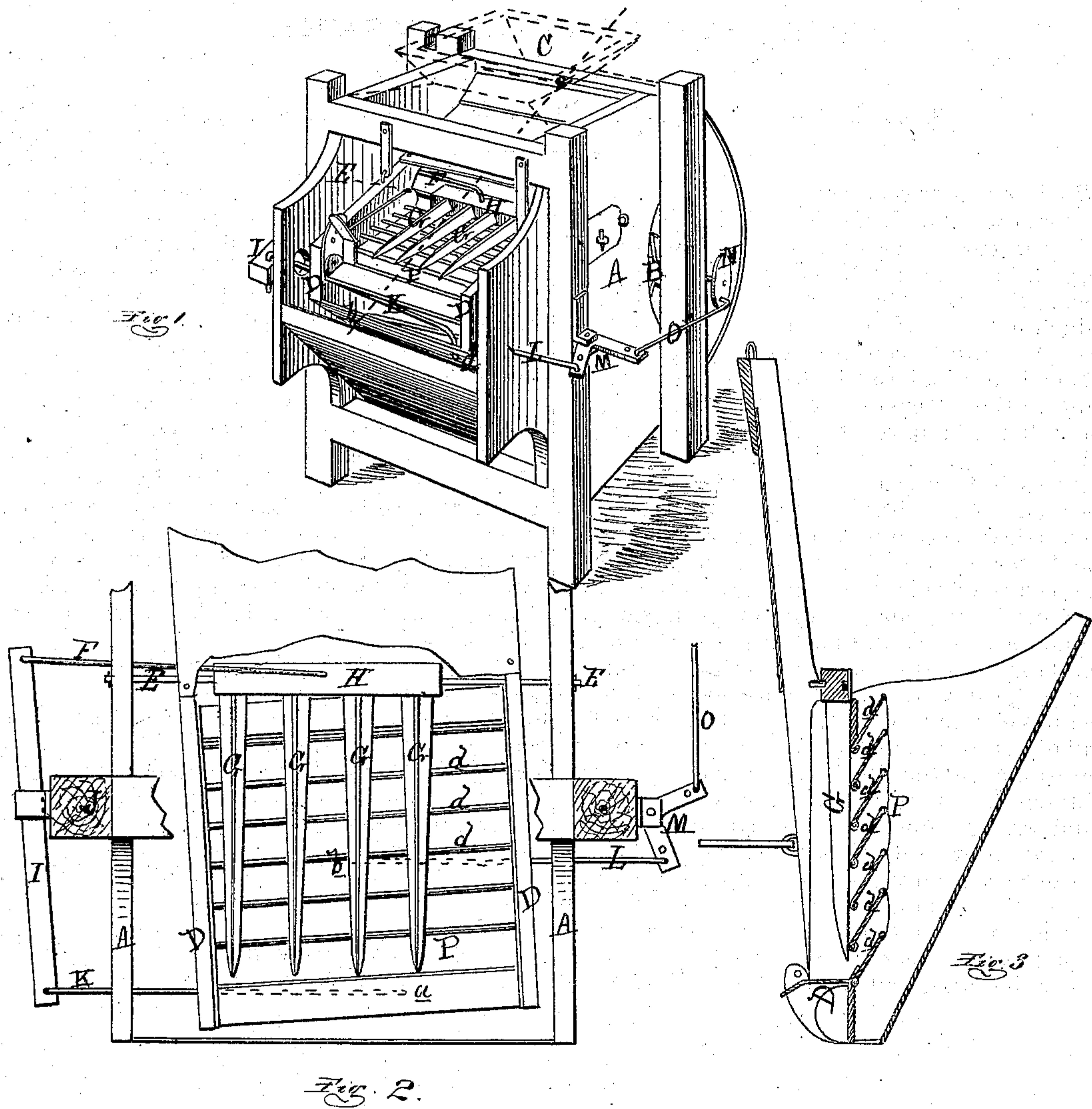


E. L. KELLY.
GRAIN & CLOVER SEPARATOR

117545

PATENTED AUG 1 1871



ATTEST

Wm. A. Church.
Edwin Cox

INVENTOR

E. L. Kelly
per Atty
Thos. B. Sprague

UNITED STATES PATENT OFFICE.

EBENEZER L. KELLY, OF READING, MICHIGAN.

IMPROVEMENT IN GRAIN-SEPARATORS.

Specification forming part of Letters Patent No. 117,545, dated August 1, 1871.

To all whom it may concern:

Be it known that I, EBENEZER L. KELLY, of Reading, in the county of Hillsdale and State of Michigan, have invented a new and useful Improvement in Grain-Separators and Clover-Cleaning Machines; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is a perspective of my device with the hopper removed. Fig. 2 is a sectional plan. Fig. 3 is a vertical section on the line *x x* in Fig. 1.

Like letters indicate like parts in each figure.

The nature of this invention relates to an improvement in the construction of grain-separators and clover-cleaning machines, by means of which damp or wet grain may be prevented from clogging the sieves; and is more especially designed to be an improvement upon the device for a similar purpose for which Letters Patent were issued to me on the 10th day of August, 1869. The invention consists in the improved construction and arrangement of the various parts, as more fully hereinafter set forth and described.

In the accompanying drawing, A represents the case, B the fan, C the hopper, and D the shoe of an ordinary fanning-mill. Between the sides of the mill, near the mouth of the hopper, and over the inner end of the shoe and screens

or sieves, is secured the rod or slide E, upon which head H of the fingers G has a reciprocating motion. This motion is secured by the connecting-rod F, which connects the head H with the rocking bar I, which is pivoted at or near the center of its length to the support J on the side of the mill, and by the connecting-rod K, which connects the opposite end of said rocking bar with the shoe at *a*. The rod L, one end of which is secured to the shoe at *b*, and the opposite end to the bell-crank M, receives motion from the crank N on the end of the fan-shaft by means of the connecting-rod O. P is a riddle or sieve-frame, whose lateral bars *d* are set edgewise into the frame, and diagonally, so that they incline downward and to the rear, and give a direction to the falling grain toward the head or inner ends of the sieves.

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

The improved construction and arrangement of the head H, fingers G, slide E, rocking bar I, rods F, K, O, and L, shoe D, bell-crank M, crank N, and riddle P provided with lateral bars *d*, substantially as described and shown, for the purposes set forth.

EBENEZER L. KELLY.

Witnesses:

M. H. PARMELEE,
Mr. H. M. WILCOX.