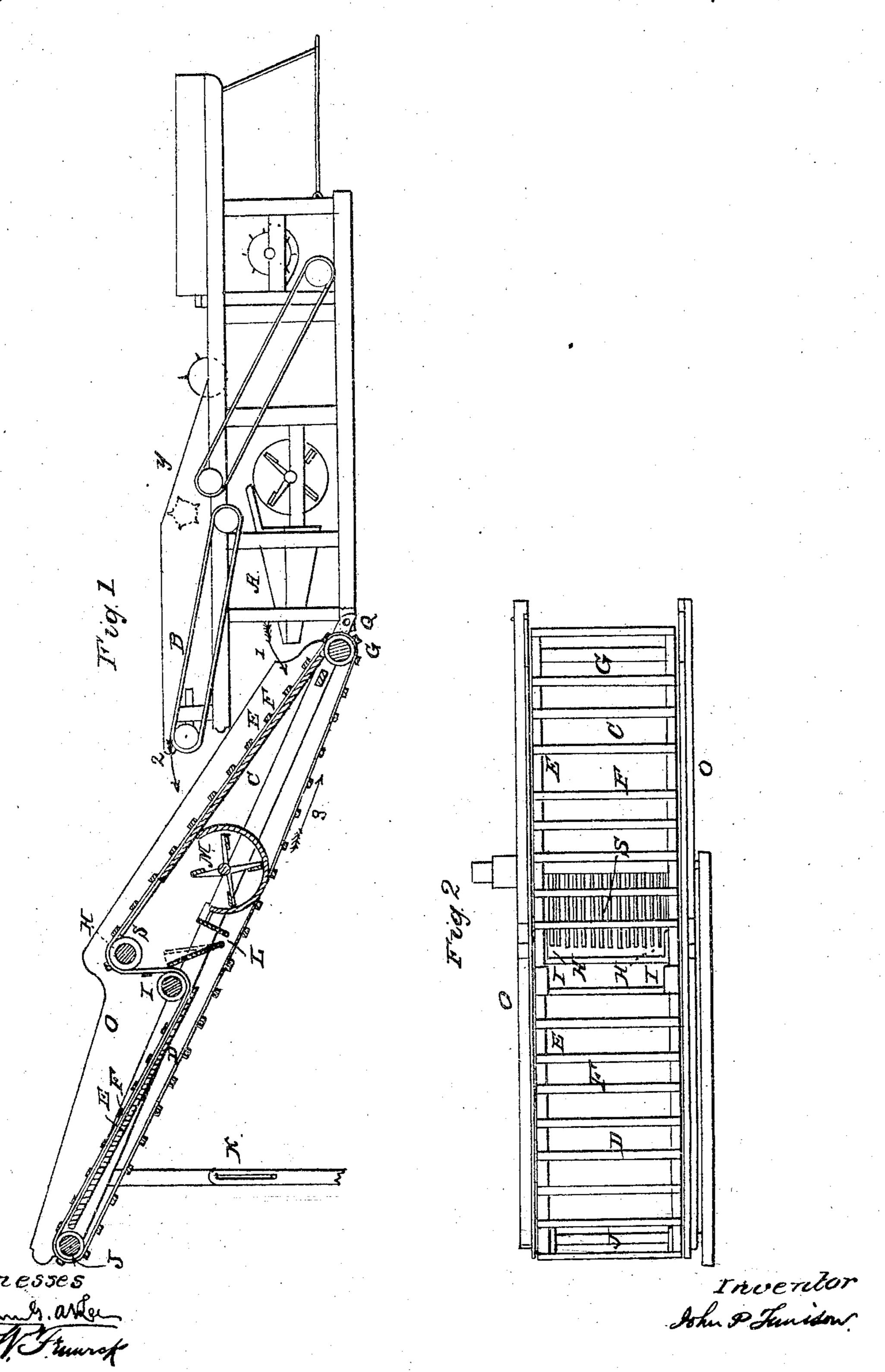
J. P. TUNISON.

Straw Carrier.

No. 30,099.

Patented Sept. 18, 1860.



UNITED STATES PATENT OFFICE.

JOHN P. TUNISON, OF OVID, NEW YORK.

GRAIN-CLEANING MACHINE.

Specification of Letters Patent No. 30,099, dated September 18, 1860.

To all whom it may concern:

Be it known that I, John P. Tunison, of Ovid, in the county of Seneca and State of New York, have invented a new and useful Improvement in Grain-Cleaning Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1, represents a vertical section of my additional separator when attached to a grain threshing and separating machine of the usual construction. Fig. 2, a plan of the additional separator when detached.

Similar letters of reference, in each of the several figures indicate corresponding parts.

My invention relates to an additional separator which may be attached to any grain 20 threshing, separating and clover hulling machine by means of a hinge for the purpose of subjecting the refuse or partly threshed and separated grain of the thresher apron and separator shoe to an additional and 25 continuous separating process, as will be described hereinafter, and the nature of my invention consists, 1st, in carrying the upper half of the endless slatted belt of my additional separator, over intermediate guide 30 rollers so that said upper half of the belt be divided into two portions of different inclinations and another vertical or nearly vertical portion between the two, in combination with a fan blower, hopper and skele-35 ton bottom, as hereinafter described.

It consists, 2nd, in arranging the fan within the endless slatted belt as hereinafter set forth.

To enable others, skilled in the art, to make and use my invention, I will proceed to describe its construction and operation.

Y, is a grain threshing and separating machine of the usual construction. The frame O, O, of my additional separator is hinged to said machines, by means of a hinge rod Q, passed to corresponding holes in the rear end of frame O, O, and in the forward end of said machine. This rod can be withdrawn whenever it is desired to detail the vertical portion of the slatted spaces, onto bottom D, to be carried off by the slats, together with the chaff, &c., which has passed over the skeleton bottom and roller H, onto bottom D. Thus the grain contained in the refuse material of machine Y, and which is usually lost to the farmer will be gathered into hopper L, in a clean state.

What I claim as my invention and desire

An endless slatted belt E, F, passes around the rollers G, J, at the ends of frame O, O, and two intermediate guide rollers, H, I, to wit, over the roller H, and under the 55 roller I, so as to subdivide the upper half of

the endless belt into two portions (one between rollers G, and H, and the other between the rollers I, and J,) of different inclinations, whereby the third portion of the upper half of the belt (between the rollers 60 H, and I) will be placed in a vertical or nearly vertical position. Bottoms C, and D, are arranged underneath the said portions of the belt between the rollers G, H, and I, J. The outer end of bottom C, is made in 65 the form of a skeleton or wire grate S, so as to answer the office of a separating shoe. Underneath this grate, there is a hopper L, and behind said hopper, a fan blower M; hopper and fan blower being inclosed without the slatted belt and situated in rear of the vertical portion of the same.

The forward end of the frame O, O, may be placed higher or lower by means of adjustable legs K, so as to suit the inclination 75 of the portion of the belt between the rollers G, ad H, to the height and peculiar arrangement of the threshing and separating machine to which my additional separator is to be attached.

The refuse material of the threshing and separating machine Y, passes out and upon the slatted belt E, F, in the direction of arrows 1, and 2. As the belt revolves in the direction of arrow 3, the slats carry the 85 refuse material up the inclined bottom C, and upon the skeleton bottom S. Here the grain contained in the refuse material of machine Y, drops through and during its descent (before it reaches the hopper L, 90 which guides it off) is acted upon by the blast arising from fan-blower M, in such a manner that any dirt chaff or other light impurities which may have passed through the skeleton bottom together with the grain, 95 will be blown through the open spaces in the vertical portion of the slatted spaces, onto bottom D, to be carried off by the slats, together with the chaff, &c., which has passed over the skeleton bottom and roller 100 H, onto bottom D. Thus the grain conand which is usually lost to the farmer will be gathered into hopper L, in a clean state.

What I claim as my invention and desire 105 to secure by Letters Patent, is—

1. Carrying the upper half of the endless slatted belt E, of my additional separator, over intermediate guide rollers H, I, so that said upper half of the belt be divided into 110

two portions of different inclinations and another vertical or nearly vertical portion between the two, in combination with a fan blower M, hopper L, and skeleton bottom 5 S, substantially as and for the purposes set forth.

2. Arranging the fan within the endless

slatted belt, substantially in the manner and for the purpose described.

JOHN P. TUNISON.

Witnesses:

GOODWIN Y. AT LEE, R. W. FENWICK.