

(No Model.)

L. PATTERSON.
CONVEYER.

No. 513,276.

Patented Jan. 23, 1894.

Fig. 1.

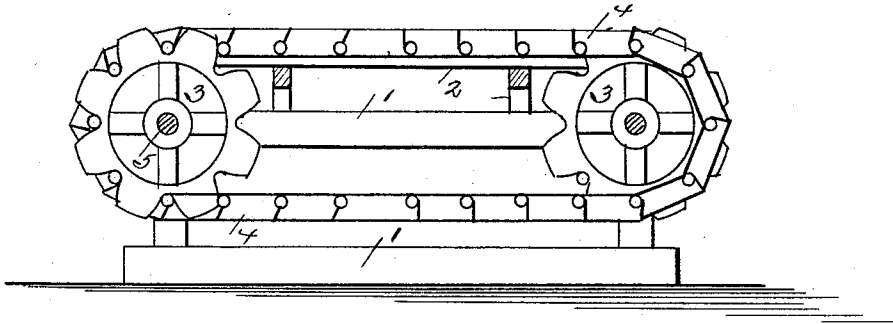


Fig. 2.

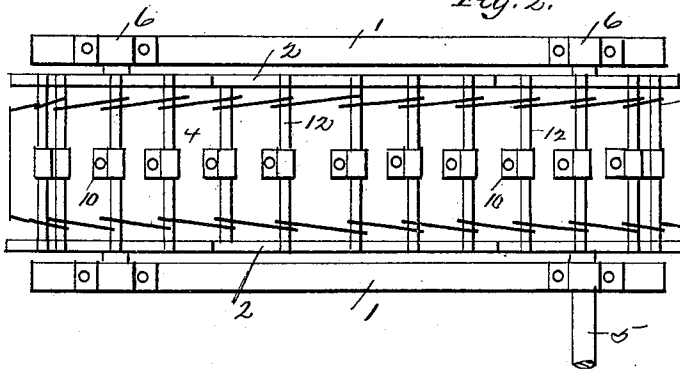


Fig. 3.

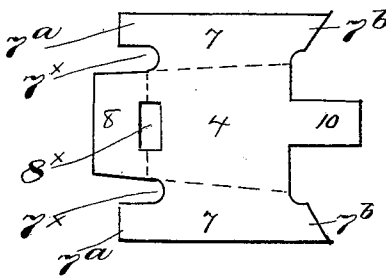


Fig. 4.

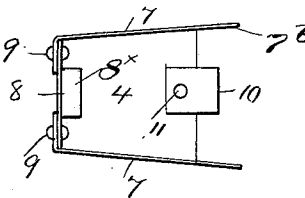


Fig. 5.

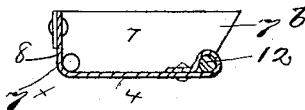
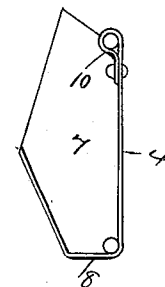


Fig. 6.



Witnesses:

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UNITED STATES PATENT OFFICE.

LEMUEL PATTERSON, OF ALLEGHENY, ASSIGNOR OF ONE-HALF TO GEORGE H. ALBERTSON, OF PITTSBURG, PENNSYLVANIA.

CONVEYER.

SPECIFICATION forming part of Letters Patent No. 513,276, dated January 23, 1894.

Application filed March 28, 1893. Serial No. 468,042. (No model.)

To all whom it may concern:

Be it known that I, LEMUEL PATTERSON, a citizen of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Conveyers; and I do hereby 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to certain improvements in sheet metal flights or buckets for elevators, conveyers, &c., and has for its object the provision of a bucket or flight of inexpensive and durable construction which shall present certain novelties and advantages over other forms heretofore devised all as will be hereinafter more fully set forth.

The novel features of my invention will be carefully defined in the claims.

In the accompanying drawings which serve to illustrate my invention—Figure 1 is a side elevation of a conveyer provided with my improved flights or buckets, and Fig. 2 is a plan view of the same. Fig. 3 is a plan view of the blank from which the bucket is formed, and Fig. 4 is a plan view of the bucket finished and ready for use. Fig. 5 is a sectional side elevation of the bucket as seen in Fig. 4 and Fig. 6 is a similar view of a slightly modified form of the bucket adapted for use on elevators.

In the views 1 represents a suitable framing, in which are journaled shafts 5, 5, bearing drivers and sprocket wheels 3, 3, over which pass the link or chain belts 2, 2, of any ordinary or approved form, connected at intervals by cross shafts 12 12, as will be readily understood by inspection of Figs. 1 and 2.

4, 4 are the buckets or flights which are each composed of a sheet of steel or iron plate of a proper strength, cut to the form seen in Fig. 3. This sheet or blank comprises the body portion 4, on each side of which are formed the wings 7, 7 and at one end of which is formed the bottom 8, separated from the rear portions 7^a of the wings 7 by apertures 8^x, 7^x as clearly seen. At the opposite end

the blank is provided with a tongue 10, and at the junction between the body 4 and the bottom 8, an aperture 8^x is formed which aperture coincides with and is of a width corresponding to the width of tongue 10. In bending the blank to form the finished flight, the wings 7, are first bent up at substantially right angles to the body 4 as indicated by the dotted lines in Fig. 3, after which the bottom 8 is bent up also at substantially a right angle to said body along the dotted line seen in Fig. 3, to a position immediately between the wings 7. The rear projecting portion 7^a of the wings 7 will then extend beyond the said bottom 8 and these portions 7^a are bent down outside of the bottom as clearly indicated in Fig. 4, and secured thereto by rivets 9, 9. The tongue 10 at the opposite end of the flight is then turned or bent to form a loop or eye of a proper diameter to receive and closely embrace the shaft 12 connecting the chain belts, the end of said tongue being secured to the body 4 by means of a rivet 11, after being thus bent. Thus it will be seen that a flight is formed having at its forward end an eye and at its rear end an aperture of a proper size to receive the eye, and in assembling the flights in building a conveyer or elevator, the eye on one of the flights is introduced into the aperture 8^x of another flight and the two are secured together by passing one of the shafts endwise through the rounded inner ends of the openings 7^x in wings 7 and through the eye on the forward end of the rear flight, when the two flights will be pivotally connected together as will be seen.

In order to cover the spaces between the several buckets or flights I have provided the forwardly projecting beveled ends 7^b, on the wings 7 of the bucket, and have set said wings at an angle to one another instead of in parallel planes whereby the mouth of the bucket is slightly wider than the bottom, whereby the projecting forward extensions 7^b on one bucket overlap the bottom of the bucket in advance. Thus it is obvious that when the flights are turning a curve, the spaces between them will be closed as seen in the side elevation Fig. 1.

The construction seen in Fig. 6 is substantially the same as that just described, with

the exception that the bottom 8 is extended at 8^a to form a front or cover for the bucket or flight, whereby when the same is moving in a vertical plane the material will be held 5 in the bucket and prevented from falling therefrom.

Having thus described my invention, I claim—

1. The herein described conveyer bucket 10 consisting of a body having an eye at its forward end, said body being provided with perforated opposite wings, and with a bottom having an aperture coinciding with and of a size adapted to receive the eye at the forward 15 end of the bucket, substantially as set forth.

2. The herein described conveyer bucket, consisting of a body having an eye at its forward end, said body being further provided with perforated opposite wings having pro- 20 jecting rear portions and with a bottom having an aperture coinciding with and of a size

adapted to receive the eye at the forward end of the bucket, said projecting rear portions of the wings being bent over against and secured to the said bottom, substantially as set 25 forth.

3. The herein described conveyer bucket, consisting of a body having an eye at its forward end, said body being further provided with outwardly sloping wings, the forward 30 ends of which are extended beyond said eye and with a bottom having an aperture coinciding with and of a size adapted to receive the eye at the forward end of the bucket, substantially as set forth. 35

In testimony that I claim the foregoing I hereunto affix my signature this 21st day of December, A. D. 1892.

LEMUEL PATTERSON. [L. S.]

In presence of—

ALBERT J. WALKER,
M. E. HARRISON.