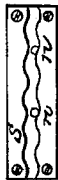
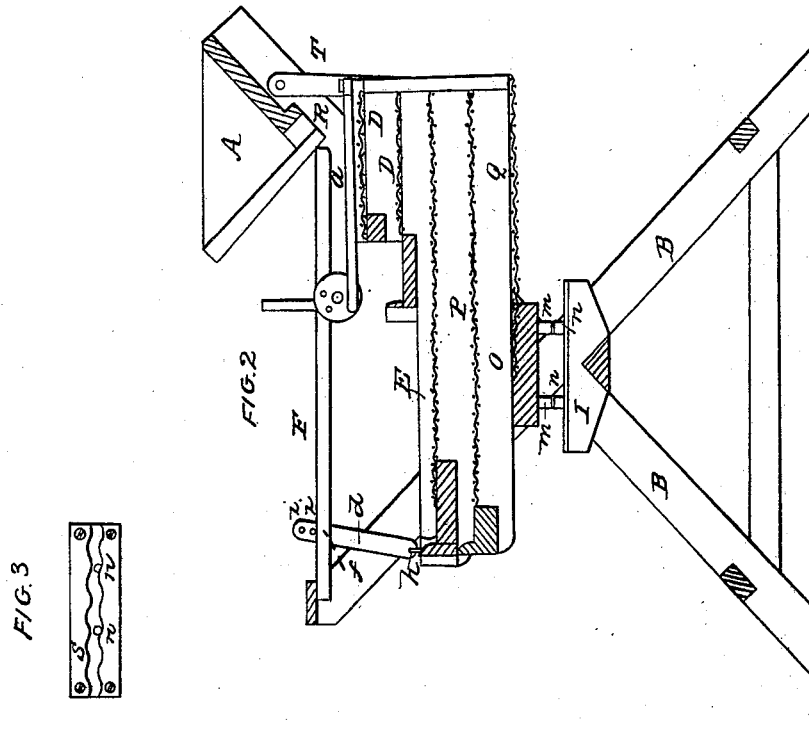


H. OGBORN.

Grain Screen.

No. 55,152.

Patented May 29, 1866.



WITNESSES
J. H. Phillips
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HARRISON OGBORN, OF RICHMOND, INDIANA.

IMPROVEMENT IN GRAIN-SCREENS.

Specification forming part of Letters Patent No. **55,152**, dated May 29, 1866.

To all whom it may concern:

Be it known that I, HARRISON OGBORN, of Richmond, in the county of Wayne and State of Indiana, have invented new and useful Improvements in Machines for Screening Grain; and I do hereby declare the following to be a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, like letters of reference referring to identical parts in the different drawings, in which—

Figure 1 is a perspective view. Fig. 2 is a vertical section; Fig. 3, a plan view of the crooked groove.

In constructing my invention I use an ordinary frame or support for the working parts, as shown at B B, Figs. 1 and 2.

I construct a nest of screens, as shown at D, D, E, P, and Q, Figs. 1 and 2, having mouths or openings V V' V'' for the discharge of the grain after it is cleaned. These screens are held in their position by suspending-straps D and T, which are so constructed as to admit of a lengthwise, and at the same time a lateral or side, motion to the nest of screens aforesaid. The long or lengthwise motion is communicated to the screens by means of a shaft, *b*, perforated circular crank *c*, and rod *a*. A is a hopper for holding the grain. W W are openings to allow the passage of the grain from the hopper A to the screens D. R is the slide for opening and closing the holes W W.

Fig. 3, letter S shows the hooked groove, by means of which, in connection with the friction-pulleys *n n* and arms *m m*, and piece O for holding the arms *m m* in proper position, a short quick side motion is communicated to the screens while the machine is in operation. I is a block, to which the crooked groove is attached. *h* is a joint, in which one end of suspending-strap *d* is placed, to allow it a free motion in two or more directions. *i i* are holes in which the pin *f* is placed to raise or lower the end of the screens to which the strap *d* is attached.

The operation of my invention is as follow: The grain to be cleaned is placed in the hopper A, when, by drawing the slide R, the opening W is enlarged so as to allow the grain to be cleaned to flow onto the screen D, when the coarse or large particles will be screened out by it and fall into the space V, when the motion of the screens will cause it to be carried to the side and fall off. The grain, such as wheat, will fall through the screens D D and lodge on screen E, when the largest and best grains, being too large to pass through it, will be carried forward and fall off at V', fit for seed, while the smaller grains of wheat and fowl seeds of different kinds will fall through screen E onto screen P, where they will be subjected to another screening process, by which the small grains of wheat will be separated from all, or nearly all, the fowl seeds, and be carried forward and discharged at V'' fit for market. The fowl seeds fall through onto screen Q, when, if there be timothy-seed in it, the timothy-seed will be screened through and fall on the floor, while the fowl seeds will be carried forward and fall off the end of the screen out of the way.

Having thus described the nature, construction, and operation of my invention, what I claim therein as new and useful, and desire to secure by Letters Patent, is—

1. The crooked groove S, in combination with the friction rollers or pulleys *n n* and arms *m m*, when used for the purposes set forth.

2. The perforated crank *c*, shaft *b*, rod *a*, and hopper A, in combination with the nest of screens D, E, and P and crooked groove S, when arranged and operated substantially as set forth, and for the purpose specified.

HARRISON OGBORN.

Witnesses:

G. A. C. SMITH,
C. M. SWANY.