

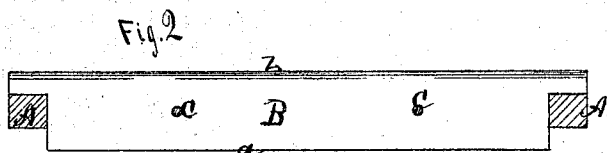
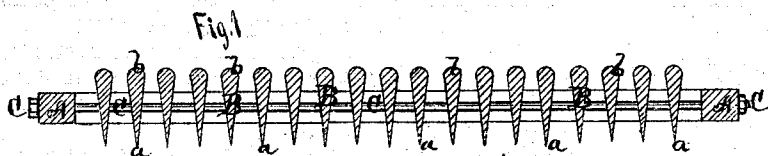
(159.)

THOMAS NICHOLSON.

Improvement in Sieve for Threshing and Separating
Machines.

No. 122,485.

Patented Jan. 2, 1872.



Witnesses:

J. R. Drake.
C. N. Woodward.

Thos. Nicholson, Inventor By

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attys

UNITED STATES PATENT OFFICE.

THOMAS NICHOLSON, OF TITUSVILLE, PENNSYLVANIA.

IMPROVEMENT IN SIEVES FOR THRASHING AND SEPARATING MACHINES.

Specification forming part of Letters Patent No. 122,485, dated January 2, 1872.

SPECIFICATION.

I, THOMAS NICHOLSON, of Titusville, in the county of Crawford and State of Pennsylvania, have invented certain new and useful Improvements in "Sieves" for Thrashing-Machines, &c., of which the following is a specification:

Nature of the Invention.

The invention consists in the employment of a single sieve to do away with the three or four now used in thrashing-machines; and in its peculiar formation, to be hereinafter particularly described.

General Description.

In the drawing, Figure 1 is a longitudinal cross-section, Fig. 2 an elevation of a single slat.

A represents the outer rectangular frame, of any suitable material; B B, the slats forming the interstices or "meshes" of the sieve. They are formed with a lug on each end, which rests on the top of the frame A, and are suitably secured to it. C C are small stay-rods of metal, running through the frame and all the slats, which aid in strengthening them and more securely hold them in position. These rods C C being removable allow the slats to be taken out and replaced in case of injury.

The Novelty.

The important feature of my invention is in the form and arrangement of the slats B. They are made on the bottom with a sharp or "feather"-edge, *a a*, gradually widening up to the top, and are there rounded, as shown at *b b*. This makes the space between each slat or "interstice" less at the top of the sieve than at the bottom, which accomplishes a very important

double purpose—viz., that no grain can possibly lodge on the rounded tops, and the edges being sharp allow double the pressure of air from the bottom, which circulates through and greatly facilitates in clearing the grain of foreign matter. No grain can possibly lodge on or clog between these slats.

One sieve of my construction will do all the work of the several now employed in thrashing-machines, doing away with those sieves entirely.

As is well known the sieves now used clog constantly, and require the attention of one person all the time to clear them. Mine keep themselves free, and when the grain has passed through a thrashing-machine with my sieve it will not be necessary to pass it through a "fanning-mill."

In its construction it is extremely light, and can be made entirely of wood. In one hour's work it will save in labor enough to pay for itself; and it will cheapen the price of a machine in which it is used. It is not easily broken, and, with ordinary treatment, will last as long as the thrashing-machine itself.

What I claim is—

The removable slats B B formed with rounded heads *b* and knife-edges or points *a*, and arranged vertically and held in position between the frames A A by means of the removable rods C C, the several parts constructed, arranged, and operating as herein shown, for the purpose set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

THOS. NICHOLSON.

Witnesses:

J. R. DRAKE,
JOSEPH THOMPSON.

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