

No. 750,167.

PATENTED JAN. 19, 1904.

H. K. CLEMENT.

GRAIN SIEVE.

APPLICATION FILED NOV. 8, 1902.

NO MODEL.

Fig. 1.

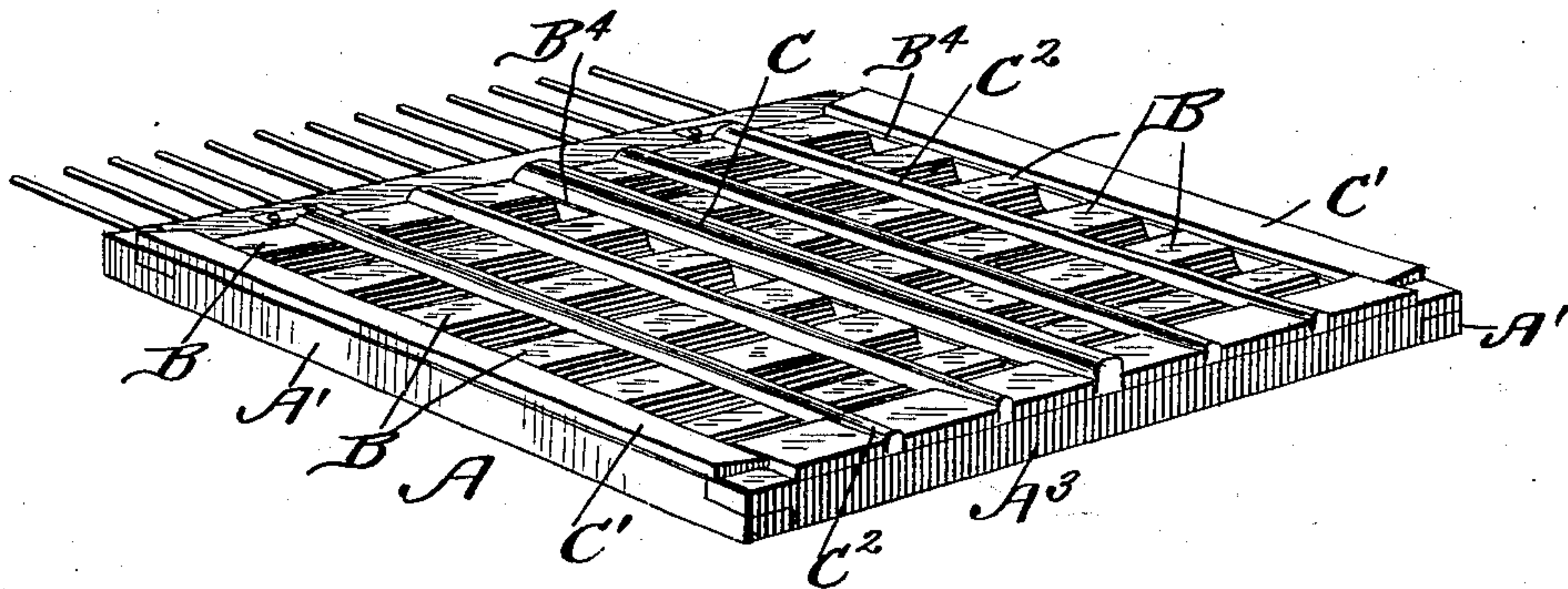


Fig. 2.

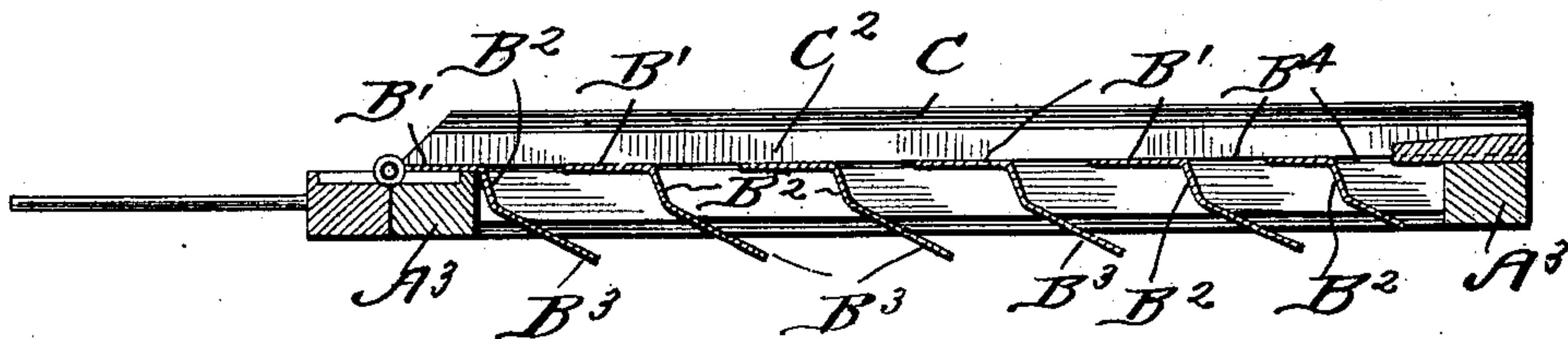


Fig. 3.

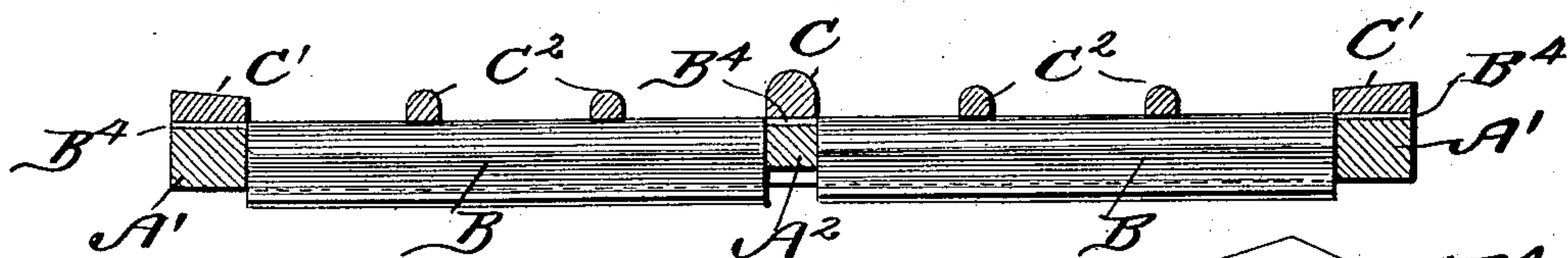


Fig. 4.

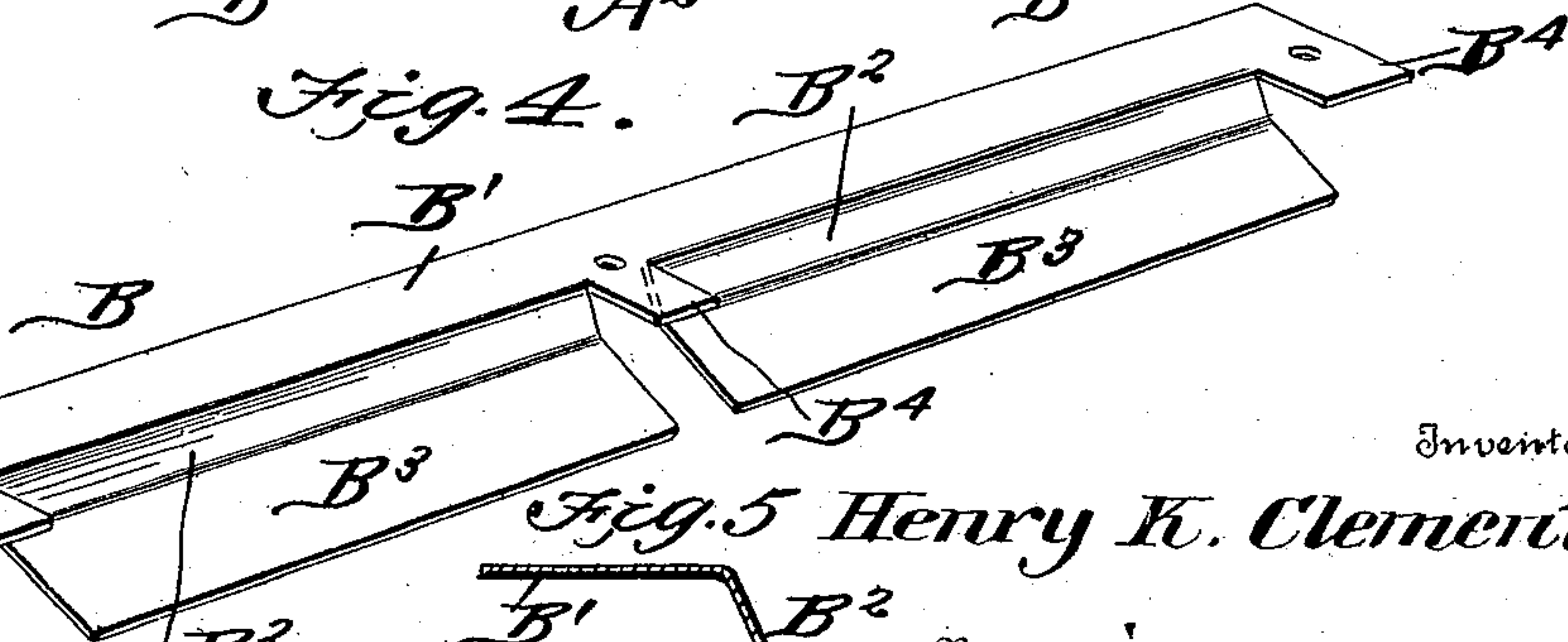


Fig. 5.

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# UNITED STATES PATENT OFFICE.

HENRY K. CLEMENT, OF LAPORTE, INDIANA.

## GRAIN-SIEVE.

SPECIFICATION forming part of Letters Patent No. 750,167, dated January 19, 1904.

Application filed November 8, 1902. Serial No. 130,592. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY K. CLEMENT, a citizen of the United States, residing at Laporte, in the county of Laporte and State of Indiana, have invented a new and useful Grain-Sieve, of which the following is a specification.

This invention is an improved construction of grain sieve or chaffer, the object of the invention being to provide a sieve for use in a threshing-machine for the purpose of separating the straw or chaff from the finer screens, the advantage of this construction of screen being that it prevents the straw and chaff falling upon the screens and clogging the same.

Another object of the invention is to provide a sieve or chaffer which can be used in connection with any construction of threshing-machines or grain separators and cleaners and also one which can be used as a permanent construction or may be adjustable, as preferred.

With these objects in view the invention consists in the special construction and arrangement of the several parts hereinafter fully described, and pointed out in the claim.

In the drawings, forming a part of this specification, Figure 1 is a perspective view illustrating a sieve or chaffer constructed in accordance with my invention. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a transverse sectional view. Fig. 4 is a detail perspective view illustrating one of the metallic strips, and Fig. 5 is a sectional view of said strip.

In constructing a sieve in accordance with my invention I employ a frame A, composed of the side pieces A' and central longitudinal piece A<sup>2</sup>, connected at the ends by the end pieces A<sup>3</sup>.

Secured upon the frame A are a series of metallic strips B, arranged transversely and in parallel order, said strips being secured by means of a central strip C, side strips C', and intermediate strips C<sup>2</sup>, all of said strips being arranged longitudinally and comprising, with the transverse metallic strips, a sieve-surface upon which the chaff and grain is deposited. The metallic strips B are all constructed alike and comprise the horizontal portions B', the intermediate inclined portion B<sup>2</sup>, and the lower inclined portion B<sup>3</sup>. Each strip has two in-

dependent inclined portions, which project downwardly below the upper face of the sieve between the side and central pieces and rest upon the said side and central pieces, and connected thereto are the ears or lugs B<sup>4</sup>, it being understood that all of the said parts—namely, the flat portion B', inclined portions B<sup>2</sup> and B<sup>3</sup>, and the ears or lugs B<sup>4</sup>—are all punched from a single plate or sheet of metal. Furthermore, it will be understood that the longitudinal strips C and side strips C' securely connect the metallic strips to the frame and that the strips C<sup>2</sup> rest above the horizontal portions B', as most clearly shown. It will also be noted by reference to Fig. 2 that the lower end of each strip projects a short distance beyond the edge of the horizontal portion of the next adjacent strip, so that each strip underlaps the next adjacent strip when viewed from the under side, and it may also be said that each strip overlaps each adjacent one when viewed from the upper side.

By having the portions B<sup>2</sup> arranged as shown and described the wind will be directed upwardly, thereby keeping the chaff and straw above the sieve, while the wind coming over the top of the sieve blows the said straw and chaff rearwardly, thus leaving the meshes free for the grain to fall through, and the result is that very little grain is carried away with the straw and chaff.

By having the portion B<sup>3</sup> lap under the portion B' of the next adjacent strip any straw which should come down through the mesh endwise will strike the said inclined portion and the wind will trip it, and it will consequently be carried on to the straw-stack, thus avoiding the possibility of clogging the sieve.

A sieve constructed as herein shown and described requires little or no attention, as it is virtually self-cleaning, inasmuch as it prevents the accumulation of straw or chaff thereon. As before stated, the sieve can be made with the strips permanently attached to the main frame. It will also be understood that I do not limit myself to the exact construction of strip hereinafter shown and described nor to the exact construction of the frame, as any construction employing a frame and the series of transverse strips, each comprising a hori-

zontal and two inclined portions and said strips arranged so as to underlap or overlap, will be within the scope of my invention.

Having thus fully described my invention,  
5 what I claim as new, and desire to secure by Letters Patent of the United States, is—

A grain - sieve comprising a rectangular frame, a central longitudinal strip carried by said frame, end strips resting on the sides of  
10 the frame, a plurality of transverse metallic strips having ears at their ends, said ears resting on the sides of the frame beneath the end

strips, forwardly-projecting ears projecting centrally from the transverse strips and secured to the under side of the longitudinal 15 strip, said metallic strips comprising horizontal and inclined portions, and strips arranged parallel to each other and above and transverse to the transverse metallic strips.

HENRY K. CLEMENT.

Witnesses:

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