

(No Model.)

2 Sheets—Sheet 1.

G. F. PRESCOTT.
COCKLE AND GRAIN SEPARATOR.

No. 355,713.

Patented Jan. 11, 1887.

Fig. 2.

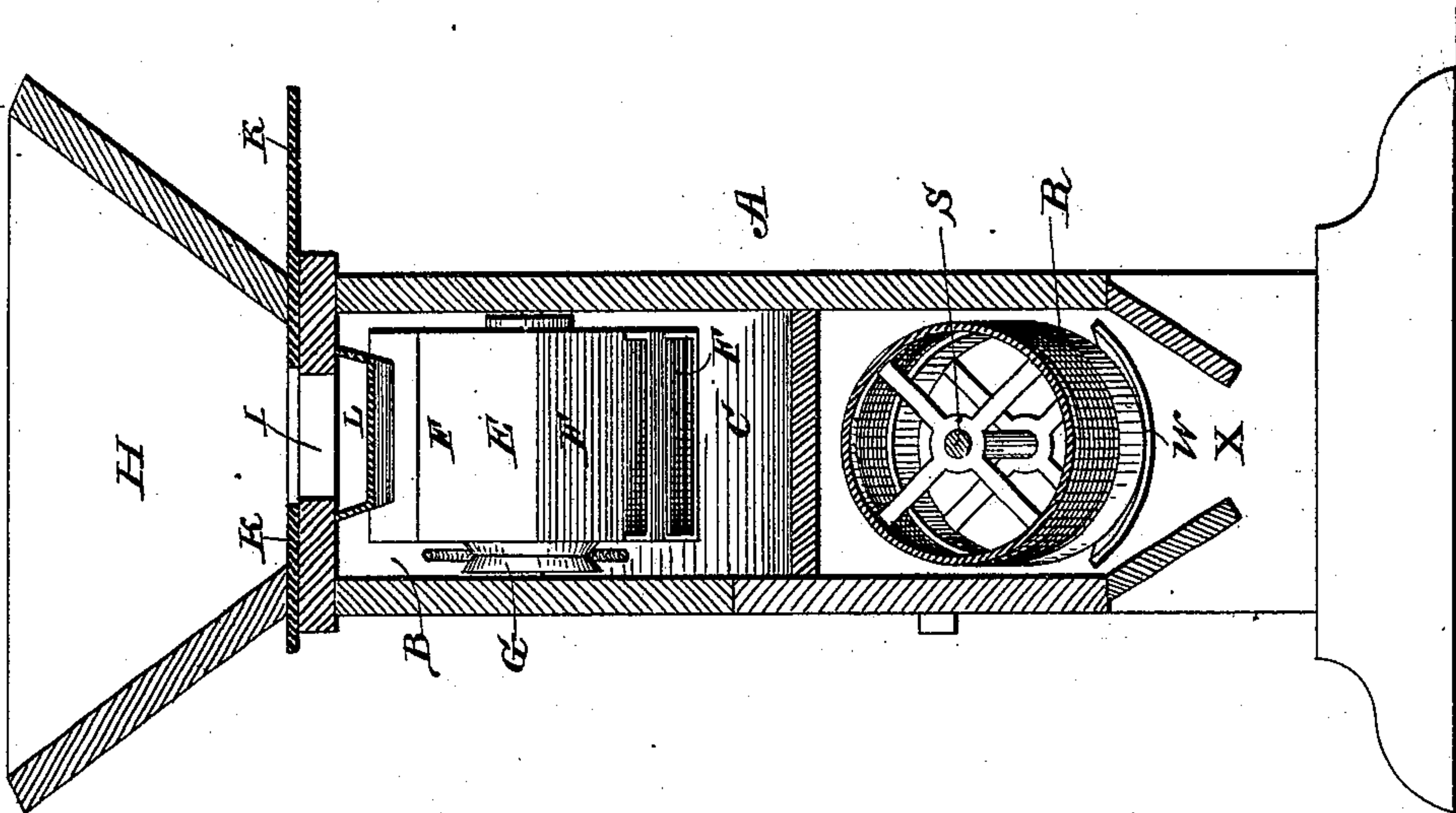
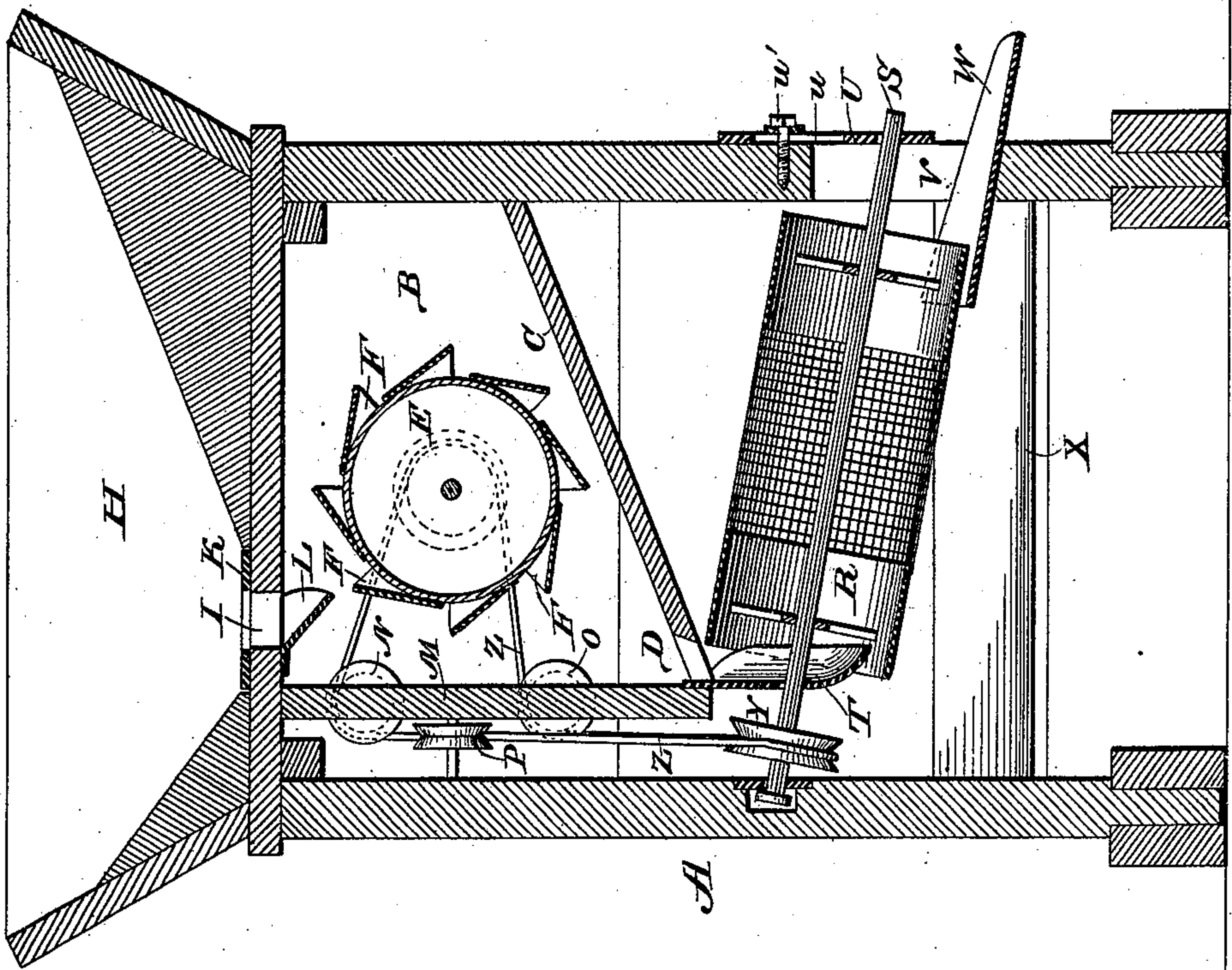


Fig. 1.



Witnesses

Percy C. Bowen.
J. W. Garner

Inventor,

Granville F. Prescott.

By his Attorneys

C. A. Snow & Co.

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Fig. 4.

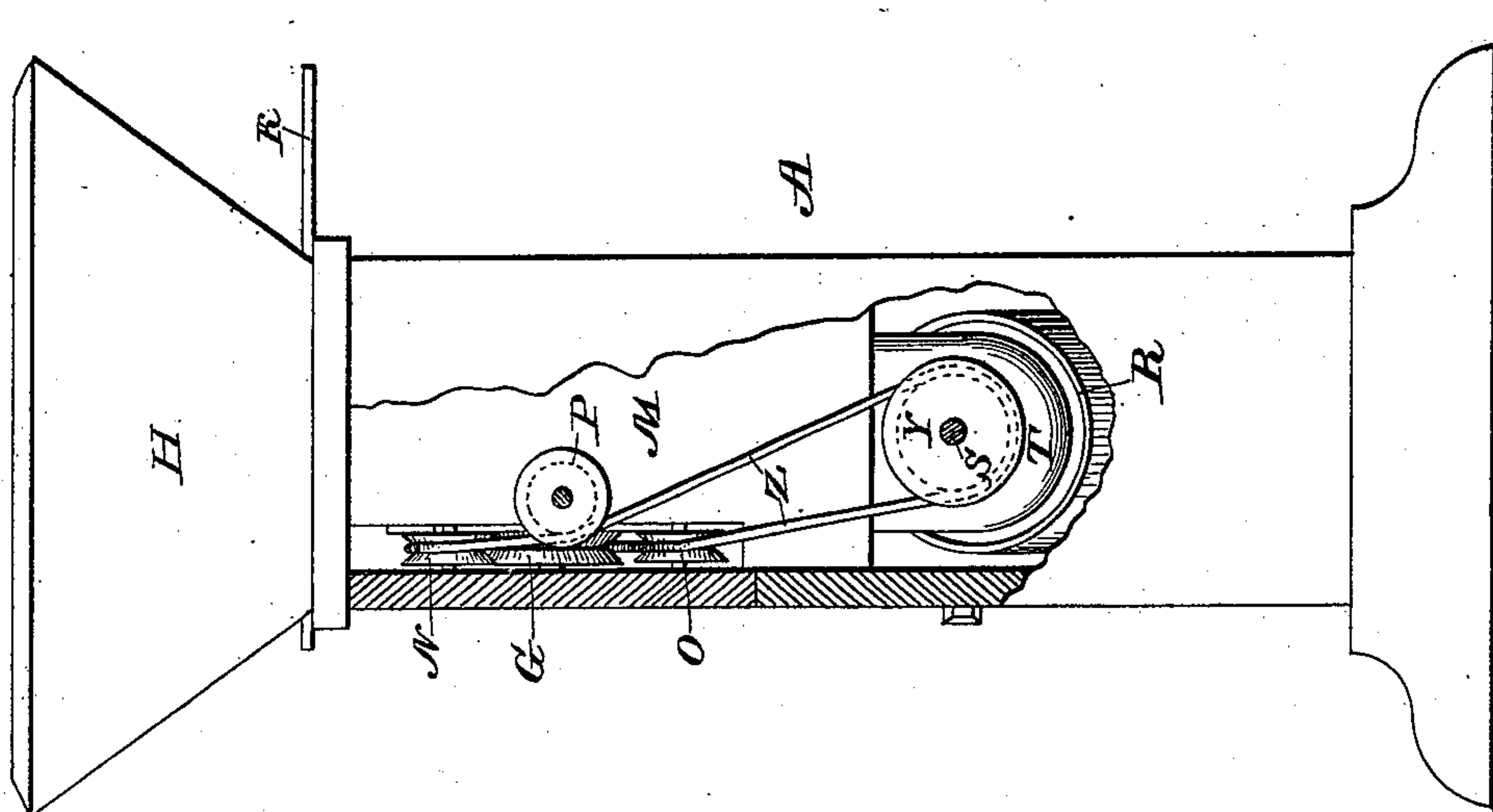
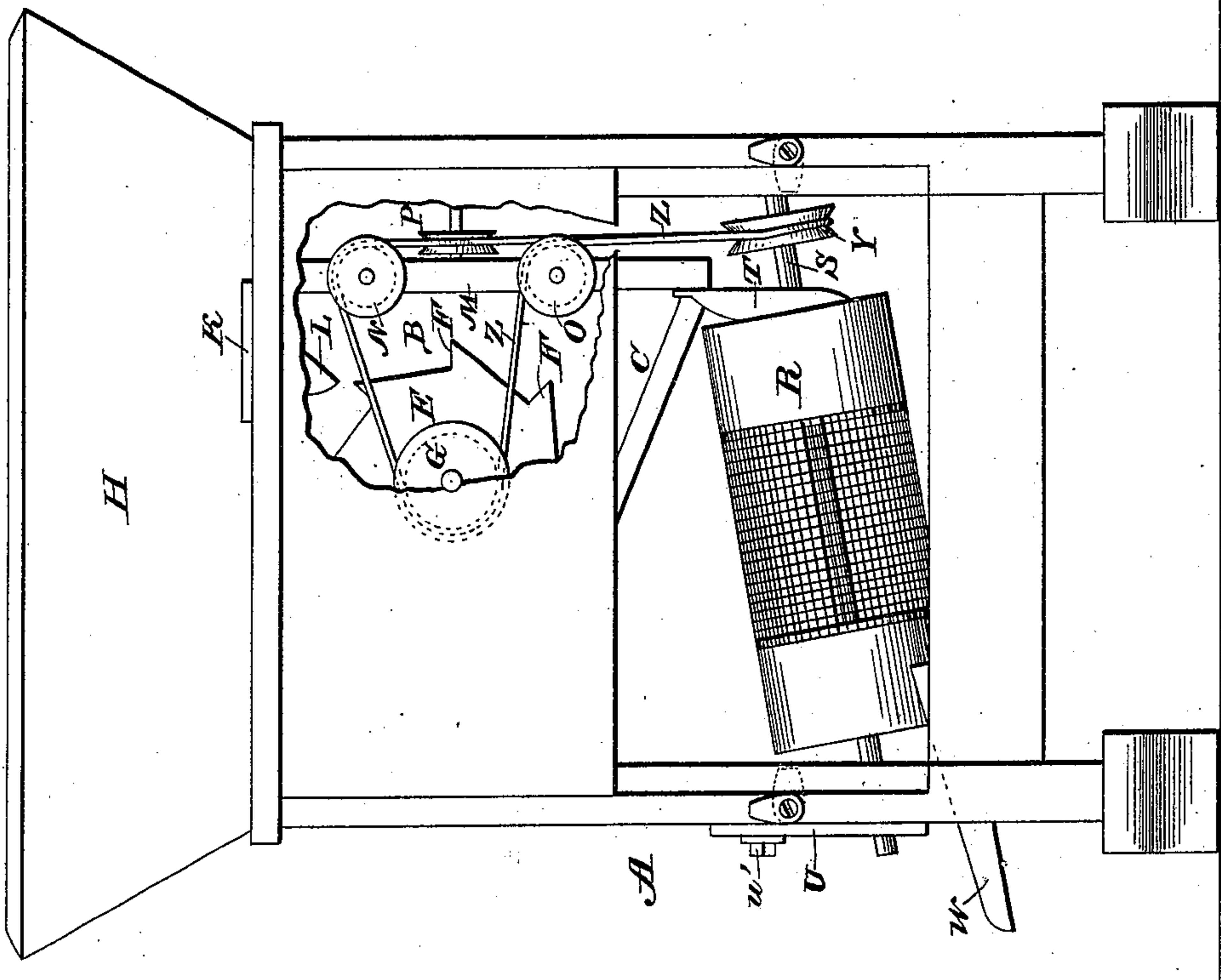


Fig. 5.



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J. W. Garner

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Granville F. Prescott

By his Attorneys

C. A. Snow & Co

UNITED STATES PATENT OFFICE.

GRANVILLE F. PRESCOTT, OF SLEEPY EYE, MINNESOTA.

COCKLE AND GRAIN SEPARATOR.

SPECIFICATION forming part of Letters Patent No. 355,713, dated January 11, 1887.

Application filed March 22, 1886. Serial No. 196,189. (No model.)

To all whom it may concern:

Be it known that I, GRANVILLE F. PRESCOTT, a citizen of the United States, residing at Sleepy Eye, in the county of Brown and State of Minnesota, have invented a new and useful Improvement in Cockle and Grain Separators, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to an improvement in cockle and grain separators; and it consists in the peculiar construction and arrangement of devices that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the drawings, Figure 1 is a vertical longitudinal sectional view of my invention. Fig. 2 is a vertical transverse sectional view of the same. Fig. 3 is a side elevation, with parts broken away. Fig. 4 is an end elevation, partly in section.

A represents a vertical rectangular inclosing case or frame, in the upper portion of which is formed a compartment, B, the bottom of which is inclined, as at C, and provided at its lower end with an opening, D. In the compartment B is journaled a wheel, E, which is provided with peripheral buckets F, and the said wheel is also provided on one side with a band-pulley, G.

H represents a hopper, which is located on top of the frame or case A, and the said hopper has an inclined bottom provided at its lowest point with a discharge-opening, I, which is regulated by means of a slide, K. A fender, L, is placed on the under side of the bottom of the hopper, at one end of the discharge-opening therein. The opening in the bottom of the hopper is directly above one side of the wheel E, and the purpose of the fender L is to direct the grain which passes from the hopper into the buckets on the wheel, thereby causing the latter to rotate by the gravity of the grain in its buckets.

M represents a vertical partition-wall, which is formed at one end of the compartment B and divides the said compartment from the adjacent end wall of the box or frame A, and between one edge of the said wall M and the adjacent side of the box or frame A are jour-

naled a pair of sheaves, N and O, one of which is arranged above the other, as shown. Between the outer side of the wall M and the adjacent end wall of the box or frame A is journaled a similar sheave, P, which is located between the sheaves N and O and extends at right angles thereto.

R represents a cylindrical screen, which is opened at both ends, and may be made either of wire-netting, perforated sheet-zinc, or any other preferred material, and is provided with a central longitudinal shaft, S, which shaft is journaled in the lower portion of the box or frame A at an angle which inclines oppositely to the bottom C of the compartment B. The upper end of the cylindrical screen is located directly below the opening D, and the grain which passes through the said opening is directed into the upper end of the screen by means of a fender, T, which depends from the lower side of the compartment B. This fender fits within and closes the inner receiving end of the separator. The lower end of the shaft S is journaled in a plate, U, which is secured at one end of the box or frame A and is vertically adjustable thereon, the said plate having a vertical slot, *u*, through which passes a clamping-screw, *u'*, that enters the end of the box or frame. By thus journaling the lower end of the shaft S in a vertically-adjustable bearing it will be readily understood that the cylindrical screen may be adjusted or moved to any desired inclination.

Below the adjustable plate U, in one end of the box or frame, is made an opening, V, through which passes an inclined discharge-spout, W, the upper end of which communicates with or is located below the lower end of the cylindrical screen, so as to receive the grain which passes longitudinally through the said screen and discharge said grain from one end of the box or frame. The usual opening, X, is made in the lower side of the box or frame, through which the cockle or screenings from the screen are discharged.

The upper end of the shaft S is provided with a band-pulley, Y, and Z represents an endless belt which connects the said pulley Y with the band-pulley G, and passes over the sheaves N and O and bears against one side of

the sheave P on its way from the band-pulley Y to the band-pulley G. By thus connecting the cylindrical screen with the wheel E it will be readily understood that the rotation of the wheel causes the screen to revolve. As the wheel is rotated by the weight of the grain fed through the hopper, the machine is thus rendered self-operative and requires no extraneous motor or power in order to run the separator.

Having thus described my invention, I claim—

1. A separator comprising the frame A, the hopper H at the top, the compartment B within the frame below the hopper, a grain-wheel, E, within the compartment, a cylindrical screen also located within the frame and below the compartment B, a partition, M, set some distance from the side of the frame to leave an inclosed space, the shaft of the screen journaled in the side of the frame near the bottom of this space, and the belt or cord connecting with the shaft of the screen passing up the

said inclosed space and connecting with the shaft of the grain-wheel, as set forth.

2. A separator comprising the frame A, a hopper, H, at the top, the grain-wheel compartment B, having an inclined bottom, C, the grain-wheel within the said compartment, the cylindrical screen R, located within the frame below the compartment and inclined in reverse direction to the bottom C, a fender, T, secured to the said bottom around the outlet-opening and closing the open inner end of the screen, the inner end of the shaft of the screen being journaled to the side of the frame, and a slide, U, adjustably fitted directly to the outside of the frame A and forming the journal-bearing for the outer end of the screen-shaft, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

GRANVILLE F. PRESCOTT.

Witnesses:

C. S. SANDERSON,
GEO. W. SOMERVILLE.