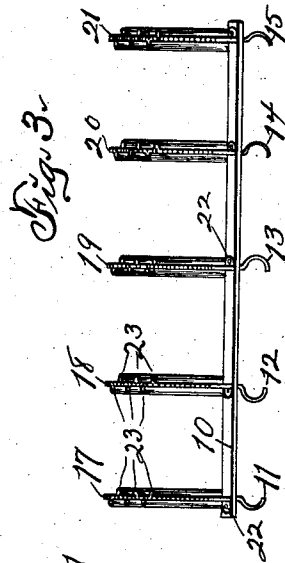
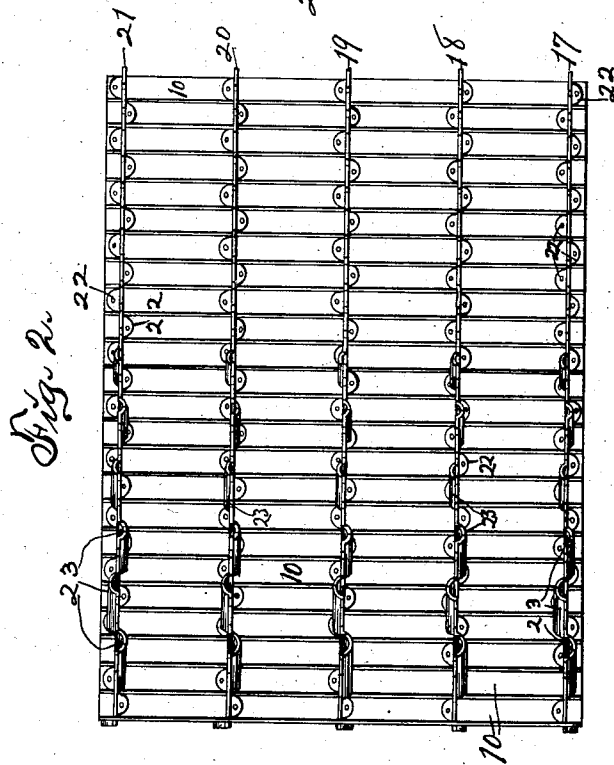
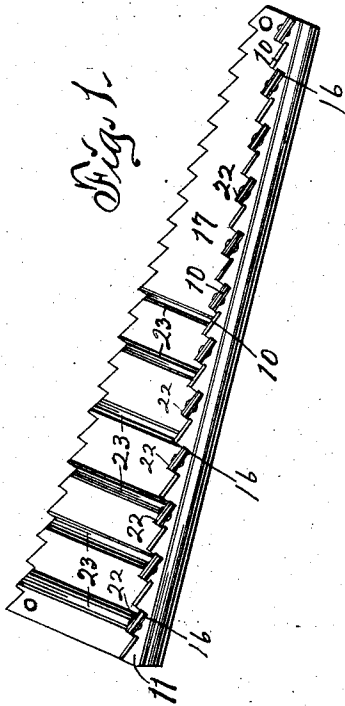


J. D. WEST.  
SHEET METAL FISH BACK FOR GRAIN SEPARATORS.  
APPLICATION FILED SEPT. 2, 1910.

1,027,365.

Patented May 21, 1912.



Attest;  
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By *Stebbins* Att'y

# UNITED STATES PATENT OFFICE.

JOSEPH D. WEST, OF DES MOINES, IOWA.

SHEET-METAL FISH-BACK FOR GRAIN-SEPARATORS.

1,027,365.

Specification of Letters Patent.

Patented May 21, 1912.

Application filed September 2, 1910. Serial No. 580,186.

*To all whom it may concern:*

Be it known that I, JOSEPH D. WEST, citizen of the United States of America, and resident of Des Moines, Polk county, Iowa, have invented a new and useful Sheet-Metal Fish-Back for Grain-Separators, of which the following is a specification.

The object of this invention is to provide an improved construction for fish-backs of grain separators.

A further object of this invention is to provide an improved construction for fish-backs whereby the effective width of an elevating table in a grain separator may be increased.

My invention consists in the construction, arrangement and combination of elements hereinafter set forth, pointed out in my claim and illustrated by the accompanying drawing, in which—

Figure 1 is a side elevation of a separating and elevating table embodying my invention. Fig. 2 is a plan and Fig. 3 a front end elevation of the same.

The separating and elevating table as shown is constructed of a plurality of parallel slats 10 extending transversely thereof. The slats 10 are laterally inclined on parallel oblique lines longitudinally of the table (Fig. 1). The upper margin of each slat 10 is flush with the lower margin of the next succeeding slat on lines perpendicular to the planes of said slats. The slats 10 are connected by sheet metal sills 11, 12, 13, 14, 15 spaced apart throughout the length of said slats and extending longitudinally of the table. The sills 11 to 15 inclusive are serrated on their upper margins to correspond with the parallel spaced planes of the slats 10 and are provided with semi-circular lips 16 extending at right angles to opposite sides of alternate serrations and adapted to be suitably secured to the lower faces of the slats. The sills 11, 12, 13, 14, 15 preferably are corrugated longitudinally (Fig. 3) in order to render them stiff and inflexible. Sheet metal fish backs 17, 18, 19, 20, 21 are

provided and are spaced apart above the slats 10 and opposite to the sills 11, 12, 13, 14, 15 respectively, and extend longitudinally of the table. The fish-backs 17 to 21 inclusive are serrated on their lower margins and semi-circular lips 22 are formed at right angles to and on opposite sides of alternate serrations and are suitably secured to the upper faces of the slats 10 opposite to and conjunctively with the lips 16 of the sills. The fish-backs 17, 18, 19, 20, 21 may gradually increase in width toward the rear end of the table or in the direction in which the slats 10 are inclined, or may vary in width as desired. Transverse corrugations 23 are formed in the widened portions of said fish-backs in order to stiffen them and reduce their flexibility in respect of lateral movement. The upper margins of the fish-backs 17, 18, 19, 20, 21 are serrated and the points of the serrations are in the direction of the upper or rear end portions of said fish-backs.

The table is adapted to be suspended in any desired manner within a grain separator and may be inclined upwardly toward its rear end portion, or in the direction of the inclination of the slats 10 and the serrations of the various fish-backs. A longitudinal reciprocating motion is imparted to the table in any desired manner, and threshed grain falling on the lower end portion thereof from the cylinder of the separator is sifted and further separated.

It is the function of the inclined slats 10 and the serrated fish-backs to carry straw upwardly along the table to other carriers (not shown), while grain and chaff falls between said slats upon other separating devices (not shown).

The construction of the fish-backs of sheet metal adds materially to the effective width of the elevating table, being relatively narrow, and the straw is not easily lodged or choked between them. They also are more durable than when made of wood and this construction provides an effective method

for separating the threshed grain from the straw.

I claim as my invention—

In an elevating table for grain separators,  
5 a sifting and feeding bottom formed from inclined slats, sheet metal fish-backs extending longitudinally thereof and formed with toothed upper margins, lips on the lower

margins of said fish-backs and means for securing each of said lips to said slats. 10

Signed by me at Des Moines, Iowa, this 23d day of May, 1910.

JOSEPH D. WEST.

Witnesses:

S. C. SWEET,

EARL M. SINCLAIR.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."