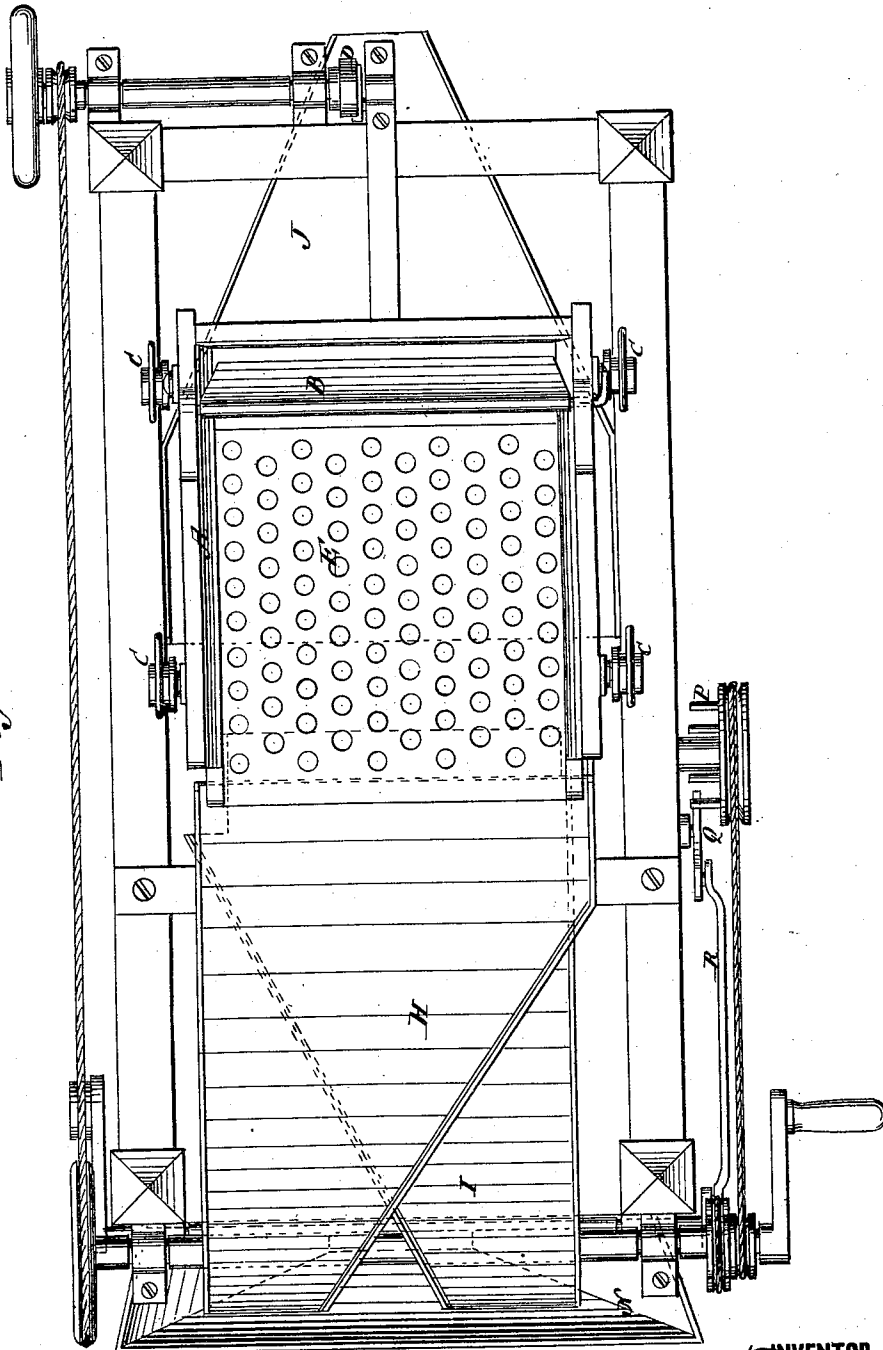


W. E. TORLEY.
Grain-Separator.

No. 166,826.

Patented Aug. 17, 1875.

Fig. 1.



WITNESSES:

E. Wolff
A. F. Perry

INVENTOR:

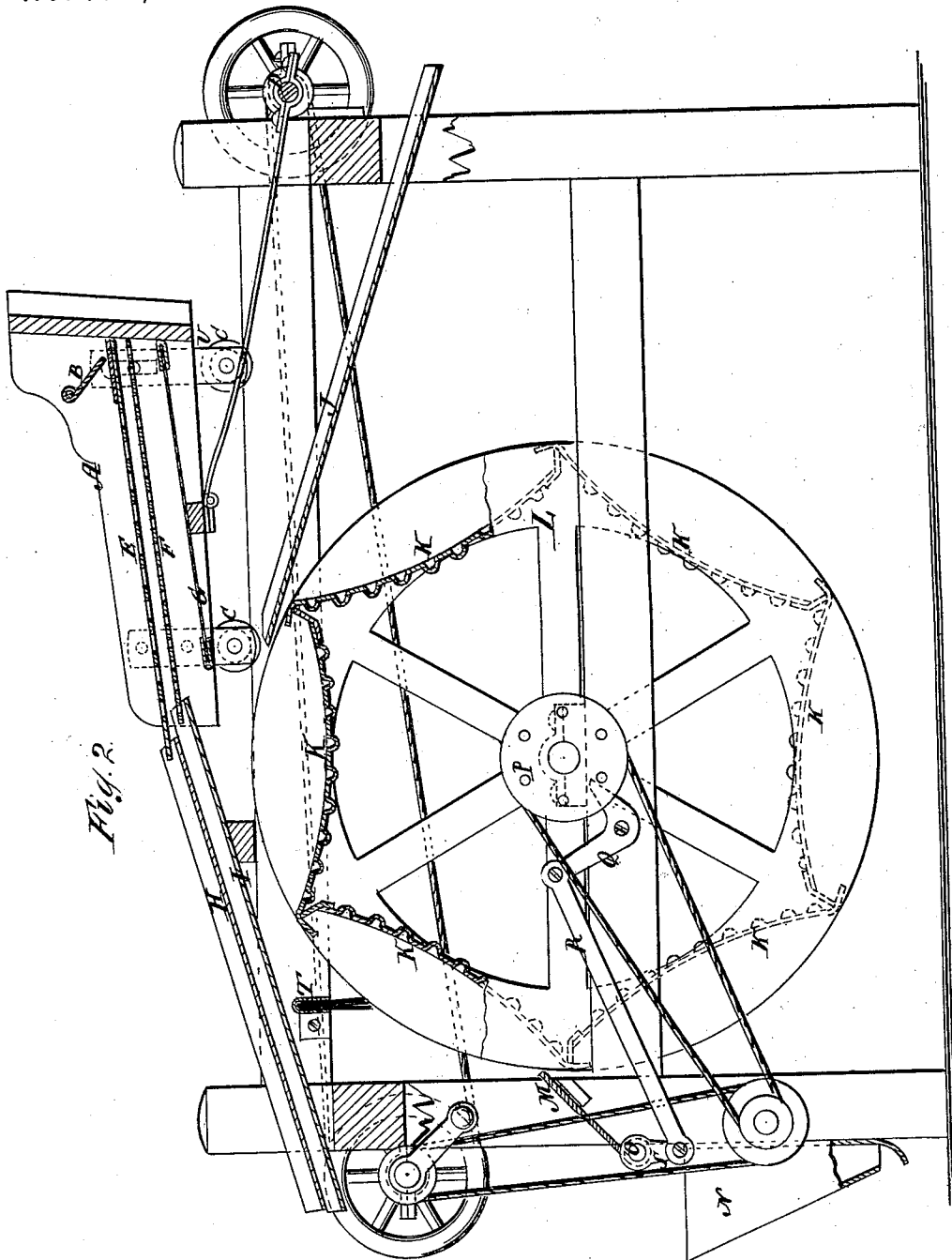
W. E. Torley
BY *Mumford*

ATTORNEYS.

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WITNESSES:
E. Wolff
A. J. Ferry

INVENTOR:
W. E. Torley
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ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM E. TORLEY, OF MILWAUKEE, WISCONSIN.

IMPROVEMENT IN GRAIN-SEPARATORS.

Specification forming part of Letters Patent No. **166,826**, dated August 17, 1875; application filed May 22, 1875.

To all whom it may concern:

Be it known that I, WILLIAM E. TORLEY, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and Improved Grain-Separator, of which the following is a specification:

The invention will first be described in connection with drawing, and then pointed out in the claims.

Figure 1 is a longitudinal sectional elevation of my improved separator, and Fig. 2 is a top view.

A is the hopper, into the upper part of which the grain is delivered above a gate, B, by which the flow can be regulated. It is mounted on rollers C, and has a quick reciprocating motion imparted to it by the crank-shaft D, which is contrived to vary the throw as may be required. In the hopper are a couple of descending sieves, E F, and a fine screen, G, for separating the coarse wheat in two grades and screening out the fine seeds, &c., to be discharged by the spouts H, I, and J, respectively. The cockle and small wheat pass off from the fine screen G onto the indented concave sides K of the drum L for the cockle to fall into the indentations, which will not hold the wheat, because of the elongated form of the grains, so that the wheat will pass off first when the sides turn down with the drum. At the point where the wheat will naturally slide off the plates is a chute, M, to

receive and conduct it into the hopper N. It is mounted on a rock-shaft, O, and is made to swing up, so as not to catch the cockle by the pins P on the drum-shaft bell-crank Q, connecting-rod R, and the crank S. T is a brush in front of the drum, to brush back any of the cockle on the front edge of the indented sides liable to slide off with the wheat and throw it back into the pockets. The hopper is contrived so as to change its incline readily by shifting the upper end up and down on its standard U, to which it is adjustably fitted.

The machine can be made quite small and still work efficiently, it does not break the wheat, runs very light, can be regulated readily, and is not easy to get out of order.

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

1. A polygonal drum having externally concave and indented faces K, as and for the purpose specified.

2. The combination of a swinging chute and polygonal rotary separating-drum, as and for the purpose set forth.

3. The combination of a fixed brush and rotary indented polygonal drum, as and for the purpose described.

WILLIAM E. TORLEY.

Witnesses:

CHAS. TOEPFER,
JOHN ROETHLISBERGER.