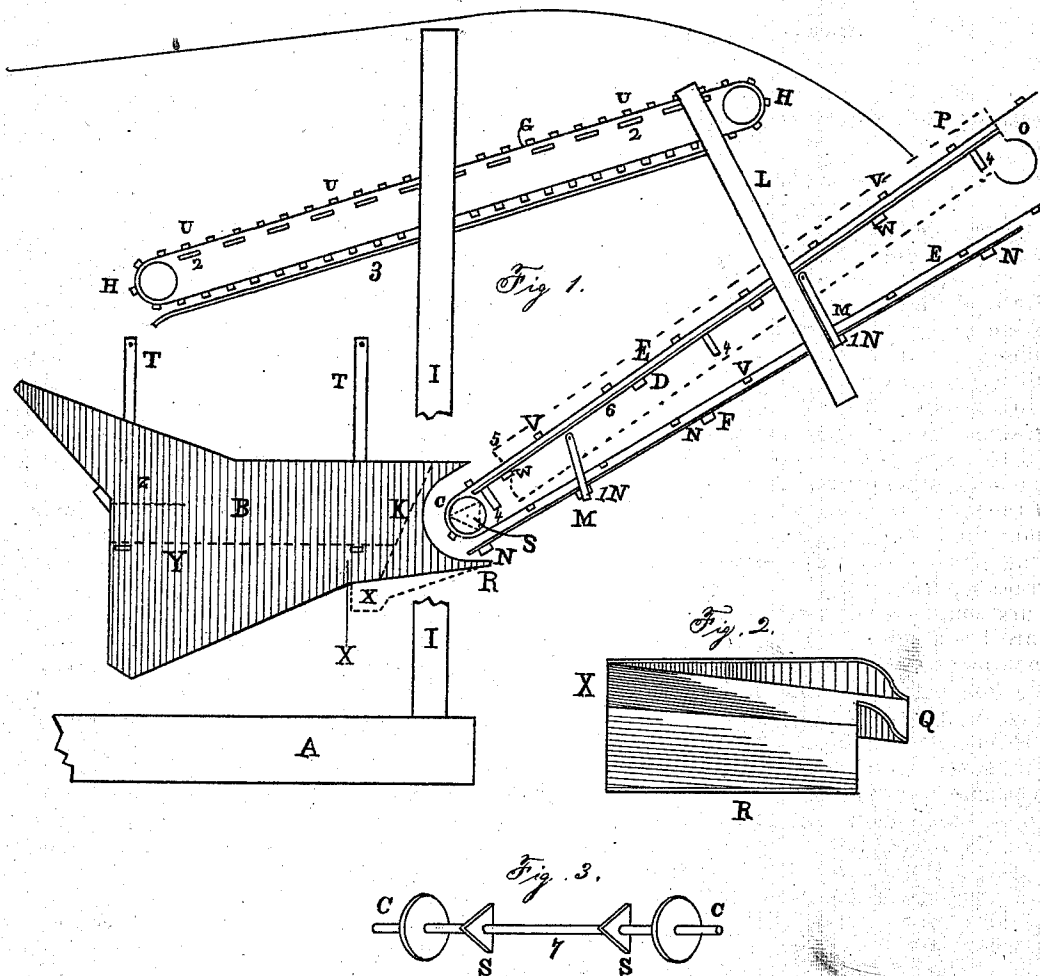


F. W. ROBINSON.
Grain-Separators.

No. 146,784.

Patented Jan. 27, 1874.



Witnesses

Inventor.

W. A. Mote.

F. W. Robinson.

Thos. A. Dugdale

UNITED STATES PATENT OFFICE.

FRANCIS W. ROBINSON, OF RICHMOND, INDIANA.

IMPROVEMENT IN GRAIN-SEPARATORS.

Specification forming part of Letters Patent No. 146,784, dated January 27, 1874; application filed March 27, 1872.

To all whom it may concern:

Be it known that I, FRANCIS W. ROBINSON, of the city of Richmond, county of Wayne and State of Indiana, have invented certain Improvements in Grain-Separators, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to providing the shoe of a grain-separator with an extension-board, secured to the spout at the back end of the shoe, so as to extend under the front or lower end of the straw-stacker, so that by combining the shoe thus extended of a grain-separator with the straw-stacker I produce a more perfect grain-separator, and not a mere carrier of straw and chaff, as heretofore.

Figure 1 is a side elevation of a section of my machine as seen with the siding-boards removed, showing the machine from the front of the shoe to the hinge of the straw-stacker. Fig. 2 is the spout of the shoe with an inclined board attached, as it appears when separated from the shoe at the line X and viewed from the tail of the machine. Fig. 3 is a representation of the lower shaft of the straw-stacker with pulleys and knockers, which shake the upper floor of the straw-stacker, producing an up-and-down motion.

A, the frame of the machine. B is the shoe, which is made as in ordinary separators. My improvement consists in providing said shoe with an extension-board, R, which is secured onto the spout Q at the back end of the shoe by means of screws, and extends back under the straw-stacker P, at its lower or front end, that it may receive all the grain that is carried over with the straw, and shaken therefrom

onto the floor F of the stacker P by means of the downward passage of the slats of the carrier E. The straw-stacker is made as ordinary stackers in grain-separators, and a description is not deemed necessary, as it is a well-known device. C, pulleys; D, sides of straw-stacker; F, apron or floor; G, belts; H, pulley; I, upright pieces; K, slanting board; L, hanging pieces; M, vibrating pieces; N, supports for the floor or apron F. O is one-half of a hinge; Q, spout of shoe; S, knockers; T, hangers for shoe B. U are slats; V, slats; W, battens; X, dotted line, showing shape of spout Q; Y, seive. Z are wires. 2 are slats; 3, floor. 4 are cross-pieces; 5, stacker, broken off; 6, floor. As the most of these devices are well known, a further description is deemed unnecessary.

It will be seen that, as the straw is thrown from the straw-carrier connected with the thrasher onto straw-carrier E of stacker P, the grain falls through between the slats of carrier E, and is drawn and shaken down the floor F of stacker P, and is received on the extension-board R, and rools or is gravitated into spout Q of the shoe B, from which it passes into a receptacle.

I claim as my invention and desire to secure by Letters Patent of the United States—

The combination, with the shoe B, of the extension R, arranged in relation to the straw-carrier, substantially as shown.

F. W. ROBINSON.

Witnesses:

H. E. ROBINSON,
THOS. A. DUGDALE.