

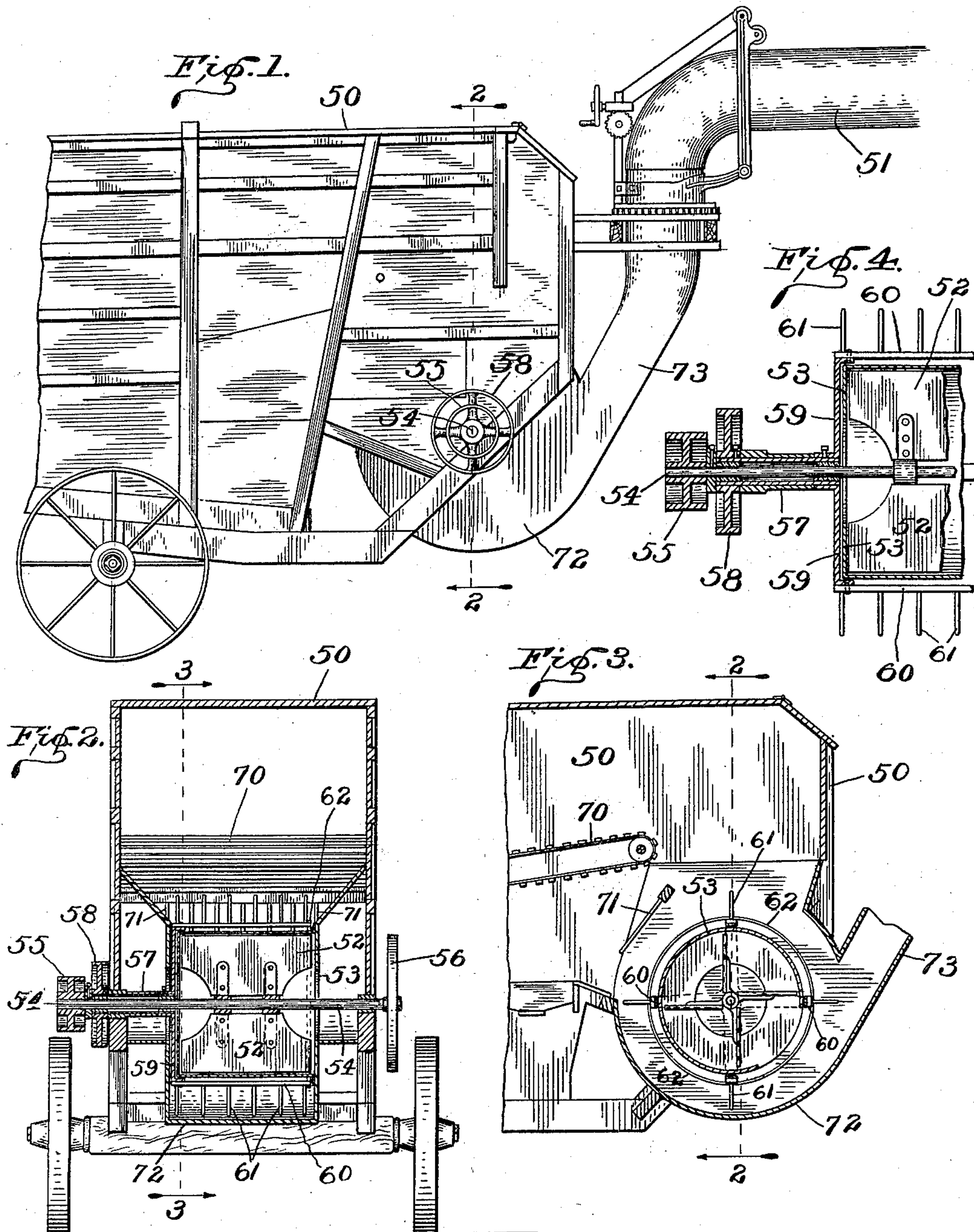
No. 686,145.

Patented Nov. 5, 1901.

J. B. SCHUMAN.
PNEUMATIC STRAW STACKER.

(Application filed June 15, 1901.)

(No Model.)



WITNESSES:

C. S. Frye.
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INVENTOR

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UNITED STATES PATENT OFFICE.

JAMES B. SCHUMAN, OF COLUMBIA CITY, INDIANA, ASSIGNOR TO THE INDIANA MANUFACTURING COMPANY, OF INDIANAPOLIS, INDIANA, A CORPORATION OF WEST VIRGINIA.

PNEUMATIC STRAW-STACKER.

SPECIFICATION forming part of Letters Patent No. 686,145, dated November 5, 1901.

Application filed June 15, 1901. Serial No. 64,728. (No model.)

To all whom it may concern:

Be it known that I, JAMES B. SCHUMAN, a citizen of the United States, residing at Columbia City, in the county of Whitley and State of Indiana, have invented certain new and useful Improvements in Pneumatic Straw-Stackers, of which the following is a specification.

My present invention consists in certain improvements on that which forms the subject-matter of Letters Patent of the United States No. 594,124, issued to me November 23, 1897, whereby a better means of driving the rotary fork is provided.

Referring to the accompanying drawings, which are made a part hereof, and on which similar reference characters indicate similar parts, Figure 1 is a side elevation of the rear end of a threshing-machine or separator provided with a pneumatic straw-stacker embodying my present invention; Fig. 2, a vertical sectional view thereof, as seen when looking in the direction indicated by the arrows from the dotted line 2 2 in Fig. 1; Fig. 3, a vertical sectional view through the fan of the straw-stacker, its housing, and adjacent parts, as seen when looking in the direction indicated by the arrows from the dotted line 3 3 in Fig. 2; and Fig. 4, a detail sectional view of the means for driving the fan and the fork similar to a portion of Fig. 2, but on a somewhat enlarged scale.

The threshing-machine or separator 50 and the straw-stacker trunk or chute 51, as well as many of the other details, are or may be of any ordinary or desired form, and not being peculiar to my present invention will not be further described herein unless incidentally in describing said invention.

In my former invention (shown and described in said Patent No. 594,124) I used two narrow fans, and the spider of the rotary fork (by which the straw was thrown into the path of the blast of air from the fans) was mounted centrally on the fan-shaft between said fans, each of which had a separate housing. In my present invention I use a single wide fan 52 and a single fan-housing 53 in place of the two of each formerly used, the fan-shaft 54 extending through the separator from side to side as before. Upon one end

of this fan-shaft I place a pulley 55, to which a belt (not shown) for driving the fan runs, and upon the other end I preferably place a fly-wheel 56, by means of which a steady and equable motion is imparted to the fan.

The fork in the case of my present invention is carried entirely from one end. I provide a sleeve-shaft 57, which is mounted and runs on the fan-shaft 54, being driven by a suitable belt (not shown) running to a pulley 58 on the outer end of said sleeve-shaft at a point outside the separator. At the inner end of the said sleeve-shaft is the spider 59 of the rotary fork, and from the rim of this spider the fork-arms 60, carrying the fork-teeth 61, extend parallel with the outer face of the fan-housing 53 and across to the other side thereof, where a narrow rim 62 for supporting and steadying said arms is preferably connected thereto.

In operation the straw comes from the separator 50 over its raddles 70 down behind the slatted guard 71 to within the outer casing 72, around which it is carried by the rotary forks into the blast from the fan and is driven up the conduit 73 to the straw-stacker trunk or chute 51, as will be readily understood.

By the means described I am enabled to secure with a single fan a construction designed to accomplish the same work as that performed by the construction shown and described in my above-mentioned patent, No. 594,124, and at the same time secure the better results due to increase fan-blade surface consequent upon the utilization of the entire available space for the fan, there being no part of the fan-and-housing structure displaced in the present construction to provide room for the fork-driving mechanism, the rotary fork being driven (by means of the sleeve-shaft) from outside the separator, as before explained.

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

1. The combination, in a pneumatic straw-stacker, of a fan, a fan-housing, a rotary fork outside said housing, a spider at one end of the fan-housing carrying the fork-arms, a sleeve-shaft running from said spider to out-

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side the separator, and suitable means for driving the same.

2. The combination, in a pneumatic straw-
stacker, of a fan-shaft extending through the
5 rear end of the separator to which the straw-
stacker is attached, a suitable stationary fan-
housing secured within said separator, an
outer casing surrounding the fan-housing and
forming the walls of the cavity into which the
10 straw is delivered from the separator, a fan
mounted on said fan-shaft within said fan-
housing, a sleeve-shaft mounted on one end
of said fan-shaft and extending to outside the
separator-casing, a spider carried by the inner
15 end of said sleeve-shaft, fork-arms extending
from the rim of said spider across the fan-
housing near the surface thereof, and means
for driving the fan-shaft and the sleeve-shaft
at different speeds.

3. The combination with the fan of a pneu- 20
matic straw-stacker, of a rotary fork for
throwing the straw around the outside of the
casing of said fan into the blast thereof, said
fork being composed of a spider at one end
having a central hub whereby it is adapted 25
to be carried upon the fan-shaft, arms carry-
ing the fork-teeth and extending from the
rim of said hub across said fan-casing, and a
rim at the opposite end of said arms connect-
ing and supporting the same at that point. 30

In witness whereof I have hereunto set my
hand and seal, at Indianapolis, Indiana, this
12th day of June, A. D. 1901.

JAMES B. SCHUMAN. [L. S.]

Witnesses:

CHESTER BRADFORD,
L. H. COLVIN.