

May 5, 1931.

G. E. STEVENSON

1,803,367

ELEVATOR ELEMENT

Original Filed Sept. 19, 1929

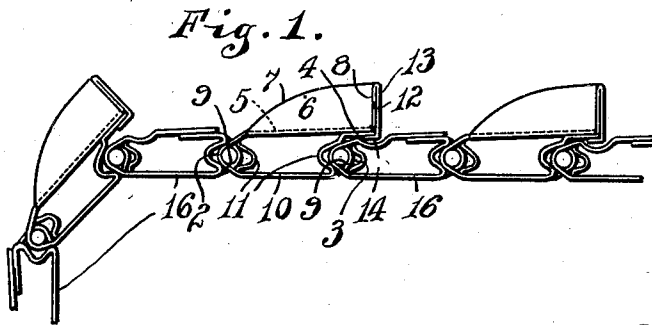
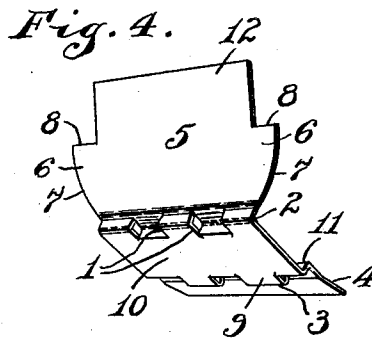
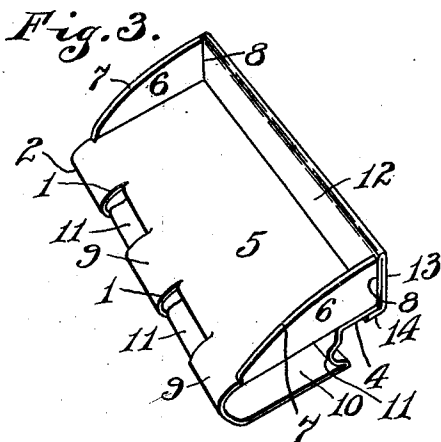
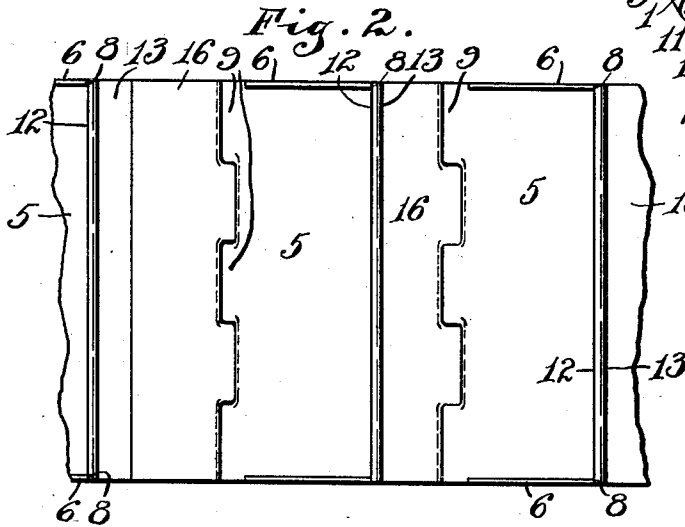
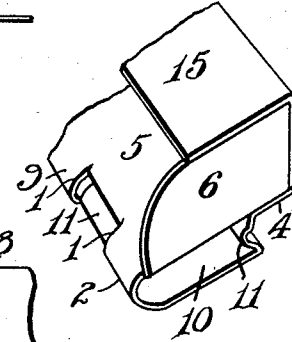


Fig. 5.



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UNITED STATES PATENT OFFICE

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ELEVATOR ELEMENT

Application filed September 19, 1929, Serial No. 393,807. Renewed September 22, 1930.

My invention relates to improvements in conveyor elements and particularly to elevating conveyor elements.

It is one of the objects of my invention to provide a bucket element for conveyors which may be formed from sheet metal in which the element is formed from a single sheet of material and is provided with suitable hinged loops for connecting the elements together.

For the purpose of disclosing my invention, I have illustrated certain embodiments thereof in the accompanying drawings, in which:

Fig. 1 is an end elevation of a portion of a conveyor embodying my invention;

Fig. 2 is a plan view thereof;

Fig. 3 is a perspective view of one of the conveyor elements;

Fig. 4 is a perspective view of the sheet metal blank partially formed, and

Fig. 5 is a perspective view of a modified form of bucket element.

In forming the element the sheet metal blank has formed therein a series of transversely extending slots 1 along lines 2—3 parallel with the side edges of the blank. The line 3 is nearer to its side edge than the line 2 so that, a lip or flange 4 is provided which is narrower than the lip or flange 5 on the opposite side. This lip or flange 5 at one portion of its width is longer than the remaining portion thereby providing flanges 6—6, the edges of which curve outwardly as at 7 and are cut sharp as at 8.

To form the hinge loops, the metal at the point 3 is bent upwardly and inwardly to form loops 9 between the slotted portion 1 and the flange portion 4 is then bent outwardly to lie in a plane parallel with the plane of the panel portion 10. The material between the loops 9 is doubled inwardly as at 11 so as to accommodate the hinge pins passing through the loop 9.

The hinges for the opposite edge of the

blank are formed in the same manner except in this instance, the flange 5 is bent to overlie the panel 10 and the flange 4. The flanges 6 are bent upwardly at right angles to the body portion of the flange 5 to form the sides of the bucket, and the free edge 12 of the flange 5 is bent upwardly against the portions 8 of the flanges 6 to form the back of the bucket and then is bent downwardly as at 13 and inwardly as at 14 beneath the edge of the flange 4 to thereby provide a rigid structure.

If desired the lips 6, 6 may be wider so that when they are bent upwardly to form the sides a deeper bucket is formed as illustrated in Fig. 5. The free edge portion of the flange 5 may be bent forwardly over the upper edges of the sides to form a top cover 15.

The conveyor bucket elements are connected together in a conveyor chain by means of links 16 which are formed in substantially the same manner as the buckets themselves except that the flange member 4 is turned inwardly to lie parallel with the panel 10 and the flange member 5 is not quite so long so that it will overlap the flange portion 4.

I claim the following:

1. A conveyor element formed from a single sheet of metal, comprising a panel section and two edge sections, the edge sections being bent to lie in a plane parallel with the panel section and one adapted to overlie the other, one of said edge sections being bent up on two parallel edges to form sides and bent up on its free edge to form a back, said element having its edges slotted and a portion of its edges doubled inwardly to form hinge loops.

2. A conveyor element formed from a sheet metal blank, the blank being slotted transversely on parallel lines extending parallel with the edges of the blank, a portion of said blank being bent upwardly and then bent to lie parallel with the center panel of the blank, and another portion being bent upwardly and then bent to overlie the first portion, said

second portion having edges bent upwardly to form sides and its free end bent upwardly to form a back, and alternate portions of the metal at the bends being doubled inwardly to provide projecting loops for the reception of pivot pins.

In witness whereof, I, GEORGE E. STEVENSON, have hereunto set my hand at Indianapolis, Indiana, this 14th day of September, A. D. one thousand nine hundred and twenty-nine.

GEORGE E. STEVENSON.

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