

(No Model.)

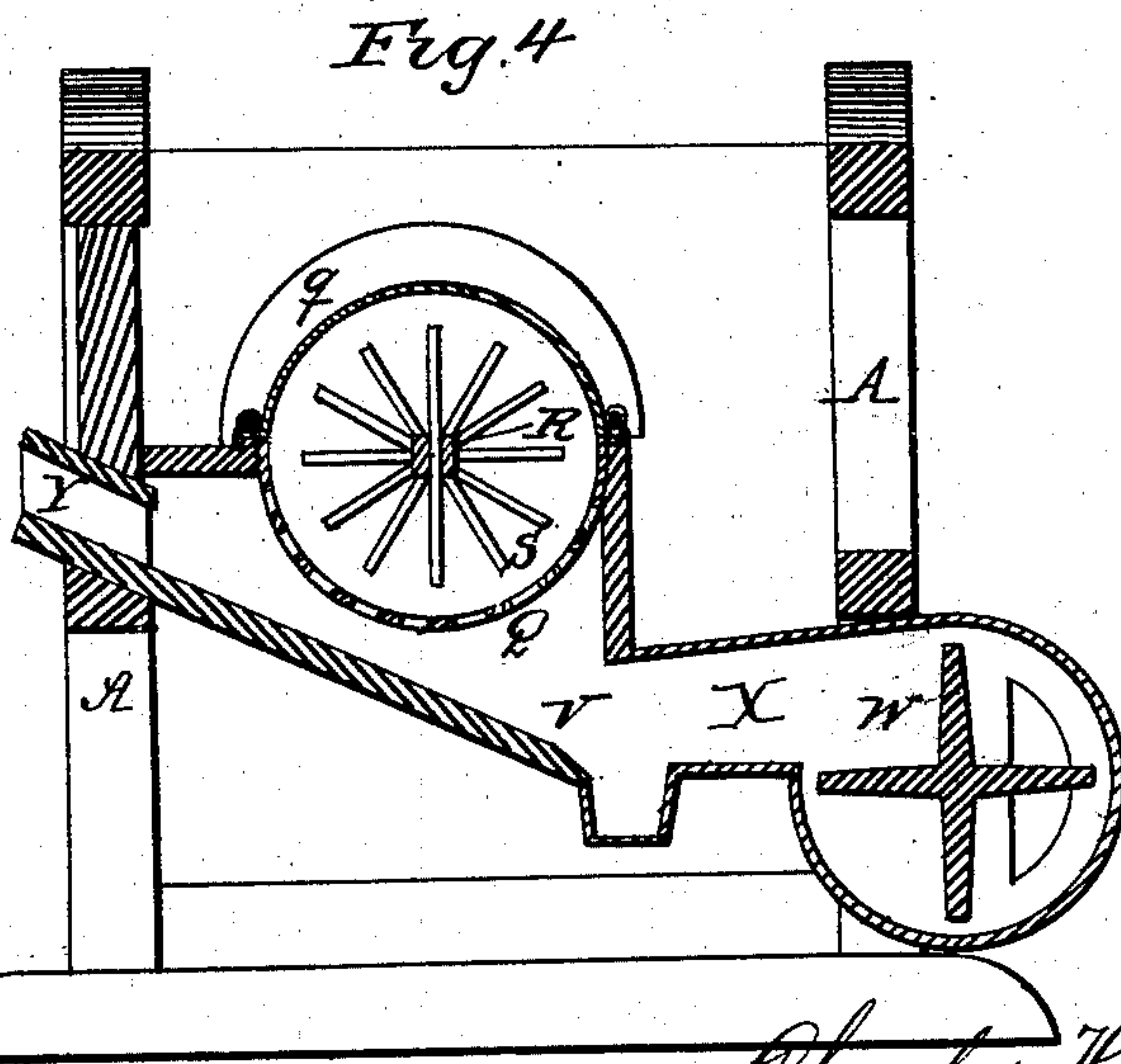
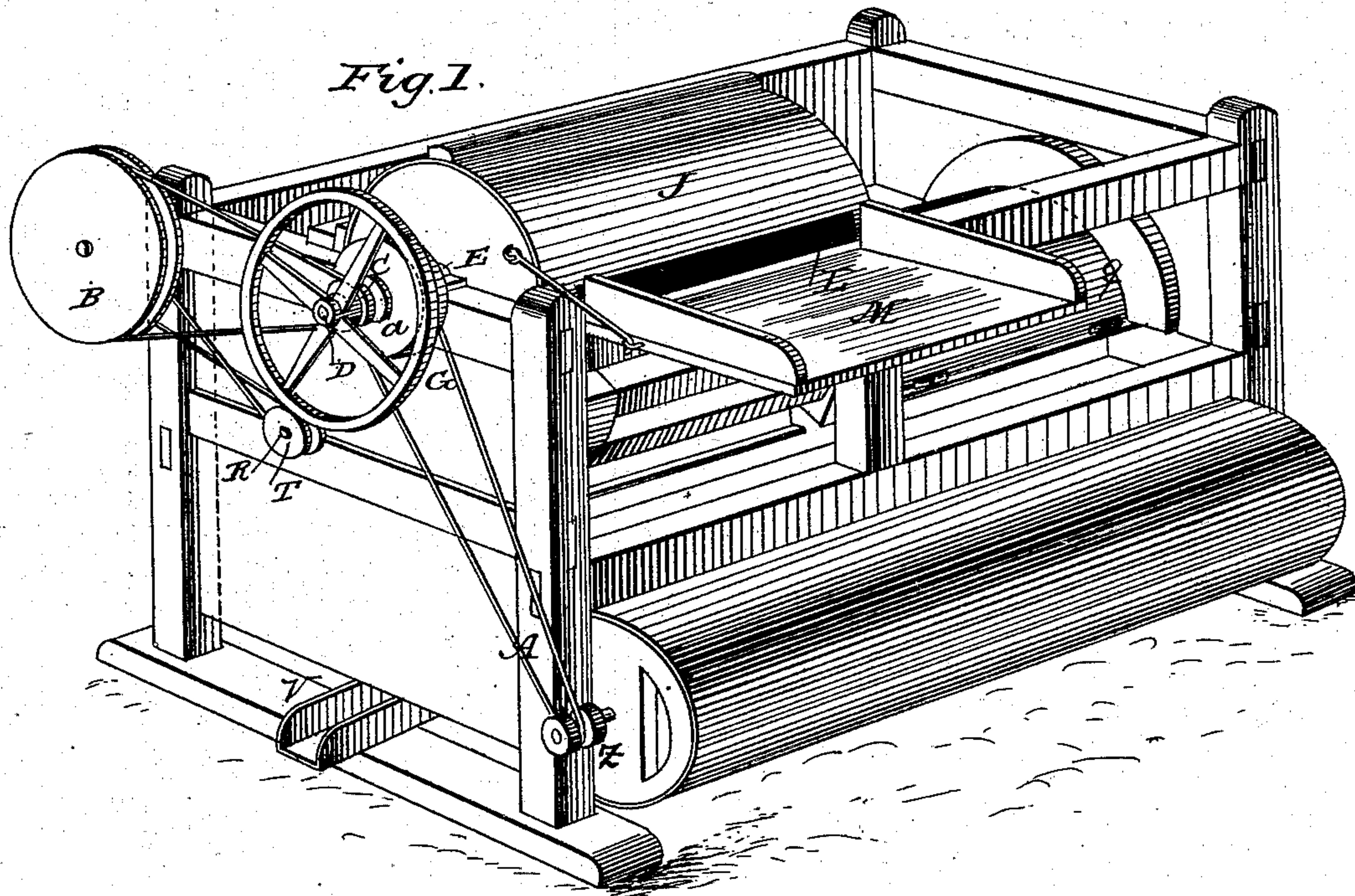
2 Sheets—Sheet 1.

C. H. J. ROBERTS.

PEA SEPARATOR.

No. 282,373.

Patented July 31, 1883.



WITNESSES:

Ad. L. Dieterich
Wm. Lecher

INVENTOR,

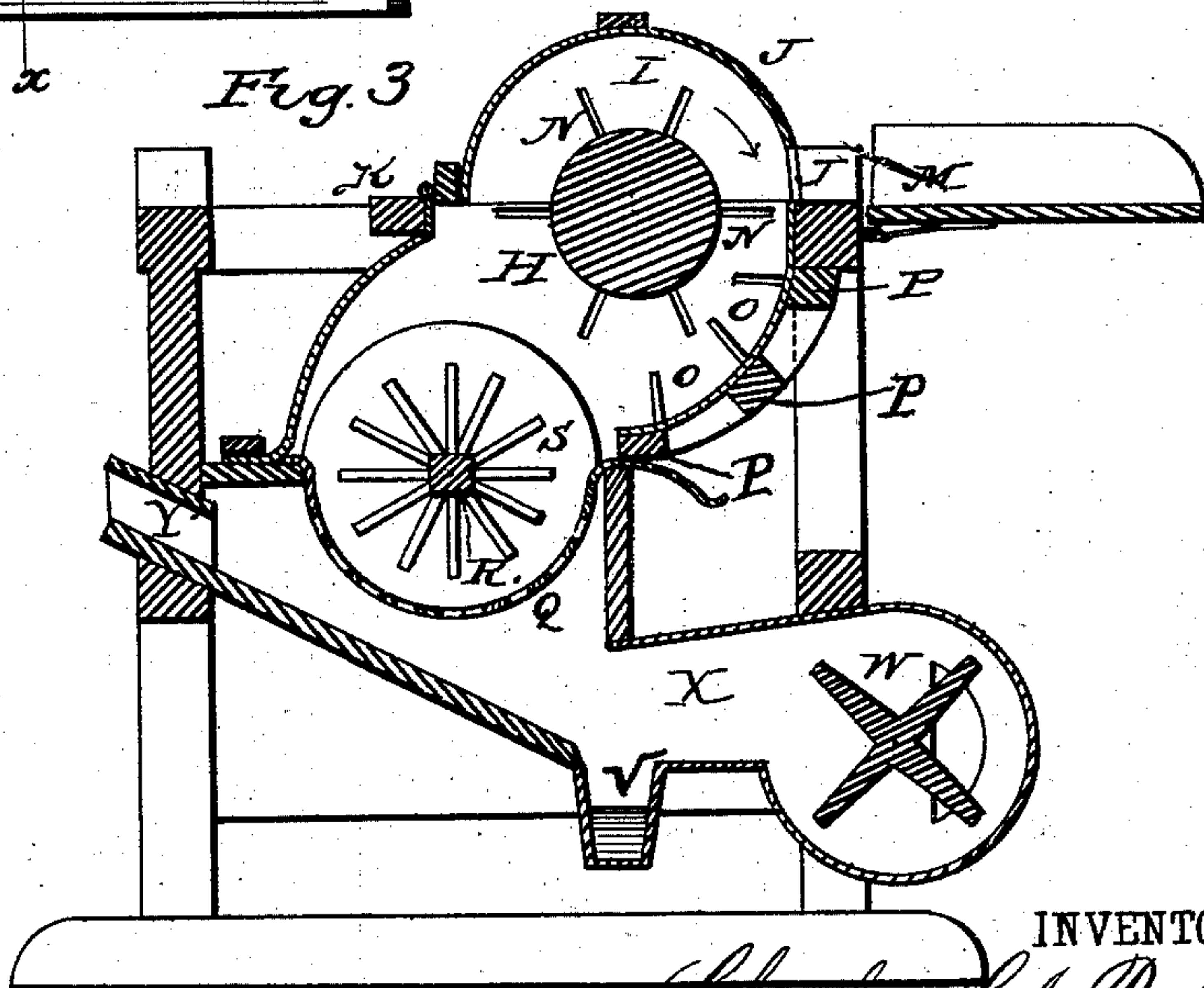
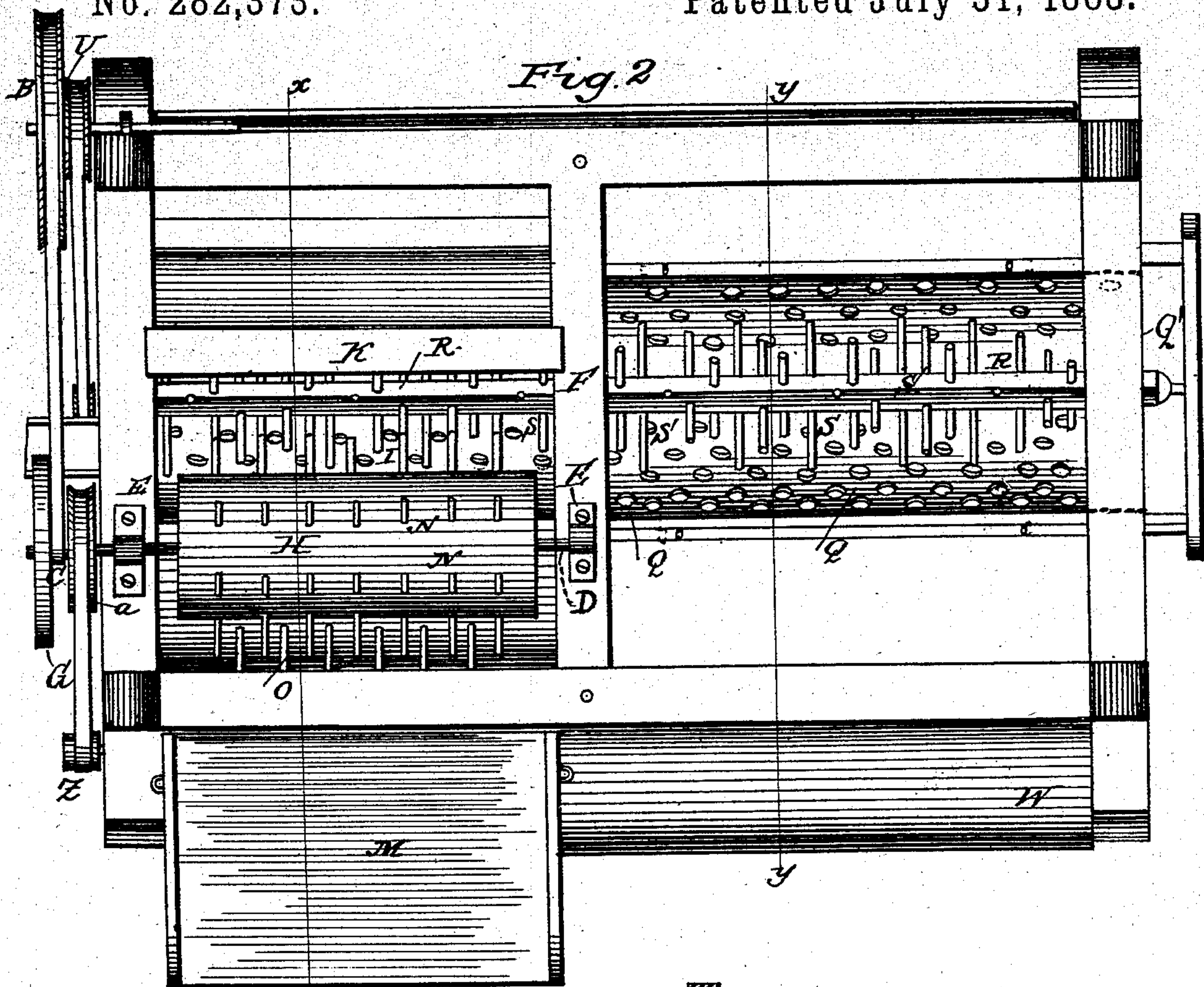
Charles H. J. Roberts
By Louis Bigger & Co.
ATTORNEYS.

C. H. J. ROBERTS.

PEA SEPARATOR.

No. 282,373.

Patented July 31, 1883.



WITNESSES:

Fred. G. Dieterich
Wm. Lecher

INVENTOR.

Charles H. J. Roberts
by Louis Ruggers & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES H. J. ROBERTS, OF FLORENCE, ALABAMA.

PEA-SEPARATOR.

SPECIFICATION forming part of Letters Patent No. 282,373, dated July 31, 1883.

Application filed March 20, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. J. ROBERTS, of Florence, in the county of Lauderdale and State of Alabama, have invented certain new and useful Improvements in Pea-Separators; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved pea huller and separator. Fig. 2 is a top view of the same, with the hoods covering the hulling and separating cylinders removed; and Figs. 3 and 4 are vertical cross-sections on lines *x x* and *y y*, Fig. 2.

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

My invention has relation to pea hullers and separators; and it consists in the improved construction and combination of parts of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, A represents a rectangular frame, in which the several shafts are journaled and the parts of the machine secured.

The power is applied to a pulley, B, journaled at the end of the frame, which is belted to a smaller pulley, C, upon a shaft, D, journaled in bearings E upon the upper edges of the end piece of the frame and of a transverse partition, F, and having a fly-wheel, G, fastened upon its outer end, whereas the hulling-drum H is fastened upon its inner portion. This drum revolves inside the hulling-cylinder I, the upper portion of which forms a removable hood, J, which is hinged to a bar, K, extending from the end of the frame to partition F, and is cut out or slotted at the front to form a feed-throat, L, through which the peas are fed into the cylinder from a hinged feed-table, M, and beaten and broken by spikes N upon the hulling-drum operating between spikes O upon the bridge-pieces P in the lower portion of the cylinder. The cylinder opens at the bottom into a long cylinder, Q, extending the entire length of the machine, open at

Q', at the end farthest away from the hulling-cylinder, having its lower half perforated, said perforations being large enough to admit of the hulled peas passing through them, and having a removable hood or cover, *q*, forming the upper portion of that part of the cylinder which extends from the hulling-cylinder to the open end Q' of cylinder Q.

A shaft, R, provided with spirally-arranged radial agitating-arms, S, is revolved inside cylinder Q by means of a belt passing over a pulley, T, upon the end of said shaft, and over a pulley, U, upon the power-shaft, and serves to carry the broken hulls and straw out of the open end of the cylinder, while the peas fall through the perforated bottom of the same into an inclined chute, V, which extends under the entire length of cylinder Q, a short distance below the same, opening at the end opposite to the opening of cylinder Q.

Secured near the bottom of the frame, and extending the full length of the same, is a fan, W, having its discharge-opening extended, forming a wide neck, X, which throws the blast from the fan into the space between cylinder Q and chute V, blowing the chaff and dust off from the peas as they drop down, the chaff and dust passing out through an upwardly-inclined chute, V, extending the entire length of the frame.

The fan W is operated by means of a belt passing over a pulley, Z, upon the end of the shaft of the fan, and over a pulley, *a*, upon the hulling-drum shaft, so that it will be seen that all the shafts are operated by belts connecting directly or indirectly with the power-shaft.

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

1. The combination, in a pea huller and separator, of the toothed hulling-cylinder and toothed imperforate concave, the perforated cylinder Q, arranged below the plane of the hulling-concave, and opening at the end farthest from the hulling-cylinder, and removable hood *q*, as described, and the shaft R, having spirally-arranged arms S, as and for the purpose shown and set forth.

2. The combination, in a pea huller and

separator, of the toothed hulling drum and concave, the perforated separating-cylinder, arranged below the plane of the hulling-concave and open at the end farthest from the hull-
5 ing-cylinder, the axial shaft having spirally-arranged stirring-arms, the fan extending the entire length of the machine, the upwardly-inclined chaff-discharge chute extending the entire length of the machine, and the down-
10 wardly-inclined pea-discharging chute, all con-

structed to operate as and for the purpose shown and set forth.

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

CHARLES H. J. ROBERTS.

Witnesses:

S. S. IVES,

C. F. CARSON.