

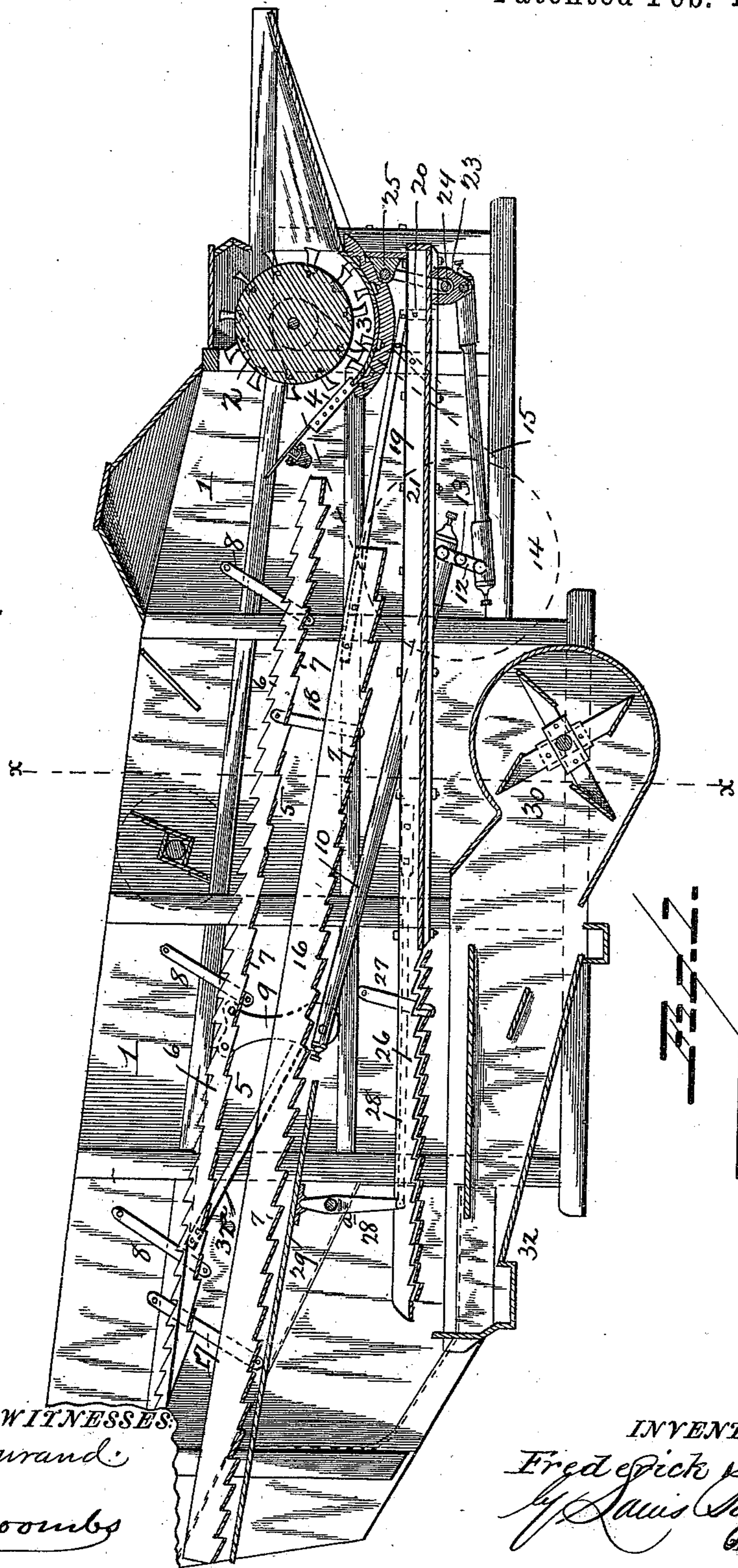
(No Model.)

2 Sheets—Sheet 1.

F. STROBEL.  
THRASHING MACHINE AND SEPARATOR.

No. 554,351.

Patented Feb. 11, 1896.



WITNESSES.

J. L. Ourand  
J. W. Bloomer

INVENTOR.

Frederick Strobel,  
by Davis, Taggart & Co.  
Attorneys.

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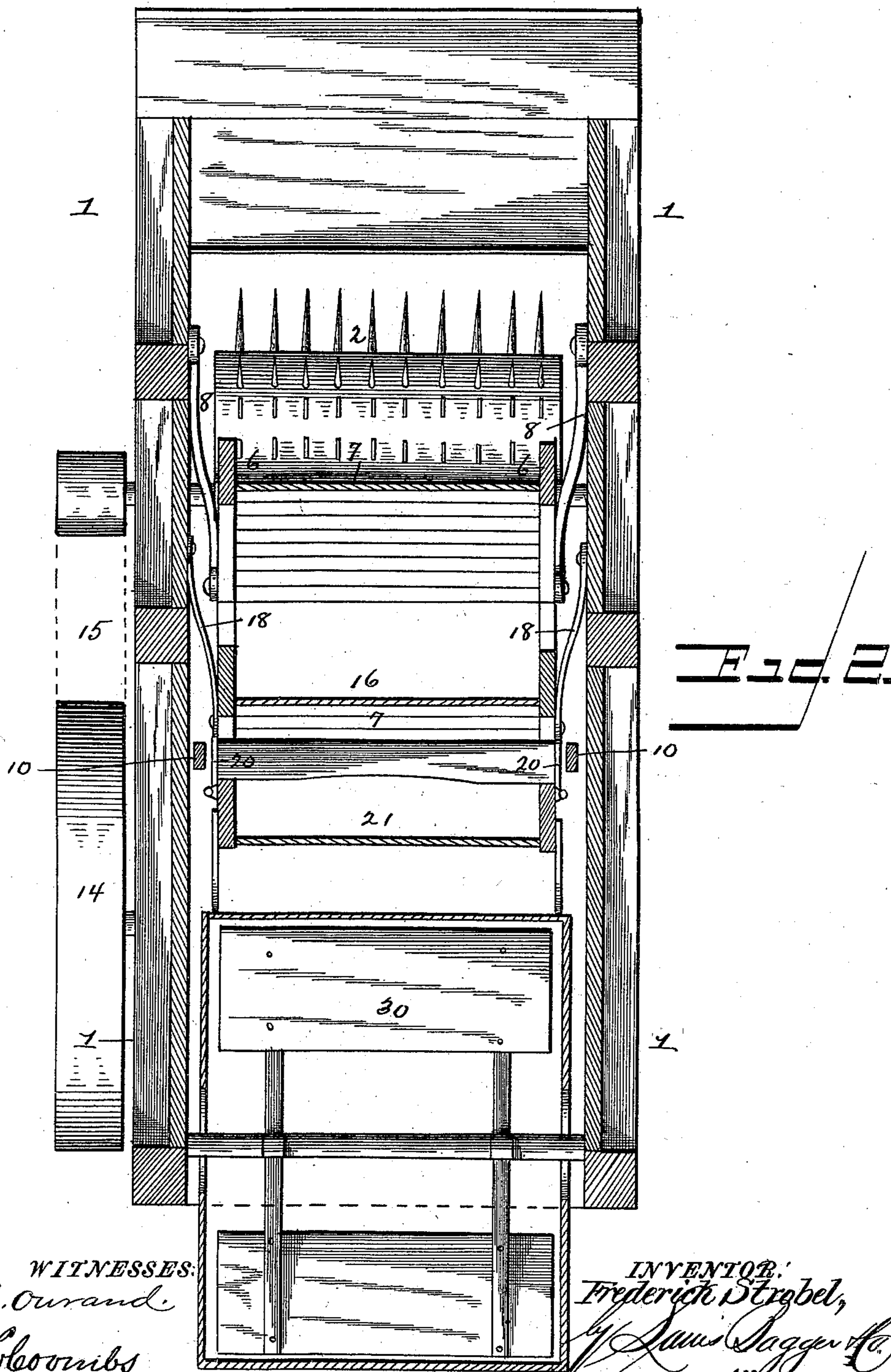
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*J. L. Leominis*

INVENTOR:  
*Frederick Strobel,*  
*J. L. Leominis & Co.*  
Attorneys

# UNITED STATES PATENT OFFICE.

FREDERICK STROBEL, OF MARION, OHIO.

## THRASHING-MACHINE AND SEPARATOR.

SPECIFICATION forming part of Letters Patent No. 554,351, dated February 11, 1896.

Application filed January 16, 1895. Serial No. 535,142. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK STROBEL, a citizen of the United States, and a resident of Marion, in the county of Marion and State of Ohio, have invented certain new and useful Improvements in Thrashing-Machines and Separators; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in separators and thrashing-machines of that character or description known as "oscillating carriers," and its object is to simplify the construction and increase the efficiency thereof.

The invention consists in the novel construction and combination of parts herein-after fully described and claimed.

In the accompanying drawings, Figure 1 represents a longitudinal sectional view of a thrashing-machine. Fig. 2 is a cross-section on line *x x*, Fig. 1, on an enlarged scale.

In the said drawings, the reference-numeral 1 designates the casing of the machine; 2, the thrasher-cylinder; 3, the concave, and 4 the grate at the rear of and secured to the concave. These parts may be of any ordinary or suitable construction, and form no part of my present invention.

The numeral 5 designates the upper straw-rack, comprising side bars 6 6, connected together by means of the inclined cross-bars 7, set some distance apart, so as to form a perforated bottom. This rack is connected with the casing by means of pivoted links 8, and at or near its center is provided with a bracket 9, which is connected by means of a pitman 10 with a crank 12 on a shaft 13, driven by a pulley 14 and belt 15 from the thrasher-cylinder.

The numeral 16 designates the lower rack, similar in construction to carrier 5, with the exception that the cross-bars 7 are set nearer together, so that there will be a smaller space therebetween. At its rear end this rack is connected with the casing by means of a swinging link 17, and near its front is con-

nected by a similar link 18 with the upper rack.

Securely bolted to the front end of carrier 16 is a bar 19, secured to a bracket 20 on the grain-pan 21, which receives any grain carried over from the concave to the racks and escaping through the perforated bottoms. This grain-pan is provided at its front end with a wrist-bracket 23, to which is pivoted a link 24, the other end of which is pivoted to a lug 25, secured to the front of the casing, and at its rear end is provided with a screen 26, connected with the casing by means of a pivoted link 27. The rear end of the pan is provided with a rearwardly-extending rod 28, pivoted to a lever 28<sup>a</sup>, fulcrumed to the casing, and at its upper end is connected with a vibrating plate or board 29, which conducts any grain falling through the rack to the screen.

The numeral 30 designates the fan, and 32 the side shake-shoe. The rear end of the upper rack and the bracket 9 are connected together by a bar 32<sup>a</sup>.

The operation will be readily understood. The straw from the concave will be deposited upon the upper rack, to which an oscillating motion is given by means of the pitman and the crank-shaft. This causes the straw to be carried to the rear end of the rack, the short straw, chaff, and grain escaping through the perforated bottom onto the lower rack, from whence the grain falls to the grain-pan, the straw being carried to the rear end of the carrier. An oscillating motion is given to the lower rack, and a horizontal reciprocating motion imparted to the grain through the crank-shaft and connections. The fan blows any chaff or dust out of the rear of the casing which may fall from the vibrating plate onto the screen secured to the grain-pan.

Having thus described my invention, what I claim is—

In a duplex or double separator, the combination with the upper oscillating rack, the links pivoted thereto and to the casing, the bracket secured to said rack, the pitman connected with said bracket, the crank connected therewith, the pitman connected with said crank, the wrist-bracket to which said pitman is pivoted, secured to the grain-pan, the link

pivoted to said wrist-bracket and its lug, of the lower rack, the link at the upper end pivoted thereto and to the casing, the link at the lower end pivoted thereto and to the upper  
5 rack the bar connecting the lower rack and grain-pan, the screen at the outer end of the grain-pan, the link pivoted thereto and to the casing, the vibrating plate, the lever supporting the front end thereof, and the rod con-

nected with said lever and with the grain-pan, is substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

FREDERICK STROBEL.

Witnesses:

MARCUS B. CHASE,  
B. OLNEY.