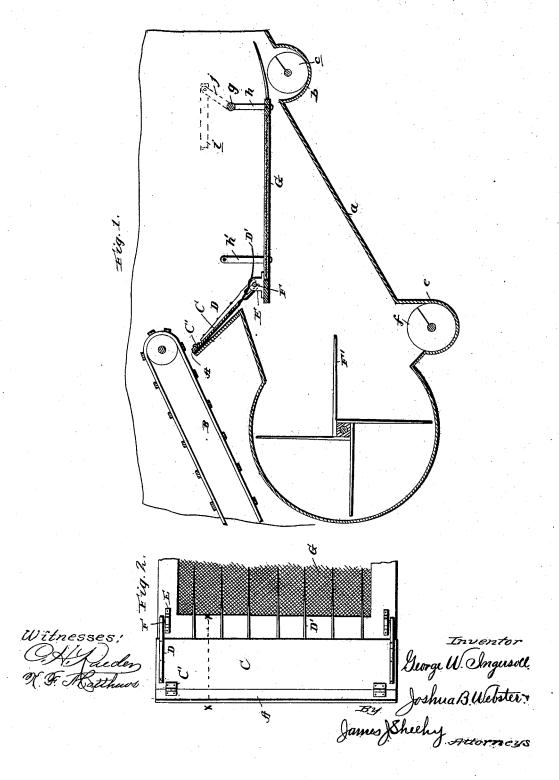
G. W. INGERSOLL.
GRAIN SAVING DEVICE IN THRASHERS.

No. 490,807.

Patented Jan. 31, 1893.



## UNITED STATES PATENT OFFICE.

GEORGE W. INGERSOLL, OF STOCKTON, CALIFORNIA, ASSIGNOR OF ONE-HALF TO BENJAMIN HOLT, OF SAME PLACE.

## GRAIN-SAVING DEVICE IN THRASHERS.

SPECIFICATION forming part of Letters Patent No. 490,807, dated January 31, 1893. Application filed July 22, 1892. Serial No. 440, 930. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. INGERSOLL, a citizen of the United States, residing at Stockton, in the county of San Joaquin and 5 State of California, have invented certain new and useful Improvements in Grain-Saving Devices in Thrashers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable 10 others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to certain improvements in thrashers and it consists in a means for the better separation of the chaff from the

grain.

The invention will befully understood from 20 the following description and claims when taken in connection with the annexed draw-

ings in which: Figure 1, is a detail, longitudinal section of a portion of a thrashing machine embody-25 ing my invention, taken in the plane indicated by the line x, x, of Fig. 2. Fig. 2, is a detail top plan view illustrating the usual grain board and the supplemental grain board together with a portion of the sieve.

Referring by letter to the said drawings: A is the usual cross grain board attached to the

sides of the thrasher.

B is the usual grain carrier.

C is a supplemental grain board attached 35 by hinges  $C^\prime$  at its upper edges to the top of the grain board A.

D are iron bars attached to the sides of the supplemental grain board C, provided with

jaws at their lower ends.

G is the usual sieve, to the front ends of which are attached lugs E provided with pins F which engage with the jaws of the bars D, so that when the sieve G is shaken endwise the supplemental grain board C will be agi-45 tated. Fingers D' are attached to the rear

edge of the board C. As the chaff and grain fall from the carrier B upon the board C and fingers D' they being agitated, aid materially in the separation of the chaff from the grain and place the former in better position to be 50 blown from the sieve by the blast of wind from the fan F'. This fan F', which is arranged in a chamber as shown, is designed in addition to blowing the chaff from the grain, to blow any refuse matter that may 55 come through the sieve up the inclined base board a, and into the receiver or trough b, which may be provided with a transverse conveyer as c, adapted to convey the refuse matter out of the machine at the side thereof. 6c The grain that falls through the sieve G, and onto the board a, takes down into the trough e, and is carried out of the machine by the conveyer f. The sieve G, derives its endwise movement from the rock shaft g, to which 65 its rear end is connected by the crank arms h, as shown; and the forward ends of the said sieve are suspended from the side walls of the machine by the straps h'.

Motion may be transmitted to the rock shaft 70 g, through the medium of a pitman i, which is pivotally connected to a crank arm j, within which the shaft g, is provided, as shown by

dotted lines in Fig. 1.

Having thus described my invention what I 75

In a thrasher the combination substantially as described of the grain board A, the supplemental grain board C attached by the hinges C' to the board A, the bars D provided 80 with jaws at their lower ends, the sieve G, the lugs E provided with the pins F engaging with the jaws of the bars D, and the fingers D'attached to the rear edge of the board C.

In testimony whereof I affix my signature in 85

presence of two witnesses.

GEORGE W. INGERSOLL.

Witnesses:

JOSHUA B. WEBSTER, JAS. T. SUMMERVILLE.