

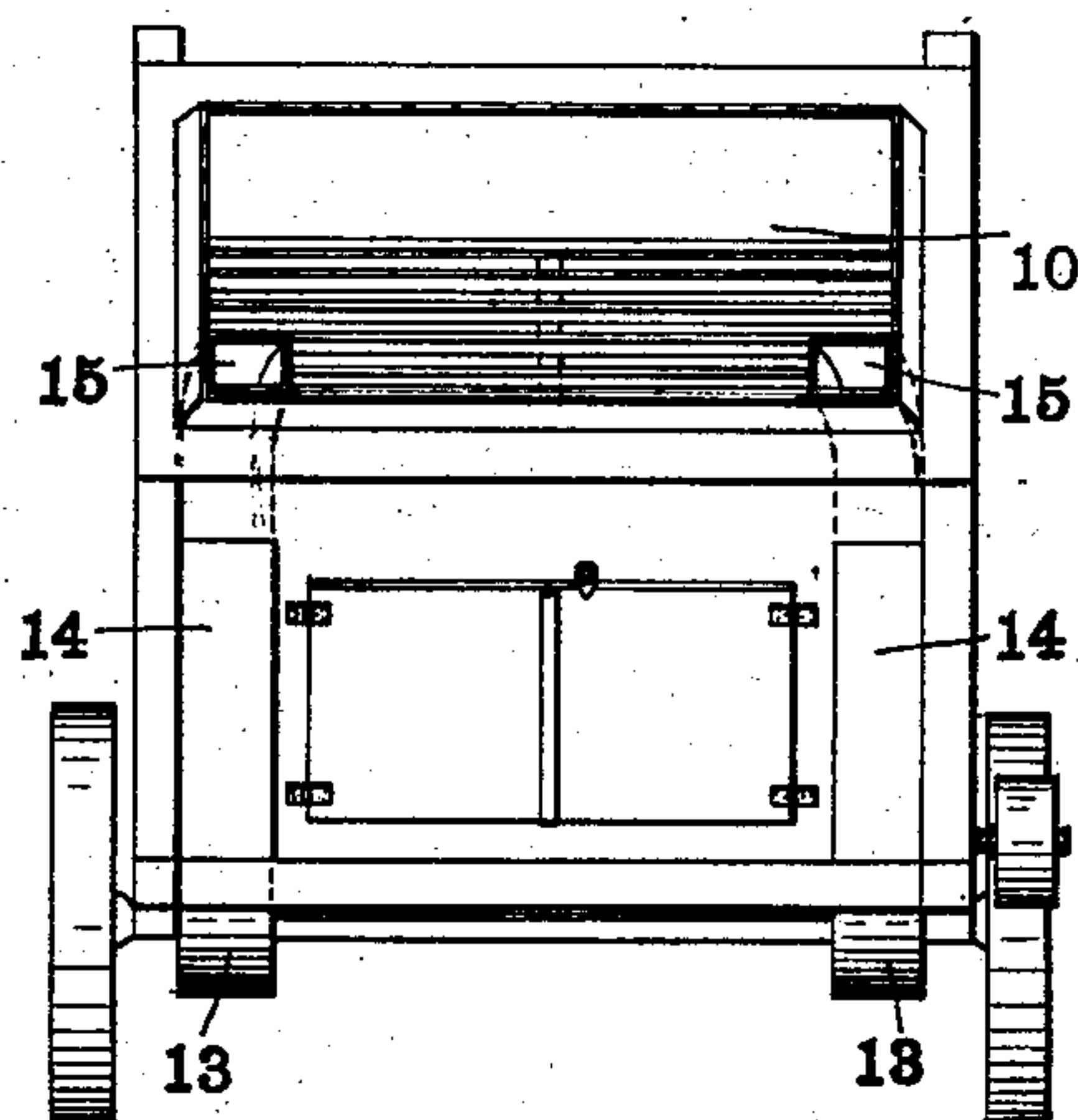
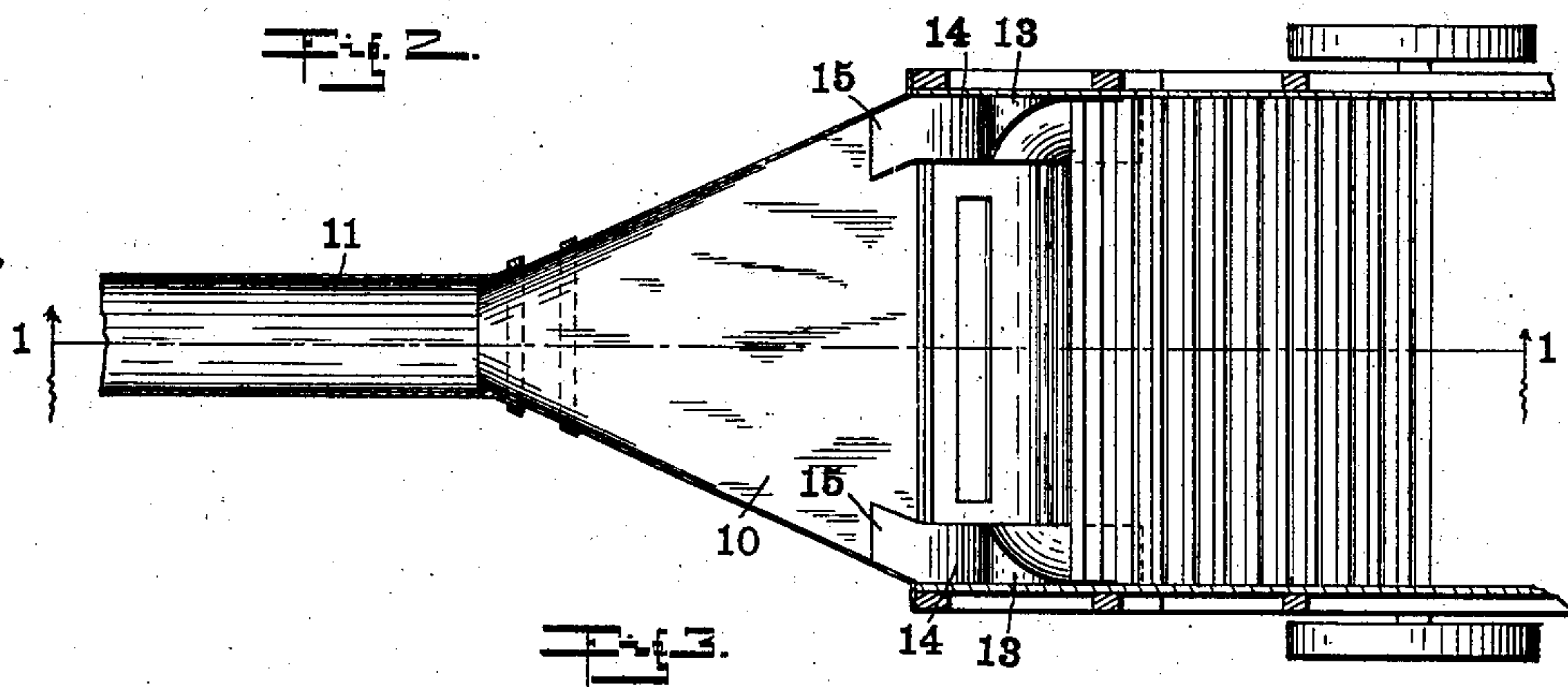
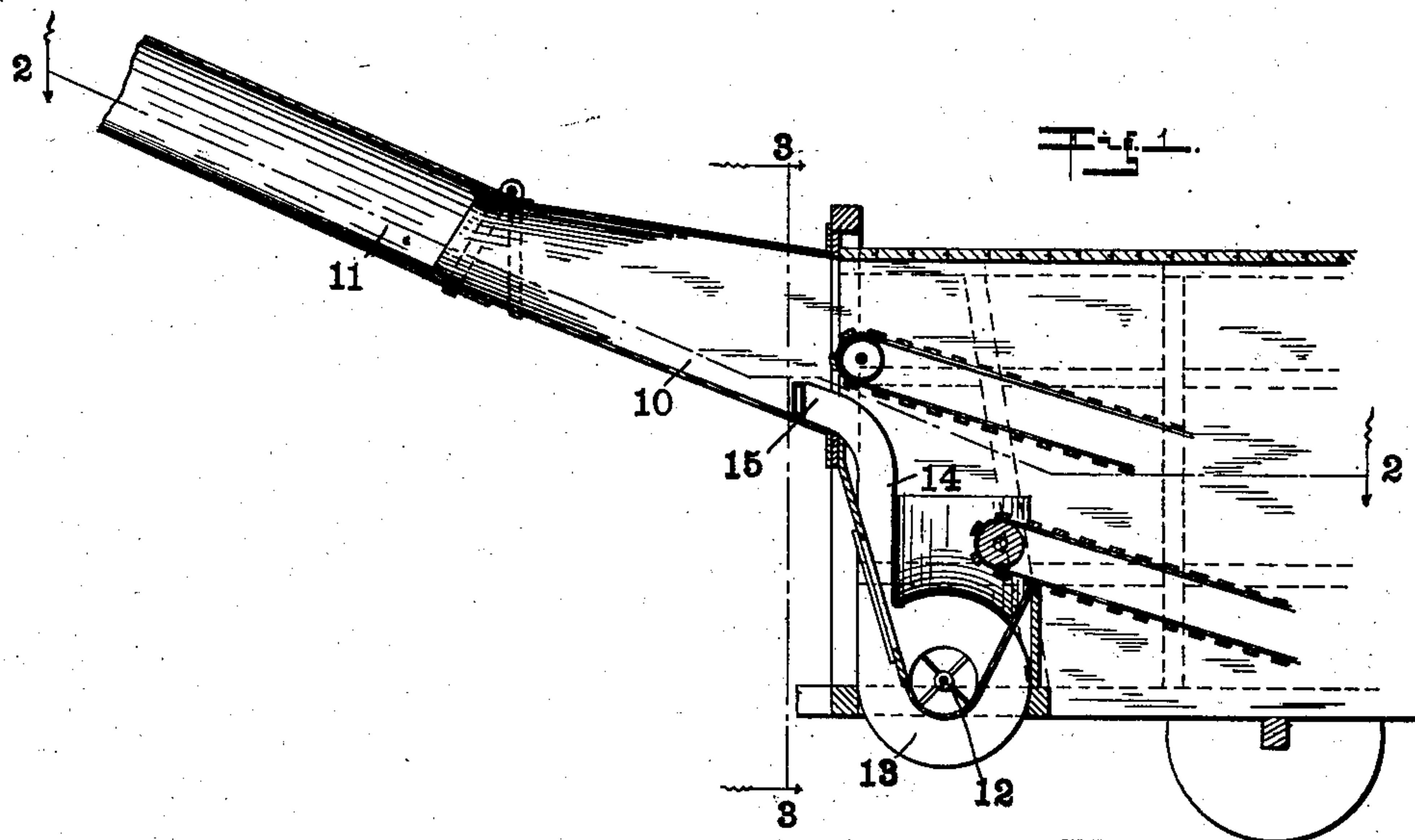
No. 721,243.

PATENTED FEB. 24, 1903.

J. K. SHARPE, JR.  
PNEUMATIC STACKER.

APPLICATION FILED JUNE 13, 1902.

NO MODEL.



Witnesses  
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# UNITED STATES PATENT OFFICE.

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INDIANA MANUFACTURING COMPANY, OF INDIANAPOLIS, INDIANA,  
A CORPORATION OF WEST VIRGINIA.

## PNEUMATIC STACKER.

SPECIFICATION forming part of Letters Patent No. 721,243, dated February 24, 1903.

Application filed June 13, 1902. Serial No. 111,449. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH K. SHARPE, Jr., a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Pneumatic Stackers, of which the following is a specification.

My present invention is an improvement upon that shown and described in my application, Serial No. 76,876, filed September 28, 1901; and it consists in a peculiar disposition of the blast-fans in respect to the straw-chamber constituting the base of my improved pneumatic stacker, whereby the frictional resistance of the straw in passing through the chamber is much diminished.

Referring to the accompanying drawings, which are made a part hereof and on which similar reference characters indicate similar parts, Figure 1 is a longitudinal vertical sectional view of the rear end of a separator provided with a pneumatic stacker embodying my present invention as seen from the dotted line 1 1 in Fig 2; Fig. 2, a horizontal sectional view thereof as seen when looking downwardly from the dotted line 2 2 in Fig. 1; and Fig. 3, a rear elevation of the separator, showing the exterior of the fan-casings of the pneumatic stacker and showing the extreme lower end of the straw-chamber of the stacker cut in section as seen from the dotted line 3 3 in Fig. 1.

This stacker in use is attached to the rear or straw-delivering end of a threshing-machine or separator, as S, as is common, and is adapted to receive the straw as it comes from the straw-delivery floor thereof. It comprises a straw-chamber 10, into which the straw is first delivered from the separator, and a duct or trunk 11, leading therefrom to the point of final delivery, and two fans, one at each side of the machine, each of which has a small air-duct leading up the base of the straw-chamber of the stacker. These fans 12 are contained in housings 13, as is usual, and the nozzles 15 of the air-ducts 14 leading therefrom are disposed at the lower and outer sides of the straw-chamber, so that the blasts of air coming from said fans are directed along the lower corners of the straw-

chamber and travel in converging directions toward the center.

In the case of large separators especially I have found by experience that a single fan delivering at the bottom of a straw-chamber of considerable size, such as I employ in my invention, lacks somewhat in efficiency on account of the tendency to drive the straw to the sides of the straw-chamber, so that its passage is retarded by friction with the chamber-walls, and this disadvantage I have overcome in the present instance by directing a blast of air along the lower corners of such straw-chamber instead of through the center thereof, as in the construction shown in my above-mentioned application. This, as will be readily understood, tends to drive the straw away from these converging sides instead of against them, and much facilitates the discharge thereof into the delivery trunk or duct, as the friction with the walls is thus largely eliminated.

Having thus fully described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a threshing-machine, of a pneumatic stacker, comprising a straw-chamber one end whereof is fitted to the upper portion of the rear end of the threshing-machine and covers the straw-delivery opening therein, and the other end of which is reduced to the size of the next section of the straw-delivery trunk or duct, and the sides whereof converge from one end to the other, a delivery trunk or duct connected to the smaller end, two fans, suitable housings therefor, and air-ducts leading tangentially from the peripheries of said housings to the lower and outer sides of the straw-chamber and adapted to discharge the air along the sides of said chamber whereby the straw is subjected to the action of the air-currents at the sides of the mass, and friction between said straw and the straw-chamber walls thus minimized.

2. The combination, with a threshing-machine, of a pneumatic stacker comprising a base-section and an outer section, the base-section consisting of a substantially horizontal straw-chamber with converging sides, the



rear end whereof is connected to the upper portion of the adjacent end of the separator and covers the straw-delivery opening therein, blast-producing means connected thereto, 5 and two pipes leading thence to the outer and lower corners of the said base-section of the straw-stacker and having their ends arranged to discharge along paths formed by the bottom and sides of said straw-chamber, the 10 blast being thus applied to the straw on the under and outer sides of the mass, between it and the horizontal and vertical walls of the straw-chamber, substantially as shown and described.

15 3. The combination, with a threshing-machine, of a pneumatic stacker comprising a straw-chamber one end whereof is fitted and connected to the upper portion of the rear end of the threshing-machine with its floor 20 just below the straw-delivery floor of said machine and the sides whereof converge from the point of attachment to the threshing-ma-

chine to the outer end thereof, a second duct-section flexibly connected to said outer end, two fans mounted on the framework below 25 the lower side of the straw-chamber, suitable housings therefor, air-ducts leading from said housings upwardly to just above the level of the straw-chamber floor and thence curved outwardly in a direction substantially paral- 30 lel with said floor and also curved inwardly to a direction substantially parallel with the sides of said chamber, the extreme ends or nozzles of said air-ducts being located in the lower corners of said chamber, said several 35 parts being constructed, arranged and operating substantially as shown and described.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 23d day of May, A. D. 1902.

JOSEPH K. SHARPE, JR. [L. S.]

Witnesses:

CHESTER BRADFORD,  
JAMES A. WALSH.