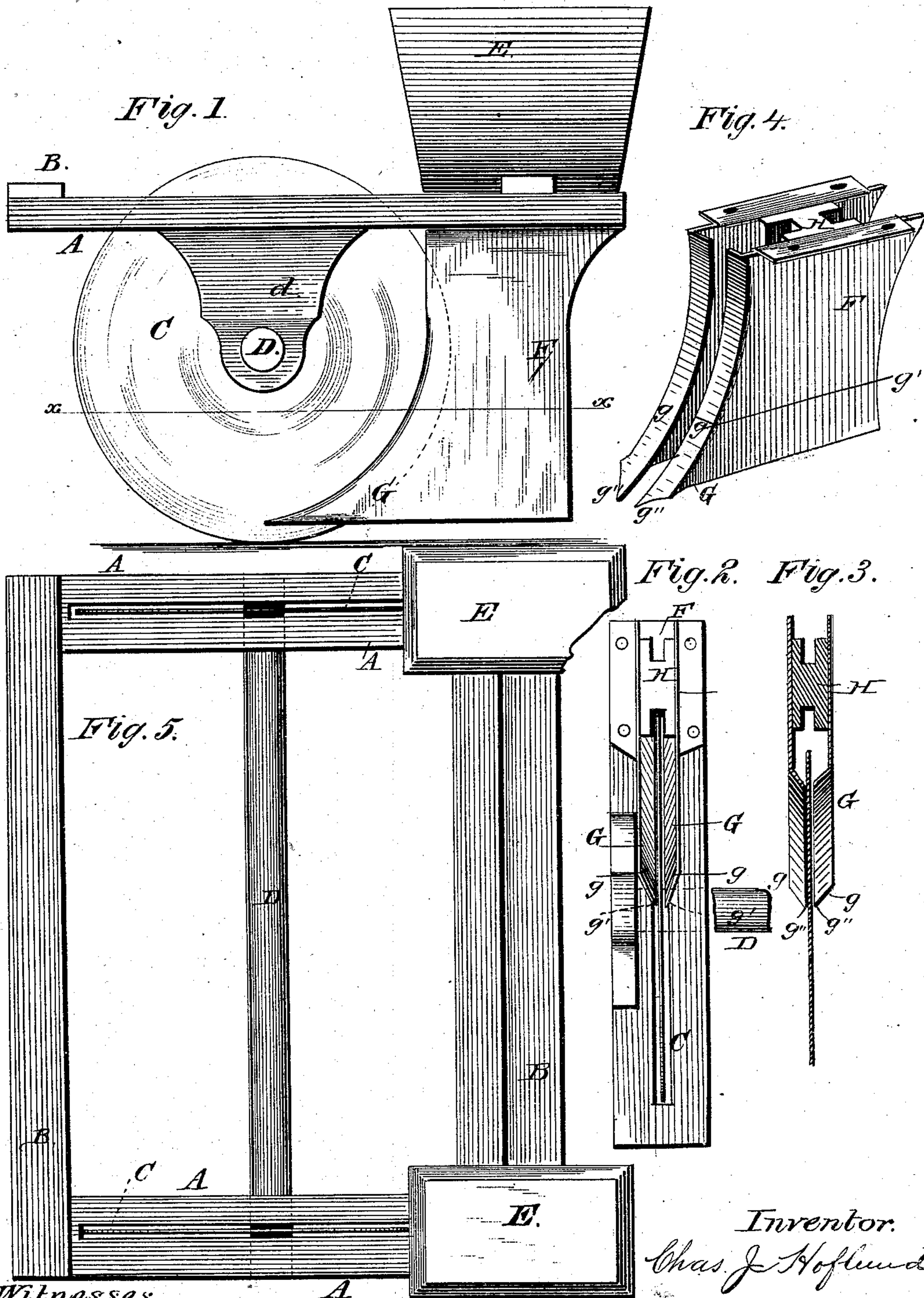


(Model.)

C. J. HOFLUND.
Corn Planter.

No. 237,278.

Patented Feb. 1, 1881.



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES J. HOFLUND, OF OSCO, ILLINOIS.

CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 237,278, dated February 1, 1881.

Application filed November 6, 1880. (Model.)

To all whom it may concern:

Be it known that I, CHARLES J. HOFLUND, a citizen of the United States, residing at Osco, in the county of Henry and State of Illinois, have invented certain new and useful Improvements in Corn-Planters; and I do hereby 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 ap-
10 pertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification, in which—

15 Figure 1 is a side elevation of a construction embodying my invention. Fig. 2 is a plan of the rolling colter and seed-tube, seen from below. Fig. 3 is a horizontal sectional plan in the line *xx* in Fig. 1. Fig. 4 is a perspective
20 of the seed-tube. Fig. 5 is a top plan of the forward frame of a corn-planter with my improvement.

This invention relates to corn-planters; and it consists in a rolling colter in advance of a
25 seed-tube, from which seed-tube pointed runners extend forward close to and on each side of the rolling colter, and are adapted to enter the soil on each side of the rolling colter as it is rolled forward by the passage of the ma-
30 chine, and to open a furrow for the seed in the path of said colter.

The invention further consists in improvements in constructions and combinations, hereinafter described, and set forth in the claims
35 hereto annexed.

Referring to the drawings by letters, letter A represents the side bars, and B the transverse bars, of an ordinary forward frame of a corn-planter.

40 C C are rolling colters, thin and sharp, of the kind generally used with turning-plows. The colters C are fixed upon an axle, D, which has bearings in blocks *d*, that are pendent from the bars A. The colters may be otherwise se-
45 cured to the frame, if preferred; but the method described is one that will hold them so that they will run true.

E E are seed-boxes, which may contain any ordinary seed-dropping devices. From each
50 seed-box a seed-tube, F, extends downward to a plane nearly as low as the lower edge of the

colter C. From each seed-tube runners G ex-
55 tend forward on each side of the rolling colter C and terminate in points, preferably in about the same vertical plane as the axis of the colter. The runners G are a short distance from the colters C, and have inwardly-turned flanges
60 *g* on their upward and forward edges, which extend inward close to the colter. The runners G may extend upward as high as the tube F, as shown by full lines at Figs. 1 and 4, or they may terminate at their upper sides, where indicated by the lines *g'* at Fig. 4, or at any other desired and suitable height. The points
65 *g''* of the runners may be made of different forms; but I prefer to form them, as shown in the drawings, similar in exterior form to an ordinary plow-point. The lower edge of the colter C extends below the lower edge of the
70 runners G.

H is the front wall of the seed-tube, and preferably should be far enough from the colter C to prevent weeds or similar rubbish collecting between them.

In operation the rolling-colter cuts a gash
75 or furrow in the soil, and will not only cut such furrow in very hard soil, sod, &c., but will also cut through any ordinary weeds, stubble, old cornstalks, or other rubbish, and the pointed
80 runners, extending forward, as they do, close to the colter, will readily and easily enter the soil and not be interfered with by said rubbish, which, being cut in two in the path of the points of the runners, will permit the runner-points
85 to raise the rubbish and press it to one side as the runners pass and open a furrow for the passage of the seed-tube, through which tube seed may be dropped in the ordinary manner.

The runners G may be termed "forward ex-
90 tensions of the seed-tube," and the space between them termed a "groove for the reception of the rolling colter."

Should the colter pass over any rubbish which it could not cut through, its lower edge, projecting below the runners, will enable it to
95 raise the runners, so that they may pass over the same.

It will be seen that the device will be operative with the runner removed from one side
100 of the colter C.

I am aware that it is common to arrange a revolving colter in advance of a furrow-opener,

and also arranging a series of said colters upon a single shaft, and such I do not wish to be understood as claiming, broadly, as of my invention.

5 Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with a rolling colter and a seed-tube in rear thereof, runners extending
10 forward from the seed-tube on each side of the rolling colter, and terminating in points on substantially the same vertical plane and below the axis of the colter, substantially as and for the purpose specified.

15 2. In combination with a rolling colter and a seed-tube in rear thereof, runners extending forward from the seed-tube on each side of the rolling colter, and terminating in points on substantially the same vertical plane and below
20 the axis of the colter, which projects below the lower edges of the runners, substantially as and for the purpose specified.

3. In a corn-planter, in combination with a rolling colter, a seed-tube which follows the rolling colter and has a groove between its
25 forwardly-projecting and pointed sides, in which groove the rear side of the colter is located, and pointed runners G G, having inwardly-turned flanges *g* on their upward and forward edges, substantially as and for the
30 purpose specified.

4. In combination with the seed-tubes F, having forwardly-projecting sides or runners G, the rotary colters C, located between the runners G and mounted on the same shaft or
35 axle D, substantially as and for the purpose specified.

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

CHARLES J. HOFLUND.

Witnesses:

H. A. ALLEN,
W. B. RICHARDS.