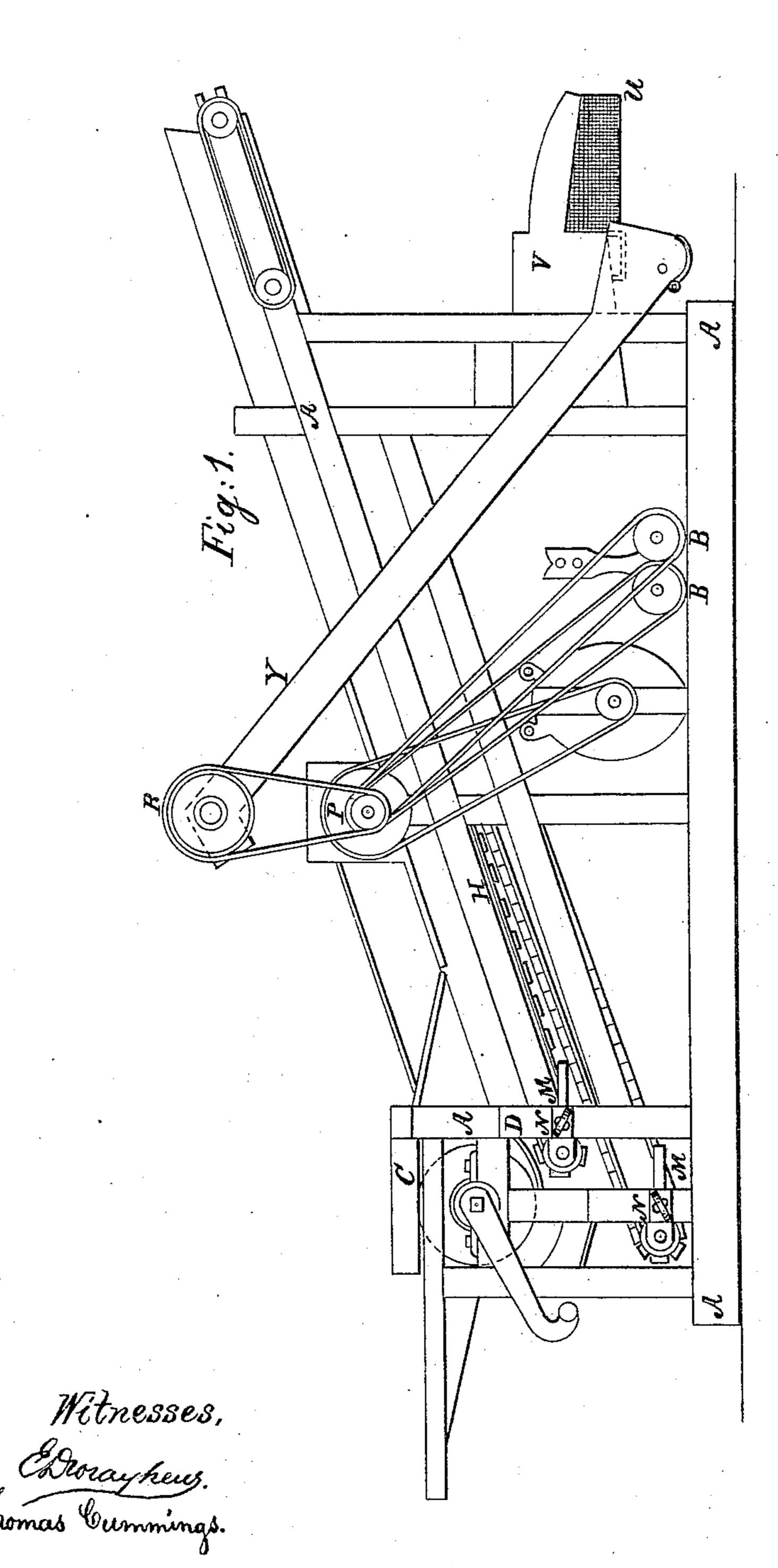
L. COSLER.

Thrashing Machine.

No. 78,650.

Patented June 9, 1868.



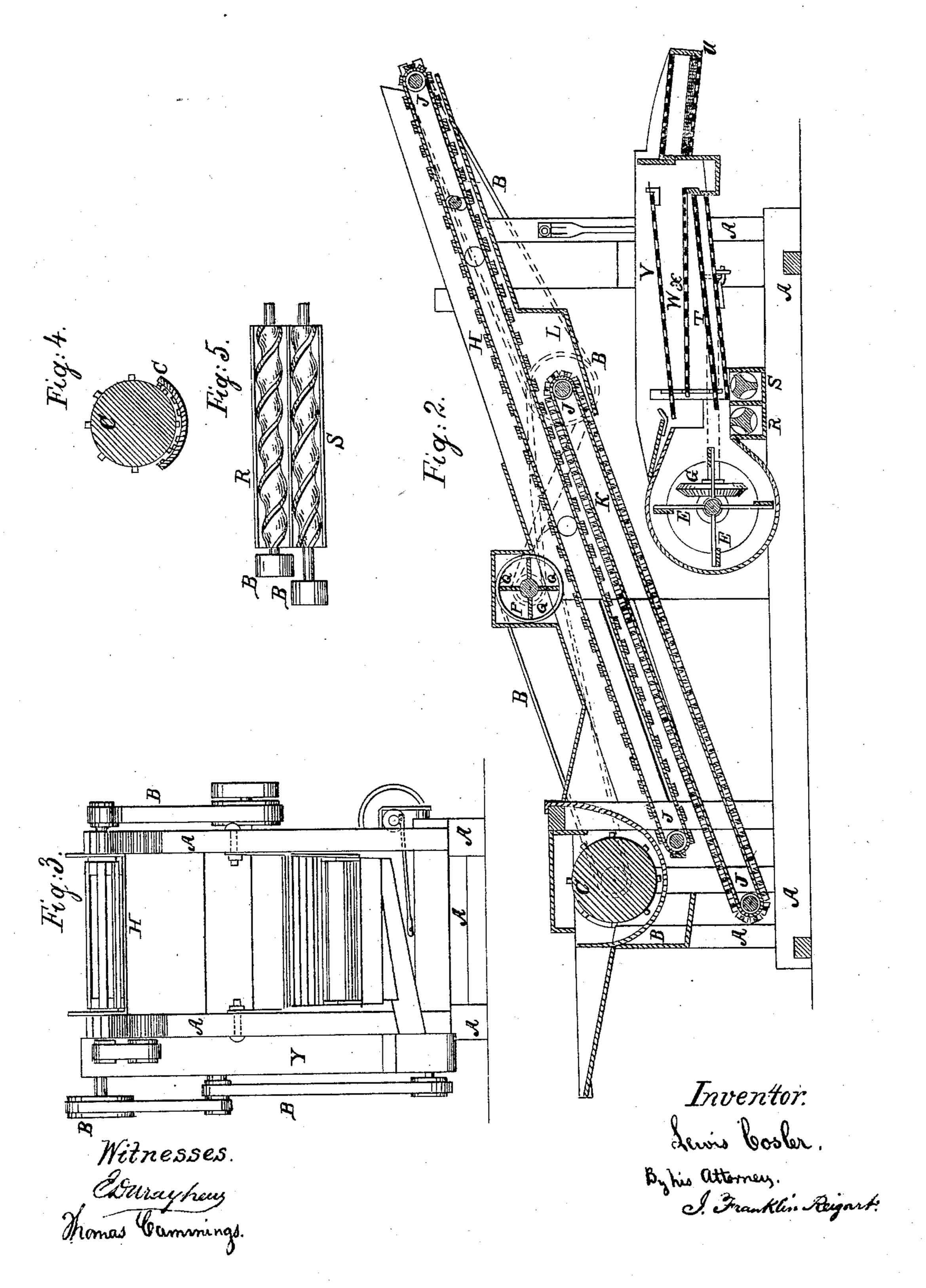
Laventor, Luis booler. Inhis attorney I Franklin Reigan.

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Anited States Patent Office.

LEWIS COSLER, OF YELLOW SPRINGS, OHIO.

Letters Patent No. 78,650, dated June 9, 1868.

IMPROVED THRESHER FOR GRAIN, CLOVER, FLAX, &c.

The Schedule referred to in these Netters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, Lewis Cosler, of Yellow Springs, Greene county, and State of Ohio, have invented an Improved Thresher for Threshing and Separating Grain, Clover, Flax, &c.; and I hereby declare the following to be an exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification, in which—

Figure 1 represents a side elevation,

Figure 2 a longitudinal section, and

Figure 3 an end view of the threshing-machine.

Figure 4 represents the cylinder and concave, with their teeth for hulling and cleaning the grain.

Figure 5, the double conveyers, for discharging the grain, seed, bolls, and sticks, at the outside of the machine.

The nature of my invention consists in the construction of the revolving beater on top of the apron.

Also, the adjusting-screws, for tightening or slackening the belts.

Also, the extension-sieve, into which the seed that has been blown forward falls and is sieved.

Also, the shape and construction of the slats or buckets of the lower apron.

Also, the incline-shaped throat, through which the grain falls from the lower apron or belt.

Also, the conveyers, for discharging the grain, seed, &c., at the side of the machine.

 Λ represents the frame that supports the devices of the machine.

B B, the belt and pulley-gearing that drives the devices.

C, the cylinder and concave for hulling and cleaning the grain.

D is a smooth concave that is used instead of the tooth concave C when required for cleaning the seed.

E is the fan, driven by the bevel-gearing G.

H is the upper apron or carrier, that travels around rollers, J, and carries the grain, flax, &c., up its incline as it leaves the cylinder C.

K is the lower apron or carrier, that conveys the grain to the throat L, from whence it is conveyed to the shoe to be fanned and sieved.

M are adjustable arms at each end of the rollers J, that operate in boxes on each side of the frame, for the purpose of slackening or tightening the aprons up or down, back or forward, whenever required, whilst the machine is in operation and the aprons are running, and as the arms M are adjusted, they are fastened by a thumb-screw, N, to their places.

The slats or buckets that form the lower apron, fit flat and close together, and open as they pass over the roller at the throat L, so that the grain and seed are easily discharged, and none retained in the buckets, but they form a close apron in operation, so that no grain collects or chokes up on its way to the throat to be discharged

The upper apron, H, carrying off the straw, and the lower apron, K, the grain or seed as they fall through the concaves C or D, or separator-bars below the cylinder C.

The slats that form the lower apron, K, are made of wood, concave on the lower side, and straight above, so that their concave sides conform with the cylindrical shape of the rollers J, and, therefore, move easily and smoothly around the rollers.

The throat L has an incline-shaped drop or offset, so that the grain or seed falls down rapidly, and does not choke the apron K.

P is the beater, with its circular end plates revolving in close grooves in the frame A, to prevent the tangling of the flax or choking it up as the seed is being knocked out by the beater, whilst the flanges Q push forward the flax or straw upon the apron H. The flanges are made of wood, and fit closely at their axis.

The conveyers R and S operate horizontally, side by side. The one conveyer, R, nearest to the fan E, discharges the bolls and sticks, the other conveyer, S, discharges the clean seed as it falls through the sieve T, and when I clean grain the "cockle" and "cheat" fall also through the sieve T, whilst the grain passes over

to the other conveyer, R, at the side, reversing the action, because the end of the sieve projects only as far as the centre between the conveyers R and S.

U is the extension-sieve at the outer end of the shoe V, that is a double sieve, the top being level, and the lower sieve being on an incline to the side, so as to catch and collect the seed that has been blown forward by the fan, upon which it falls and is sieved, and then collected in a box or half-bushel measure, and again carried forward by the operator to the cylinder C in front to be again cleaned.

As the grain falls from the throat L it is fanned and sieved in the vibrating-shoe V by the common fan

E and sieves W, X, and T.

Y is the common elevator for reconveying the grain to the cylinder in front, to be cleaned again.

Z is the crank or driving-wheel, by which the machine is driven.

What I claim as my invention, and desire to secure by Letters Patent, is-

1. The adjustable arms M, as herein set forth.

2. I also claim the extension-sieve U, for the purpose set forth.

3. I also claim the construction of the incline-shaped throat L, when located at the top of the apron K, as herein described and for the purposes set forth.

4. I also claim the arrangement of the two conveyers R and S, when located and operating with the sieve T, as described and set forth.

LEWIS COSLER.

Witnesses:

J. FRANKLIN REIGART, EDM. F. BROWN.