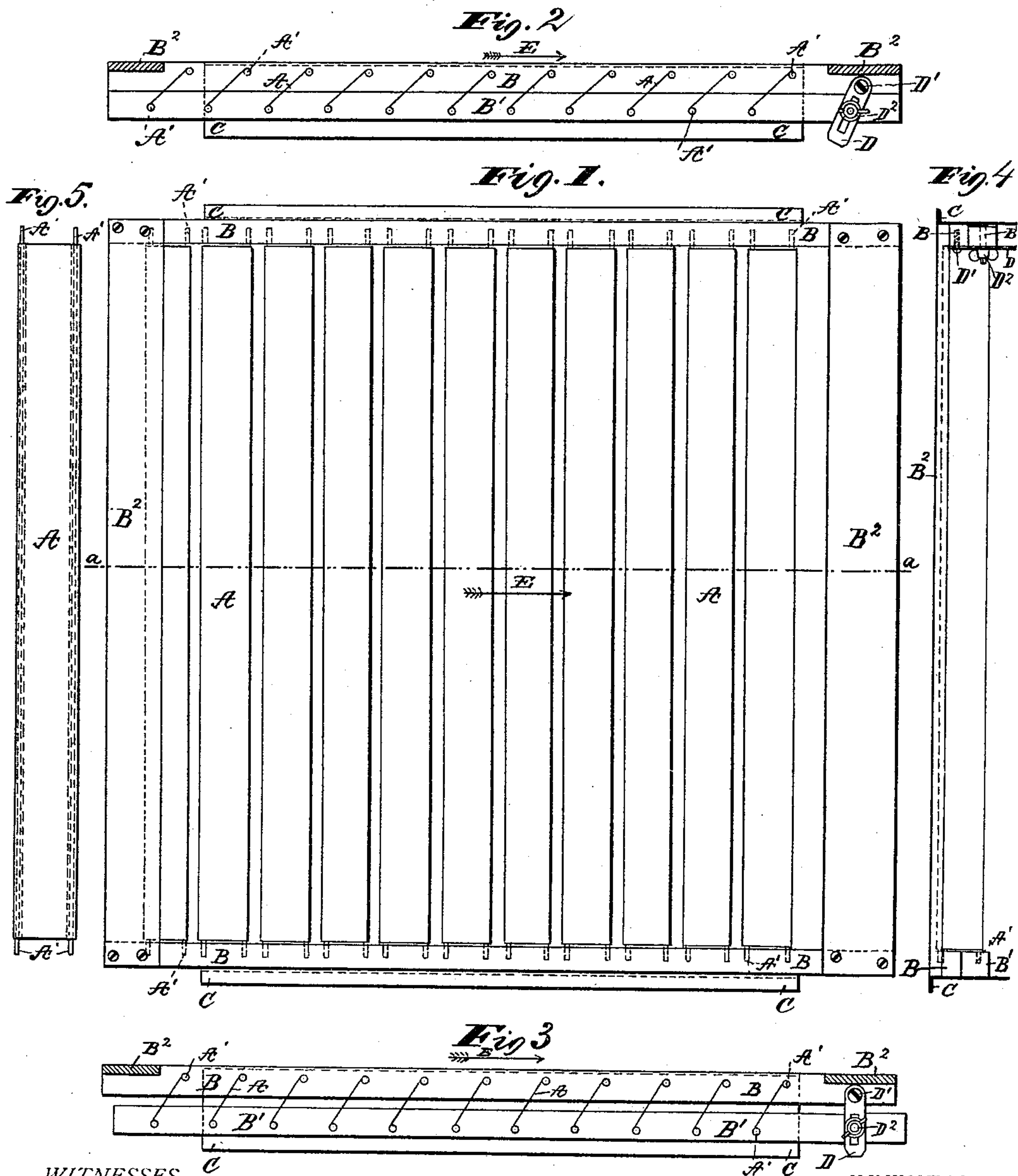


(No Model.)

C. HAYWARD.
SCREEN FOR WINNERS.

No. 370,139.

Patented Sept. 20, 1887.



WITNESSES.

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SCREEN FOR WINNOWERS.

SPECIFICATION forming part of Letters Patent No. 370,139, dated September 20, 1887.

Application filed December 17, 1885. Serial No. 185,877. (No model.) Patented in Victoria October 1, 1885, No. 4,254.

To all whom it may concern:

Be it known that I, CHARLES HAYWARD, a subject of the Queen of Great Britain, residing at Pine Lodge, near Shepparton, in the British Colony of Victoria, Australia, farmer, have invented an Improved Screen for Winnowers, (that an application for patent was filed in the British Colony of Victoria, Australia, on the 1st day of October, 1885, and numbered 4,254, that under the laws governing the grant of patents in said colony the Letters Patent bear date as of the day of filing, and that up to the present time the patent on said application filed in said colony has not been granted,) of which the following is a specification.

This invention has been designed for the purpose of providing a screen for winnowers and other grain-cleaning machines, which will allow the grain to fall through it onto the shaking-riddles, while the straw and waste is carried over it. It is made in the form of a louver-frame, either wood or metal, and is placed immediately above the riddles or attached to the riddle-frame, so that when the material to be winnowed is fed onto it from the hopper and is subjected to the action of the fanners the grain strikes against the louvers and falls by gravity between them, while the straw and other larger and lighter materials are blown over it.

The screen consists of a number of louvers, each having one or more pins, but by preference two at each end. The upper one of these pins is centered in the top half of a divided frame, while the lower one is centered in the lower half, so that by lowering the one half of the frame from the other the width of the spaces between the louvers is increased. The screw is placed so that the louvers fall toward the fanners. I also provide means for securing the frames in the several positions to alter the width of the spaces between the louvers by means of a slotted plate pivoted to the upper frame, and held in any desired position by means of a screw-pin passing through the slot in the lower frame, and provided with a thumb-

nut for holding the slotted plate in the desired position.

The accompanying drawings form part of this specification, and illustrate what I consider the best means of carrying out my invention.

Referring to the drawings, Figure 1 is a plan of my improved screen. Fig. 2 is a longitudinal section of it, looking from the line *a a*, Fig. 1. Fig. 3 is a similar view, but showing the louvers in their altered position. Fig. 4 is an end view of the same, and Fig. 5 is a side view of one of the louvers.

Similar letters of reference are employed to indicate like parts in all the figures.

A A are the louvers, (shown constructed by preference of metal,) and A' are the projecting pins at their ends, the upper ones of which are centered in the holes in the top frame, B, while the lower pins are centered in the lower frame, B'.

B² B² are the cross-bars forming the ends of the top frame, and C C are the slides secured to the side of the frame for supporting it in the side cheeks of a riddle.

D is a slotted plate centered at D' to the top frame, and D² the thumb-nut of a screw the pin of which passes through said slotted plate and through the lower frame, B'. E are arrows denoting the course of the material which is fed to the same.

The position of the louvers A' is regulated by raising or lowering the frame B'. When the frame B' is raised, as shown by Fig. 2, the position of the louvers A' is such that a greater resistance is presented to the passage of the grain to be winnowed, while, when the frame B' is lowered, as shown by Fig. 1, a more direct course is open for the passage of the same.

When the frame B' is raised or lowered, as desired, it is held for the time being permanently in position by the thumb-nut D² of the binding-screw, the pin of which, as described, passes through the slotted plate D and the lower frame, B'.

Having now particularly described and ascertained the nature of my said invention and

in what manner the same is to be performed, what I claim, and desire to secure by Letters Patent, is—

5 A screen embodying in its construction a frame, B, a vertically-adjustable frame, B', a series of louvers pivoted at their opposite faces to the frames B and B', as described, and a slotted adjusting and retaining plate, D,

pivoted to the upper frame, B, and adjustably secured to the lower frame, B', the whole being constructed and arranged substantially as shown and described.

CHARLES HAYWARD.

Witnesses:

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PERCIVAL AUGUSTUS SMITH.