

U. H. SHOCKLEY.

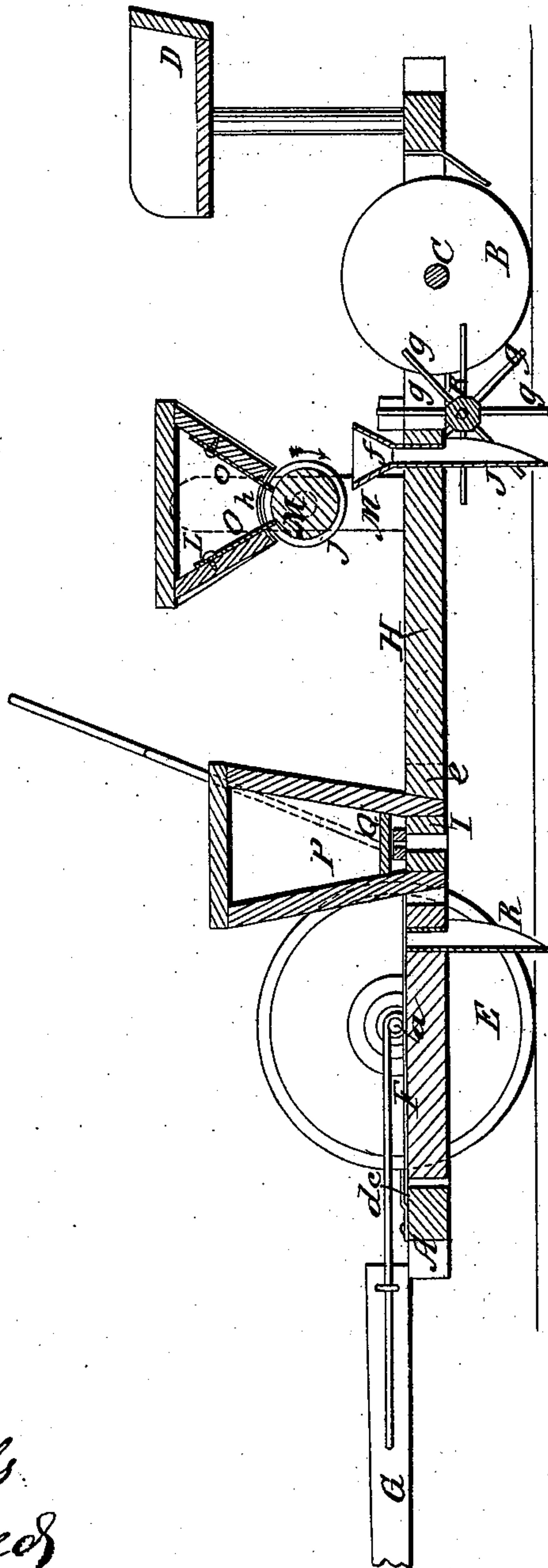
Grain Drill.

2 Sheets--Sheet 1.

No. 42,116.

Patented Mar. 29, 1864.

Fig. 1.



Witnesses.

J. W. Coombs.
Geo. Reed.

Inventor.

U. H. Shockley
per Wm. & Co.
Atty.

U. H. SHOCKLEY.

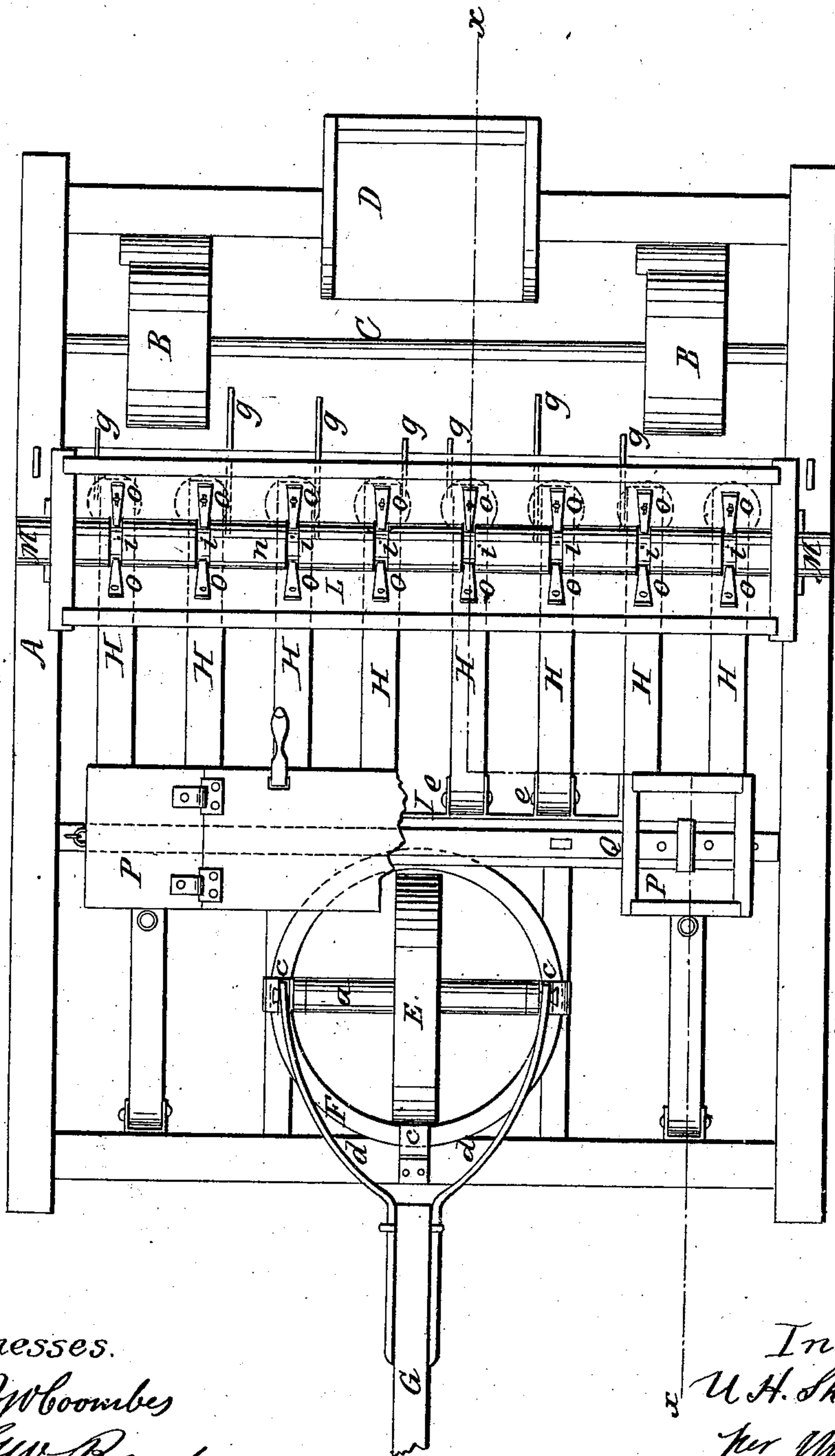
2 Sheets—Sheet 2.

Grain Drill.

No. 42,116.

Patented Mar. 29, 1864.

Fig. 2.



Witnesses.

J. W. Boombes
G. W. Reed

Inventor.
U. H. Shockley
per Munn & Co
Attys.

UNITED STATES PATENT OFFICE.

U. H. SHOCKLEY, OF LITCHFIELD, ILLINOIS.

IMPROVEMENT IN GRAIN-DRILLS.

Specification forming part of Letters Patent No. 42,116, dated March 29, 1864; antedated March 23, 1864.

To all whom it may concern:

Be it known that I, U. H. SHOCKLEY, of Litchfield, in the county of Montgomery and State of Illinois, have invented a new and Improved Seeding-Machine; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side sectional view of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a plan or top view of the same.

Similar letters of reference indicate corresponding parts in the two figures.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a rectangular frame, the back part of which is supported by two wheels, B B, placed on an axle, C, the latter rotating with the wheels.

D is the driver's seat, placed on the back part of the frame A.

The frame A is supported at its front part by a caster-wheel, E, the axle *a* of which has its bearings *b* attached to an annular plate, F, which is fitted in or between guides *c* on the frame A.

G is the draft-pole, the back end of which has hounds *d d* attached to it, said hounds being connected to the axle *a* of the caster-wheel E. By this arrangement of the caster-wheel and draft-pole it will be seen that the machine may be readily turned or guided, and within a short compass.

H represents a series of bars, the front ends of which are connected by hinges or joints *e* to a cross-bar, I, in the frame A. To the back ends of these bars H teeth J are attached, one to each. These teeth may be of any proper form, and they have funnel-shaped hoppers *b* at their upper ends, above the bars H, to receive the seed, as shown clearly in Fig. 1.

In the frame A, directly back of the bars H, there is placed a shaft, K, which is allowed to rotate freely, and is provided with a series of radial arms, *g*, which are so disposed or placed in the shaft K that they will, as the machine is drawn along, rotate in contact, or nearly so, with the sides of the teeth J, and keep the same free from all substances which would have a tendency to clog them up or gather

upon or around them. The arms *g* are rotated in consequence of coming in contact with the ground. By this means the teeth are kept perfectly clear and free from all obstructions.

L is a seed-box, which is placed transversely on the frame A and supported between uprights M M on the side bars of the frame A. This seed-box is of V form in its transverse section, and it has a bottom, *h*, of curved or segment form, which is constructed of sheet metal and slotted transversely, as shown at *i*, said slots being at equal distances apart, as shown in Fig. 2. Directly underneath this curved bottom there is placed a cylinder, N, which is grooved circumferentially, as shown at *j*, the grooves *j* being directly underneath and in line with the slots *i* in the bottom *h*. The cylinder N is quite close to the curved bottom *h*, the curvature of the latter corresponding to the curvature of the cylinder *a*—in other words, being concentric with it. (See Fig. 1.)

To the inner surfaces of the front and rear sides of the seed-box L there are attached plates O O, the lower ends of which pass through the slots *i* of the bottom *h* of the seed-box and into the grooves *j* of the cylinder N, as shown in Fig. 1. The plates O at the rear side of the seed-box are adjustable, and by raising or lowering them a greater or less amount of seed may be allowed to escape from the seed-box, as desired. The direction of the rotation of the cylinder N is indicated by the arrow in Fig. 1. The grooves *j* in the cylinder N are directly over the hoppers *f* of the teeth J, and the seed is consequently discharged directly into said hoppers.

By having the bottom *h* of the seed-box L constructed as shown and described—to wit, of metal, and of curved form—the discharge of seed from the seed-box is fully insured, and the slots *i* will not be liable to clog or choke up, as the grain will pass freely through the slots.

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

The arrangement of the rotary front wheel, E, and pole G with the frame A, clearer K, and seat D, in the manner herein shown and described.

U. H. SHOCKLEY.

Witnesses:

A. KEELER,

HENRY LEEVEN.