

No. 720,697.

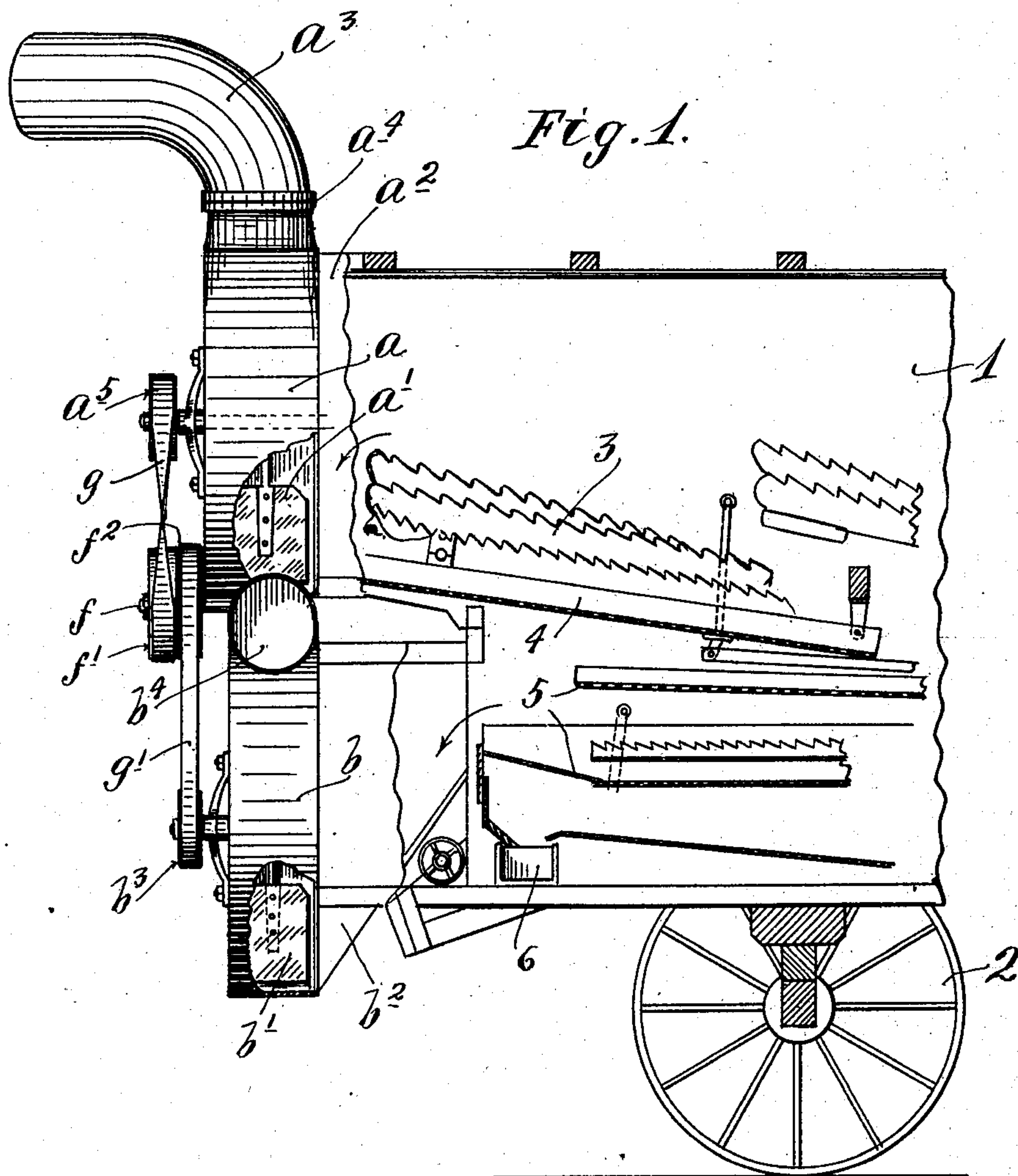
PATENTED FEB. 17, 1903.

C. P. JENSEN.  
PNEUMATIC STACKER.

APPLICATION FILED JULY 10, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses  
A. H. Opsahl.  
H. D. Kilgore.

Inventor.  
Claus. Peter Jensen  
By his Attorneys  
Williamson & Merchant

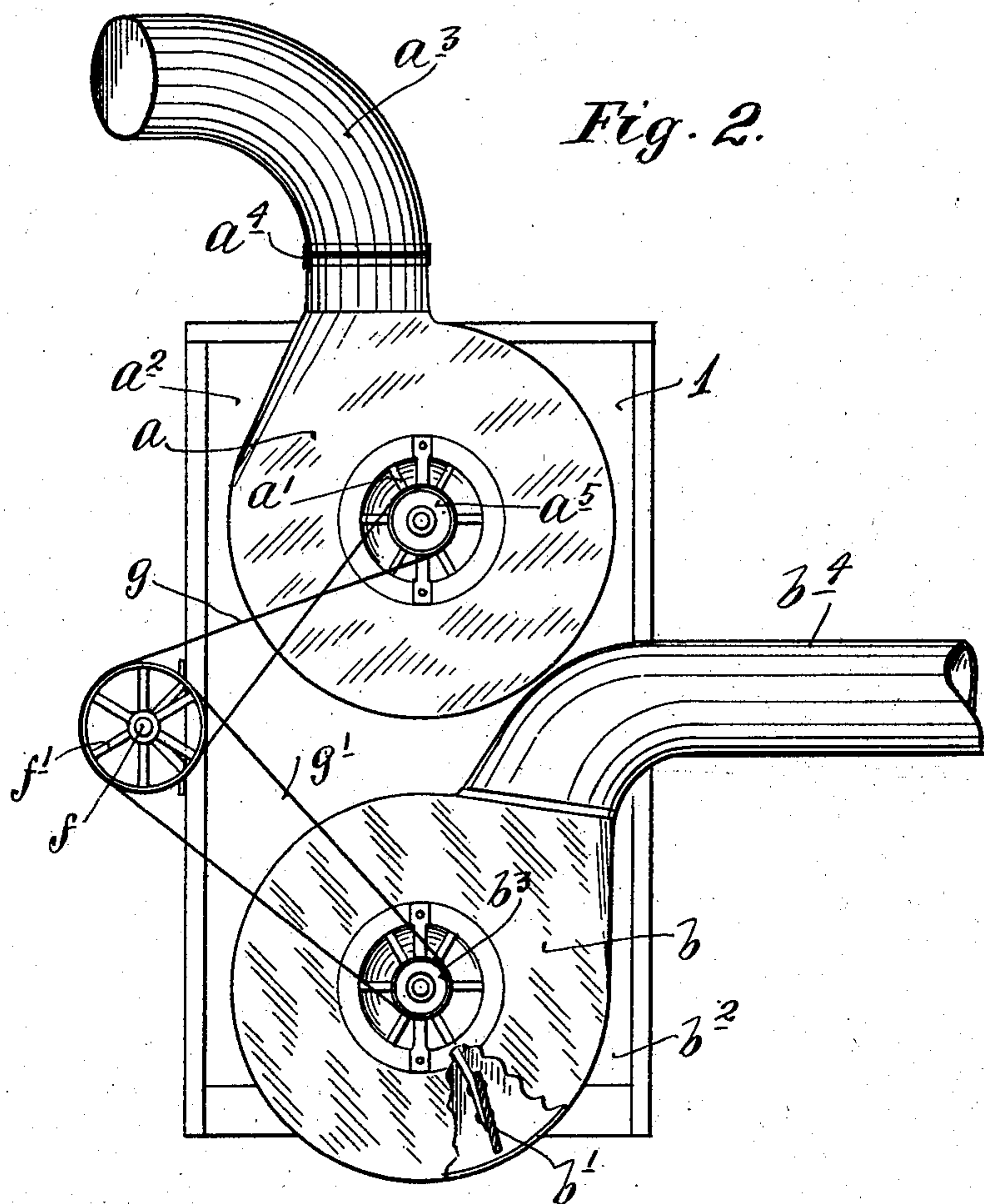
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*Witnesses.*  
*A. H. Opsahl.*  
*H. S. Kellogg.*

*Inventor.*  
*Claus. Peter. Jensen.*  
*By his Attorneys'*  
*Williamson Merchant*



# UNITED STATES PATENT OFFICE.

CLAUS PETER JENSEN, OF CLARKS GROVE, MINNESOTA.

## PNEUMATIC STACKER.

SPECIFICATION forming part of Letters Patent No. 720,697, dated February 17, 1903.

Application filed July 10, 1902. Serial No. 115,058. (No model.)

*To all whom it may concern:*

Be it known that I, CLAUS PETER JENSEN, a citizen of the United States, residing at Clarks Grove, in the county of Freeborn and State of Minnesota, have invented certain new and useful Improvements in Pneumatic Stackers; 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 appertains to make and use the same.

My present invention relates to pneumatic stackers for separators or threshing-machines, and has for its object to provide means whereby the straw and the chaff or finely-broken material may be separated and discharged at different points outside of the machine.

To the above ends the invention consists of the novel devices and combinations of devices hereinafter described, and defined in the claim.

The invention is illustrated in the accompanying drawings, wherein like characters indicate like parts throughout both views.

Figure 1 is a view, partly in side elevation and partly in vertical section, showing the rear portion of a separator or threshing-machine having applied thereto my improved pneumatic stacking device involving a pair of blowers which receive different portions of the stock and deliver the same at different points outside of the machine, some parts of the said devices being broken away; and Fig. 2 is a rear end elevation of the parts shown in Fig. 1, some parts being removed and others being broken away.

The parts of the separator or threshing-machine shown may be briefly noted, as follows:

The numeral 1 indicates the case of the separator, the numeral 2 one of the supporting-trucks, the numeral 3 the straw-rake or delivery device, the numerals 4 and 5 the vibrating screens, and the numeral 6 the tailings-spout, which parts are of the ordinary standard construction and are shown for the purposes of illustration only.

In accordance with my invention I provide a pair of independent fans, one of which receives the straw from the straw-rake or delivery device 3 and delivers the same at a

suitable point exterior of the machine and the other of which fans receives the chaff and delivers the same to another point or place exterior of the machine.

It is a well-known fact that the so-called "chaff," which consists chiefly of finely-broken straw, carries with it or contains more or less of the grain which is being threshed. With the ordinary pneumatic stacker this chaff, together with the grain carried therewith, is delivered into the stack with the main body of the straw, and hence is wasted. By my invention I separate the chaff and the grain carried therewith from the body of the straw by the use of a secondary or auxiliary fan, arranged as above described. This having been done, the grain can be quite easily separated from the chaff and saved in this way, or the whole body of chaff, together with the grain, may be fed to stock, in which case it is also saved or put to profitable use.

In the drawings the primary blower is made up of a fan-case  $a$  and a fan  $a'$ , mounted therein. The fan-case  $a$  is open at its inner side and has a hood  $a^2$ , which joins the upper portion of the rear end of the case 1 in position to receive the main body of straw, which is delivered thereinto from the straw-rakes 3. A discharging-stack  $a^3$  of ordinary or any suitable construction is connected to the fan-case  $a$ , preferably by a swiveled joint  $a^4$ . The shaft of the fan  $a'$  is provided with a pulley  $a^5$ . The secondary blower is made up of a fan-case  $b$  and a fan  $b'$ , mounted therein. The fan-case  $b$  is located in a vertical position just below the fan-case  $a$ . It is open at its inner side and provided with a hood or hopper-like extension  $b^2$ , which stands in position to receive the chaff which is drawn from the screens 5. The fan is provided with a shaft which carries a pulley  $b^3$ , and the fan-case  $b$  is provided with a laterally-extending discharging-stack  $b^4$ , which preferably delivers the chaff at one side of the machine.

Mounted on one side of the case 1 in suitable bearings is a counter-shaft  $f$ , which is provided at its rear end with pulleys  $f'$   $f^2$ . The twisted belt  $g$  runs over the pulleys  $a^5$  and  $f'$ , and a belt  $g'$  runs over the pulleys  $b^3$  and  $f^2$ . The counter-shaft  $f$  is driven in any suitable way, preferably from some of the

running parts of the thresher mechanism, and it is of course evident that the two fans  $a'$  and  $b'$  will receive their proper rotary movements from the said shaft  $f$  through the  
5 belts  $g$  and  $g'$ .

The operation of my improved double blower or pair of independent blowers is of course obvious from the foregoing description and statements made, and it will also be un-  
10 derstood that the device described is capable of many modifications within the scope of my invention as herein set forth and claimed.

What I claim, and desire to secure by Letters Patent of the United States, is as follows:

15 The combination with a separator involving the straw-delivery rake 3 and screens 5, of the primary blower made up of the case  $a$

and fan  $a'$ , and the secondary blower made up of the case  $b$  and fan  $b'$ , said case  $a$  being opened at its inner side and provided with the  
20 hood  $a^2$  receiving from said rake  $a^3$ , and said case  $b$  having the hood  $b^2$  receiving from said screens 5, the said two fan-cases being set vertically in approximately the same plane and  
25 having straw-delivery stacks or tubes delivering to different places exterior of the machine, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

CLAUS PETER JENSEN.

Witnesses:

J. L. INGBRITSON,  
HERMAN BLACKMER.