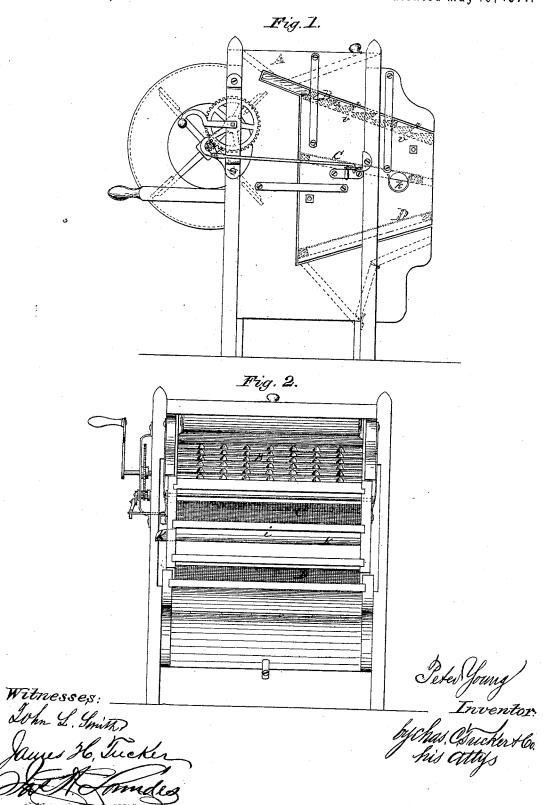
### P. YOUNG.

## Improvement in Fanning-Mills.

No. 114,898.

Patented May 16, 1871:



# United States Patent Office.

#### PETER YOUNG, OF AUSTIN, MINNESOTA.

Letters Patent No. 114,898, dated May 16, 1871.

#### IMPROVEMENT IN FANNING-MILLS.

The Schedule referred to in these Letters Patent and making part of the same.

I, Peter Young, of Austin, in the county of Mower and State of Minnesota, have invented certain Improvements in Fanning-Mills, of which the following is a specification.

#### Nature and Objects of the Invention.

My invention relates to an improvement in fanningmills by the introduction of an inclined step-sieve immediately under the grain-hopper, made of either hard wood or thin metal, with steps every inch or three-fourths of an inch, inclined inwardly, so that the wheat, from its greater weight, will, in its descent from the hopper over each step, fall inwardly through the inclined perforations in the joint of each step of the sieve, the fan being so constructed as to throw the blast upward through the holes of the sieve, blowing off the oats and chaff over its entire length.

Also, to the introduction of a metallic case and spout, attached to the sieve immediately below the step-sieve, for the purpose of gathering and conveying off all the cockle and finer refuse in the wheat.

#### Description of the Accompanying Drawing.

Figure 1 represents a side view of a fanning-mill embodying my invention.

Figure 2 represents a view of the back end of the same.

#### General Description.

The wheat is deposited in an ordinary fanning-mill hopper, A, on top, from whence it descends on the inclined step-sieve B underneath, the steps of which are about an inch or three-fourths of an inch apart, about half that height, and inclined inwardly, with round holes in each joint.

r represents the edge of each step,

s the joints, and

v v the holes cut through the same, with an inclination from the edge r to the joint s and its holes v v.

This sieve, together with the two underneath it, receive a vibratory motion communicated to them by

means of the rod  $a_1$  elbow-lever c, and springs d d the other end of the rod being attached to the crank o on the shaft of the fan, which is turned as in ordinary fanning-mills.

After passing through the inclined step-sieve B the wheat falls on the sieve C underneath, in its descent receiving the full blast from the fan f, in front, which blows off all oats and chaff which may have passed through the inclined step-sieve B.

Underneath the sieve C is a metallic case, i, with a spout, k, at the lower end to receive and convey off the cockle and finer refuse which escape the blast and drop through the sieve.

The wheat passes the entire length over this sieve, and in the rear drops over on the lower sieve D underneath, over which it again passes; becoming separated and freed from everything, drops into a box in front, as in ordinary fanning-mills, the last refuse being caught in the box E.

#### Claims.

I claim as my invention-

1. The upper inclined step-sieve B, with the steps thereof inclined from their outer edges r to their inner joints s, and provided with inclined perforations v, all constructed substantially in the manner and for the purpose hereinbefore set forth.

2. The combination of the upper inclined stepsieve B, constructed as described, with the sieve C and the metallic case i and spout k attached, as shown, and the lower sieve D, all constructed and arranged substantially in the manner and for the purposes hereinbefore set forth.

PETER × YOUNG.

#### Witnesses:

O. HAYES, L. BOURGARD, JOHN STURGEON.