(No Model.)

C. W. JOHNSON & E. BAILEY.

ADJUSTABLE SCREEN FOR THRASHING MACHINES.

No. 426,589. Patented Apr. 29, 1890.

Fig. 1.

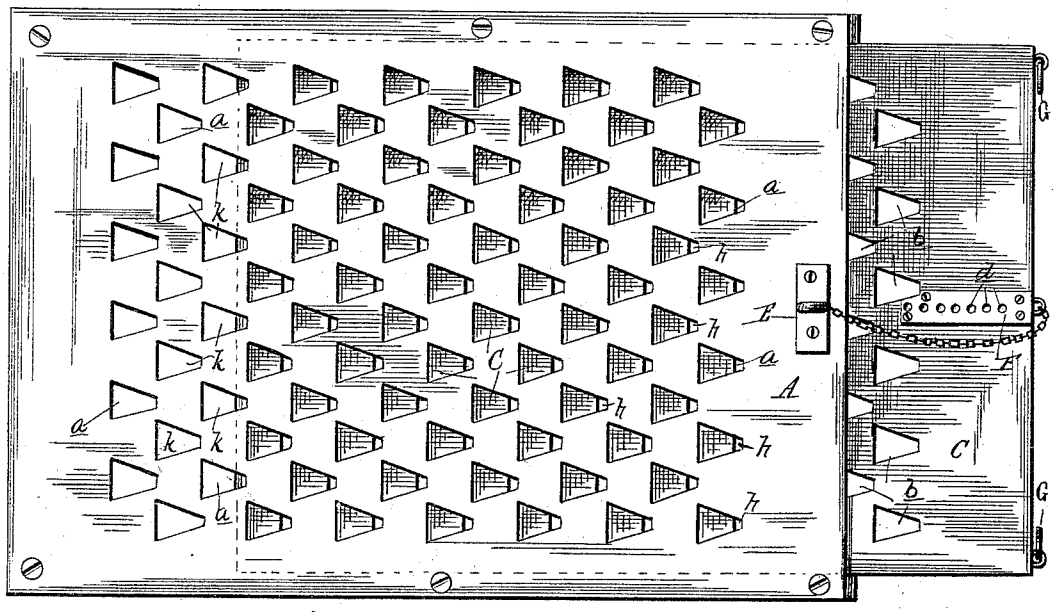


Fig. 2.

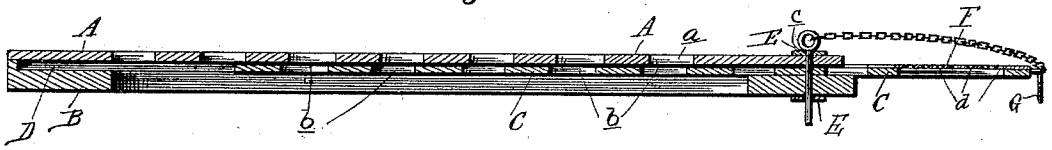
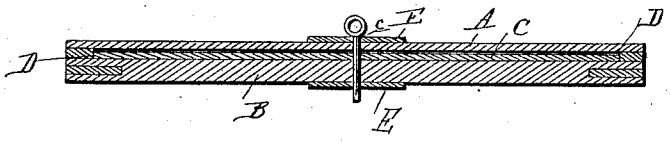


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

CHARLES M. JOHNSON AND ESCAL BAILEY, OF ALGONA, IOWA; SAID BAILEY ASSIGNOR OF ONE-HALF OF HIS INTEREST TO L. E. SHERWOOD, OF SAME PLACE.

ADJUSTABLE SCREEN FOR THRASHING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 426,589, dated April 29, 1890.

Application filed June 6, 1889. Serial No. 313,338. (No model.)

To all whom it may concern:

Be it known that we, CHARLES M. JOHNSON and ESCAL BAILEY, citizens of the United States, residing at Algona, in the county of Kossuth and State of Iowa, have invented certain new and useful Improvements in Adjustable Screens for Thrashing-Machines; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable 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.

This invention relates to certain new and useful improvements in adjustable screens for thrashing-machines; and it has for its object to generally improve upon the construction and to render more efficient and serviceable in operation this class of devices.

To the above ends and to such others as the invention may pertain the same consists in the peculiar construction and in the novel combination, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the accompanying drawings, and then specifically defined in the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, like letters of reference indicating like parts throughout the several views, and in which drawings—

Figure 1 is a top plan view of an adjustable screen constructed in accordance with our invention, the movable section of the screen being shown as drawn partially out. Fig. 2 is a central vertical section through the screens and their frame, and Fig. 3 is a central transverse section of the same.

Reference now being had to the details of the drawings by letter, A designates the upper screen, which is secured to the upper face of the frame B. This screen is made of either wood or metal, and is provided with meshes or openings *a a*, preferably substantially triangular in form and arranged in alternating series, as shown.

C is a movable screen provided with meshes *b b*, corresponding in size and relative position with the meshes *a* in the stationary screen A. The screen C is adapted to be moved within suitable guide-slots D, formed within the frame B directly beneath the stationary screen A. The upper face of the movable screen C is in contact with the lower face of the stationary screen, and it will be seen that the meshes in the screens are so arranged as to cause the meshes in the movable screen to register with the corresponding meshes in the stationary screen when the movable screen has been moved into place within its guides, and it will also be seen that by moving the screen C slightly the size of the meshes through which the grain is to pass may be varied.

E is a plate of metal secured to the upper face of the stationary frame A at a point adjacent to one of its ends. This plate is provided with a central hole *c*, which hole is extended through the screen and is adapted to receive a pin or bolt in locking the movable screen in its adjusted position, the said bolt being passed through one of the series of holes *d* in the metallic plate F, secured to the upper face of said screen C.

G is a projection or handle secured to the end of the movable screen, and is adapted for use in moving or adjusting the position of the screen, as will be readily understood.

Importance is attached to the peculiar shape of the openings in the screen, as the triangular shape provides for a greater variation in the size of the meshes through which the material may pass than can be obtained by square or round openings. Said meshes may be readily varied from a very small one, as shown at *h* in Fig. 1, to a very large one, as shown at *k* in the same figure.

Having thus described our invention, what we claim to be new, and desire to secure by Letters Patent, is—

The combination, with the open frame B, having the longitudinal guides D on each side of the frame, of the upper screen A, rigidly secured to the upper face of the open frame, said upper screen being provided with essentially triangular apertures *a*, arranged in al-

ternating series, and a movable screen C, adapted to slide beneath the rigid screen in the guides D, said screen being constructed similar to the upper rigid screen A, a metallic plate F, secured to the outer end of said movable screen and provided with a series of holes *d*, a perforated metallic plate E, secured over an aperture in the rigid screen and frame, and a pin adapted to pass through the said apertures in the different screens when brought into vertical alignment, substantially as shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

CHARLES M. JOHNSON.
ESCAL BAILEY.

Witnesses:
J. B. JONES,
F. E. SMITH.