No. 673,210. Patented Apr. 30, 1901.

D. LIPPY.

CONVEYER SIEVE.

(Application filed Aug. 23, 1900.)

(No Model.)

Fig. 1

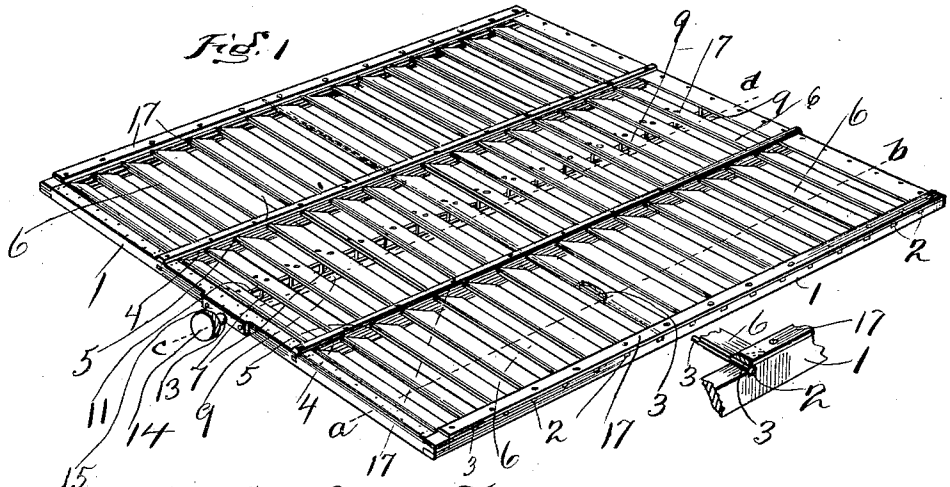


Fig. 2

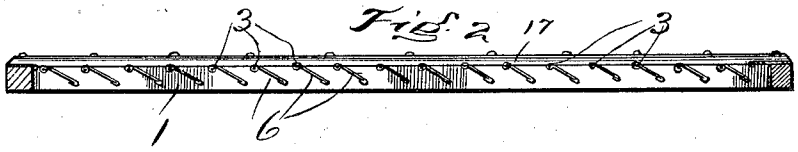


Fig. 3.

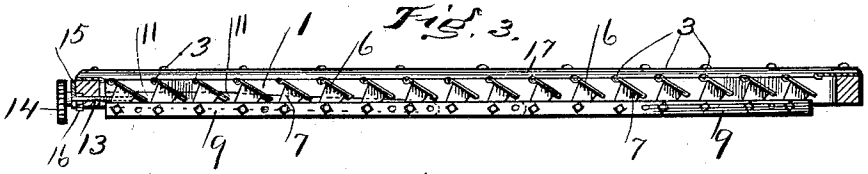


Fig. 4.

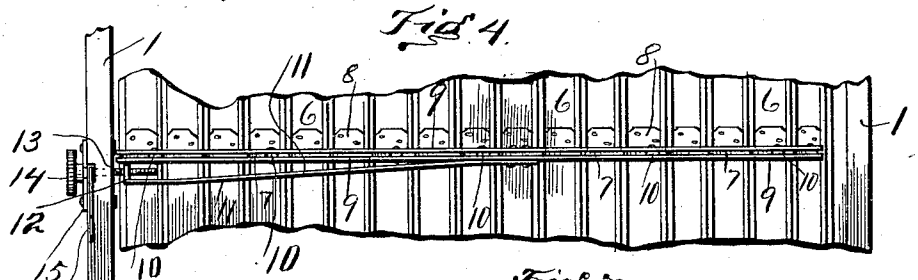


Fig. 5.

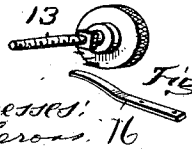
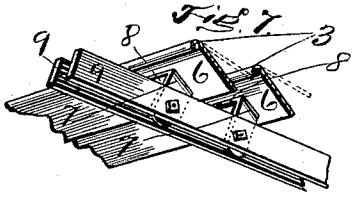


Fig. 6.

Fig. 7



Witnesses:
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

DAVID LIPPY, OF MANSFIELD, OHIO, ASSIGNOR TO THE LIPPY MFG. CO., OF SAME PLACE.

CONVEYER SIEVE.

SPECIFICATION forming part of Letters Patent No. 673,210, dated April 30, 1901.

Application filed August 23, 1900. Serial No. 27,773. (No model.)

To all whom it may concern:

Be it known that I, DAVID LIPPY, a citizen of the United States, residing at Mansfield, in the county of Richland and State of Ohio, have invented certain new and useful Improvements in Conveyers and Sieves; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the figures of reference marked thereon, in which—

Figure 1 is a perspective view showing the different parts properly assembled and illustrating a portion of one of the shaft-retaining caps broken away. Fig. 2 is a longitudinal section through line *a b*. Fig. 3 is a longitudinal section through line *c d*. Fig. 4 is a view showing portions of two blades, also showing the adjusting-strips connected thereto. Fig. 5 is a detached view of the screw-threaded shaft and its knob or head. Fig. 6 is a detached view of the retaining-spring. Fig. 7 is a view showing two blades and portions of bars for connecting the blades together.

The present invention has relation to conveyers and sieves; and it consists in the different parts and combination of parts hereinafter described, and particularly pointed out in the claim.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, 1 represents the frame, which is formed of a size to correspond, substantially, with the size of the conveyer or sieve designed to be constructed, the end bars and side bars of said frame being connected together in any convenient and well-known manner.

The side bars of the frame 1 are each provided with the notches or recesses 2, which notches or recesses are for the purpose of receiving the ends of the shafts 3, which shafts extend entirely across the conveyer or sieve, and for the purpose of preventing the shafts 3 from springing or sagging the frame 1 is provided with the bars 4, which bars are also provided with the notches 5 to receive the shafts 3. In the drawings I have illustrated two bars 4; but it will be understood that any desired number of bars may be employed, as the only object is to prevent the shafts 3 from springing or sagging.

To the shafts 3 are securely attached the blades 6, said blades being of such a width that when they are brought into a horizontal position, or substantially so, they will overlap each other for a distance, thereby providing a means for closing the sieve, if desired.

It will be understood that the blades 6 are formed of a length to correspond with the distance between the side rails of the frame 1 and the bars 4, and if two bars such as 4 are employed there must necessarily be three sections or divisions of the blades 6. For the purpose of causing all of the blades to move in unison they are securely connected to the shafts 3.

The bottom or under sides of the middle section of the blades 6 are provided with the downward-extending arms 7, the downward-extending arms being provided with the right-angled portion 8, which right-angled portion is riveted to the blades, said parts being located and arranged substantially as shown in the drawings.

Upon each side of the downward-extending arms 7 are located the strips of metal 9, said strips of metal being spaced one from the other by a series of spacing-blocks 10, said spacing-blocks being held in proper relative position by means of suitable rivets or their equivalents.

The object and purpose of spacing the strips of metal 9 from each other are to prevent the arms 7 from binding when the conveyer or sieve blades are adjusted, as hereinafter described.

To the metal strips 9 and about midway between the end members of the frame 1 is connected the bar 11, which bar is extended rearward and its rear end provided with the right-angled portion 12, which right-angled portion is provided with a screw-threaded aperture, through which screw-threaded aperture is located the screw-threaded shaft 13, said screw-threaded shaft being provided with an operating-knob 14 and an angle-faced disk 15.

It will be understood that when the knob 14, together with the screw-threaded shaft 13, is rotated in one direction it will move the bar 11 forward, and when rotated in the opposite direction it will move the bar rearward, thereby opening and closing the blades 6. It will be understood that when the knob is rotated and the bar 11 moved lengthwise it will carry with it the strips of metal 9, and for the purpose of compensating for the arc described as the blades turn with their shafts 3 the rod 11 is pivotally connected to the strips of metal 9, thereby allowing the strips of metal 9 to move with the arms 7 to and from the shaft 3, or, in other words, allow the strips of metal 9 to come and go during the times the blades 6 are adjusted as to their angularity.

It will be understood that by my peculiar arrangement I am enabled to provide a conveyer and sieve adjustable for all kinds of grain and for all conditions of the straw and chaff.

It will be understood that when the straw and chaff are damp the seeds or kernels are larger and it is more difficult to separate the kernels or seeds from damp straw and chaff, and hence the blades should be adjusted so that a greater space will be formed between said blades than when the straw and chaff are thoroughly dried. It will also be understood that for different kinds of grain different adjustments must be provided.

By connecting the blades 6 to the shaft 3 at the rear edges of said blades I am enabled to provide a greater amount of adjustment, thereby giving to the conveyer and sieve a greater blast capacity, by which arrangement the device can be used as a separator, conveyer, and sieve.

The spring 16 is connected to the rear end member of the frame 1 in any convenient and well-known manner and is so located that it will engage one of the angled faces of the disk 15, thereby preventing the accidental rotation of the screw-threaded shaft 13 and holding the blades 6 at the fixed point of adjustment at all times and under all circumstances, and especially when the device is in operation.

For the purpose of properly holding the shafts 3 and the blades 6 in their proper relative position the caps 17 are provided, which caps are securely connected to the side members of the frame 1 and to the bars 4.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of a frame, a series of shafts journaled transversely to said frame, blades fixed at their rear edges to the shafts and one division of the blades provided with downwardly-extended arms, strips or bars 9 pivotally connected to the downwardly-extended arms, a bar pivotally connected to the strips or bars 9 between their ends, and means for adjusting the pivoted bar, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

DAVID LIPPY.

Witnesses:
W. L. HARDGROVE,
GEO. W. STATLER.