No. 894,356. PATENTED JULY 28, 1908.

A. W. WALTON.

CONVEYER BELT.

APPLICATION FILED OCT. 28, 1907.

Fig. 1.

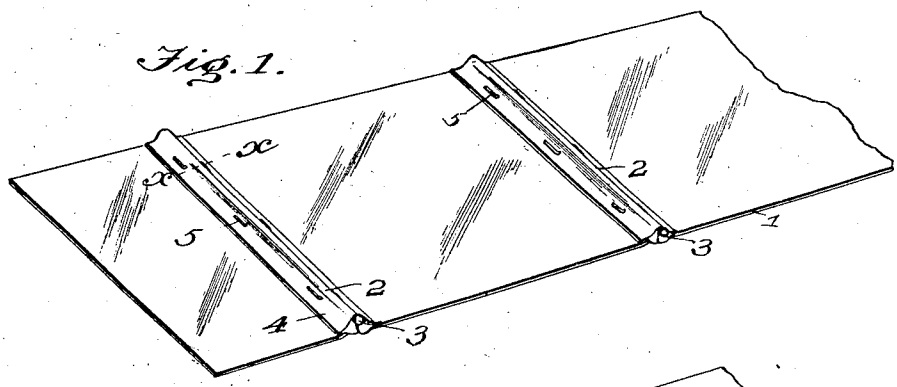


Fig. 2.

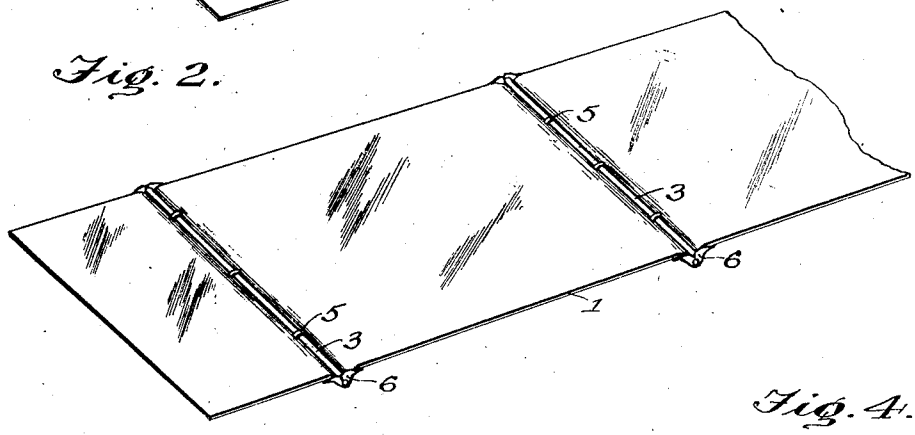


Fig. 4.

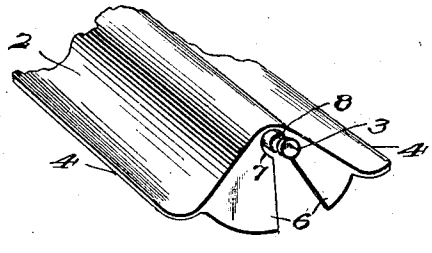
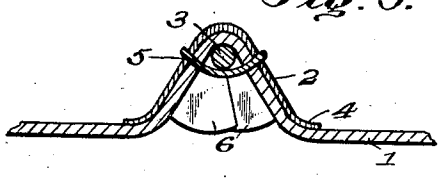


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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CONVEYER-BELT.

No. 894,356. Specification of Letters Patent. Patented July 28, 1908.

Application filed October 28, 1907. Serial No. 399,501.

To all whom it may concern:

Be it known that I, ALBERT W. WALTON, citizen of the United States, residing at Bozeman, in the county of Gallatin and State of Montana, have invented certain new and useful Improvements in Conveyer-Belts, of which the following is a specification.

This invention is designed to provide a novel form of conveyer or endless belt of the type provided with slats or flights and used in connection with agricultural machinery for moving grain either during the harvesting operation or when threshing or milling.

Heretofore belts or aprons of canvas or like textile have been provided with slats or flights, either tacked thereto or secured in such a manner as to admit of the grain catching between the belt or apron and the slats and tearing off the latter.

The present invention provides a novel form of flight and unique securing means for attaching the flight to the belt or apron.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings.

While the invention may be adapted to different forms and conditions by changes in the structure and minor details without departing from the spirit or essential features thereof, still the preferred embodiment is shown in the accompanying drawings, in which:

Figure 1 is a perspective view of a portion of a conveyer belt embodying the invention. Fig. 2 is a perspective view of the parts shown in Fig. 1 inverted. Fig. 3 is an enlarged section on the line *x*—*x* of Fig. 1. Fig. 4 is an enlarged perspective view of an end portion of a flight.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The belt, conveyer or apron 1 may be of canvas or other textile commonly employed in the manufacture of devices of this nature. The flights 2 are hollow and are arranged with the hollow side adjacent to the belt or apron, a portion of the latter being deflected into the space and secured therein by means of a rod or bar 3. The edge portions of the flights are outwardly deflected, as shown at 4, to provide an extended bearing upon the belt or apron, as also to prevent straw, grain or the like passing between the edge portions of the flights and the belt or apron. Fastenings 5 pass transversely through opposite sides of the flights and through side portions of the deflected part of the belt or apron and engage under the rod or bar 3 to hold the parts in place.

The fastenings 5 may consist of pins or short lengths of wire having their end portions bent so as to prevent displacement of the fastenings. The fastenings 5 in addition to holding the parts in place, also serve as ties to prevent spreading of opposite side portions of the flights. The space formed in the hollow side of each of the flights is closed at opposite ends by flanges in which the ends of the rods or bars 3 are secured.

The flights 2 are preferably formed of sheet metal which is bent into the shape substantially as shown. A flange 6 projects inward from each side portion of the flights, and the flanges at each end of the flights overlap and are provided with notches 7 to receive end portions of the rods or bars 3. To prevent endwise displacement of the rods or bars 3, grooves 8 are formed near each end and receive the notched portions 7 of the flanges 6. The flights may be applied to the belt and to the rods or bars 3 by suitable appliances which will press the flanges 6 or the notched portions 7 thereof into the grooves 8 of the said rods, thereby preventing longitudinal movement or play of the parts. By having a portion of the belt or apron deflected into the hollow side of the flight, a close fit is assured between the lower edges of the side portions of the flights and the material of the belt or apron, thereby preventing any grain, straw or the like from entering between the belt or apron and the flights.

Having thus described the invention, what is claimed as new is:

1. In combination, a belt or apron, hollow flights secured to a side of the belt and having portions of the latter deflected into the spaces thereof, said flights having flanges closing opposite ends of the spaces, and rods or bars for confining the deflected portions of the belt in the hollow sides of the flights and having their end portions secured in the flanged ends of the flights.

2. In combination, a belt or apron, flights

placed against a side of the belt and having the sides adjacent to the belt made hollow and having inwardly extending flanges at opposite ends of the side portions, and rods or bars fitted in the hollow sides of the flights and confining deflected portions of the belt therein, end portions of said rods or bars being held between opposite terminal flanges of the flights.

3. In combination, a belt or apron, hollow flights placed with their open sides against the belt and having inwardly extended flanges at opposite ends, said flanges having notches in their inner edges, and rods or bars fitted in the hollow sides of the flight and confining deflected portions of the belt therein, said rods or bars having grooves near their ends seated in the notches of the aforesaid terminal flanges.

In testimony whereof I affix my signature in presence of two witnesses.

ALBERT W. WALTON. [L. S.]

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