

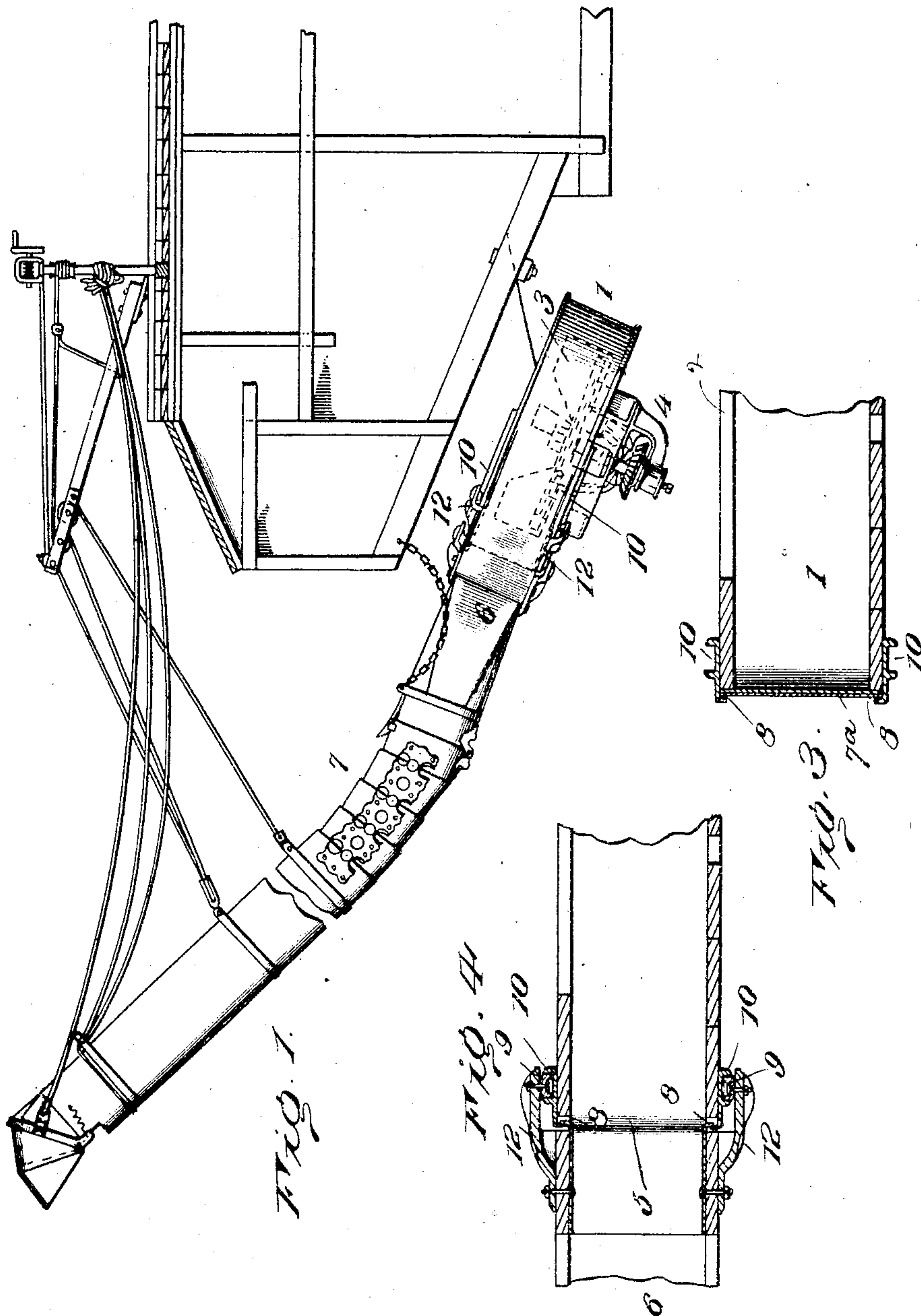
No. 786,071.

PATENTED MAR. 28, 1905.

E. J. VRAALSTAD.
STRAW STACKER.

APPLICATION FILED SEPT. 2, 1904.

2 SHEETS—SHEET 1.



Inventor

Edward J. Vraalstad

Witnesses

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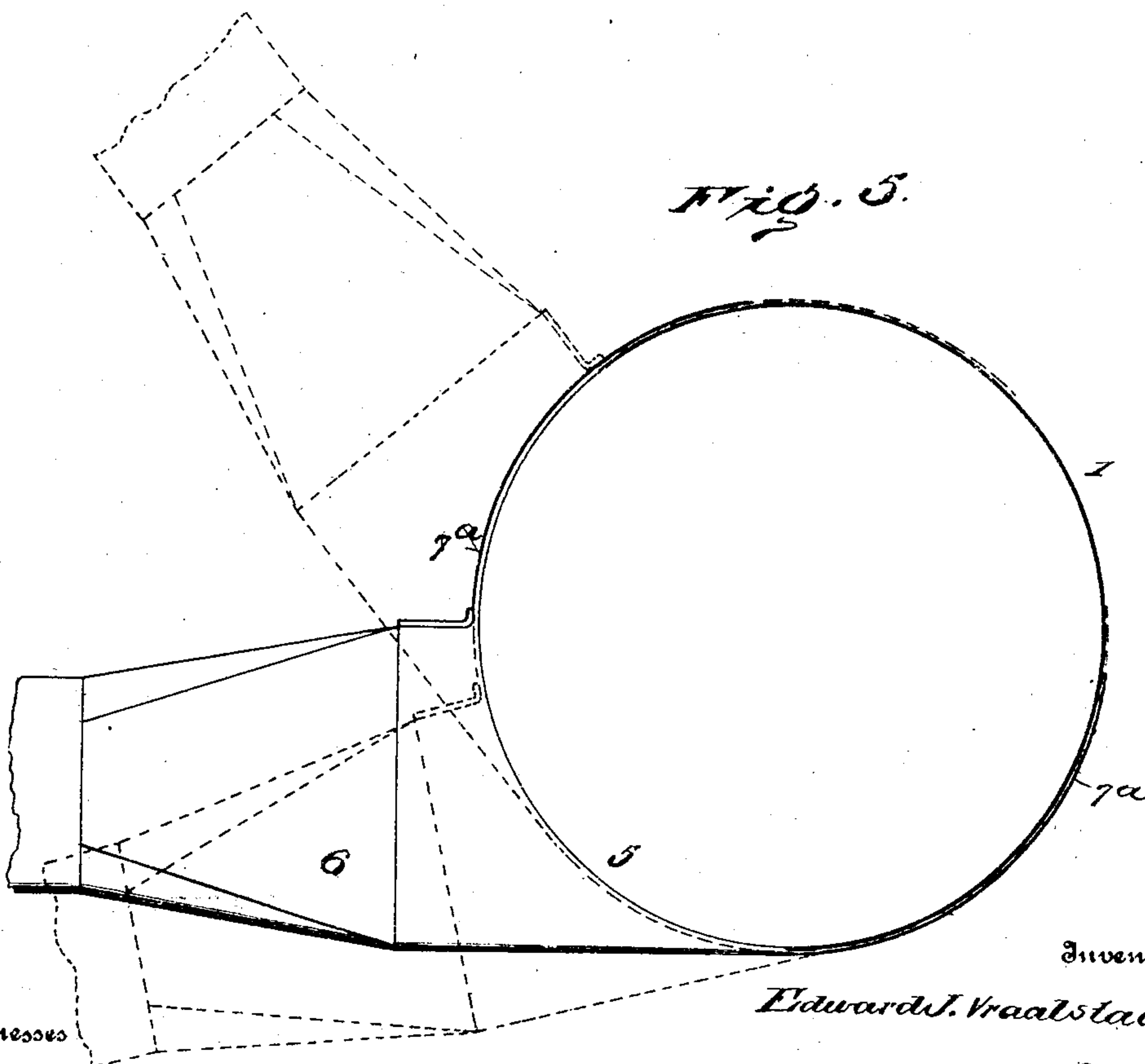
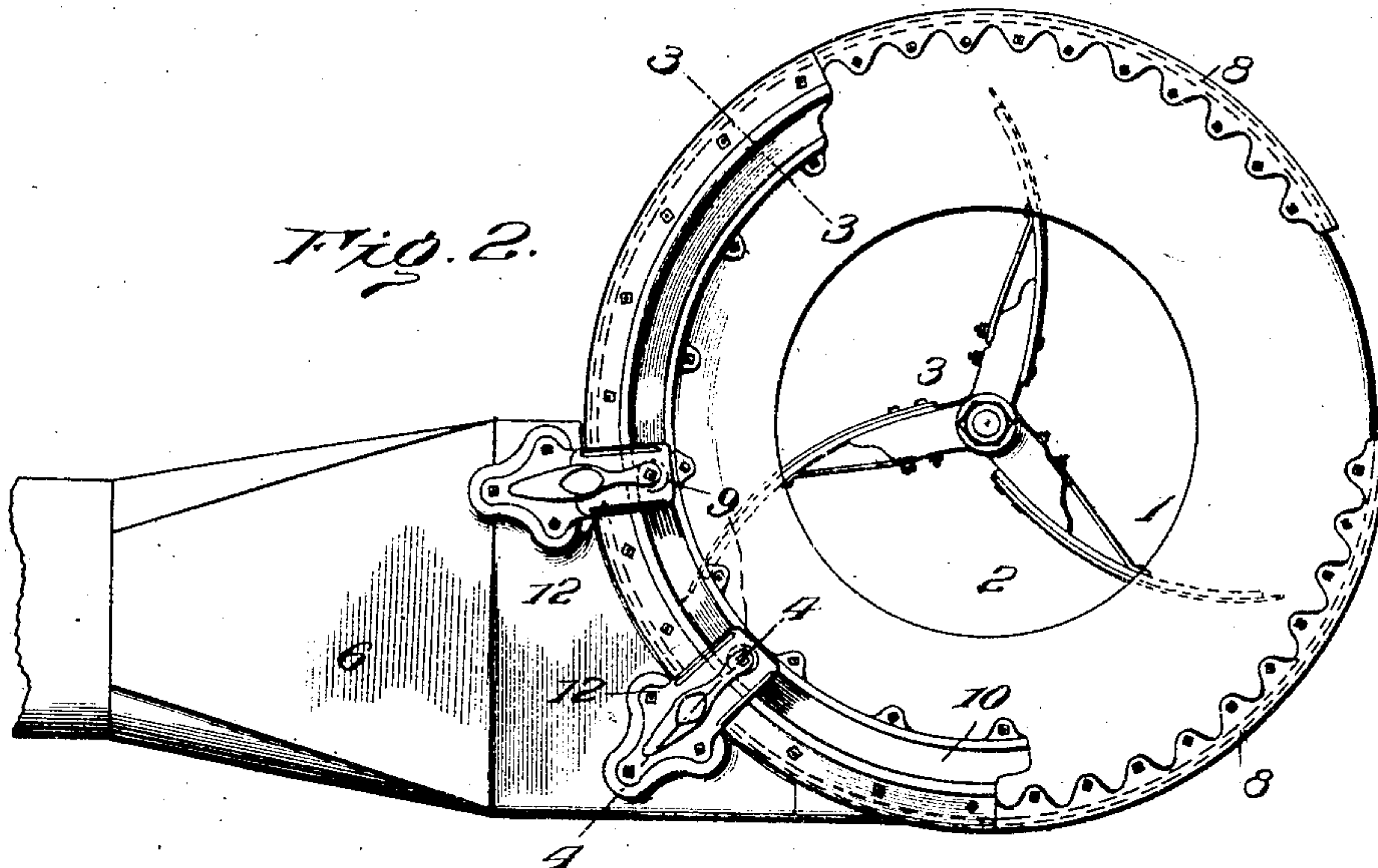
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2 SHEETS—SHEET 2.



Witnesses

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UNITED STATES PATENT OFFICE.

EDWARD J. VRAALSTAD, OF BUFFALO, NEW YORK, ASSIGNOR TO
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PORATION OF NEW YORK.

STRAW-STACKER.

SPECIFICATION forming part of Letters Patent No 786,071, dated March 28, 1905.

Application filed September 2, 1904. Serial No. 223,118.

To all whom it may concern:

Be it known that I, EDWARD J. VRAALSTAD, of Buffalo, in the county of Erie and State of New York, have invented certain new and use-
ful Improvements in Straw-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.

In that class of pneumatic straw and chaff elevators and stackers wherein the stacker is pivoted concentrically with the fan, so as to be swung from side to side, the fan-shaft has heretofore formed the pivot on which the structure turns. Then, too, it has been necessary to turn the fan-casing as a whole in the swinging of the stacker from side to side.

The objects of my invention are to avoid using the fan-shaft as the pivot for the laterally-movable stacker and to enable the latter to be turned without moving the fan-casing.

The invention will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 shows in side elevation a portion of a threshing-machine with my improved stacker. Fig. 2 is an enlarged plan view with parts broken away. Figs. 3 and 4 are respectively cross-sectional views on lines 3 3 and 4 4, Fig. 2. Fig. 5 is a plan view in skeleton form.

Referring to the drawings, 1 designates the fan-casing suitably mounted relatively to the thresher, so as to receive the straw and chaff through its central eye or opening 2. Within the casing is mounted fan 3, whose shaft is supported by bridge-tree 4 and is driven by any suitable means as customary in this class. The fan-casing is stationary, and for a considerable distance—say a little more than one-third of its circumference—the encircling wall of the casing is cut away to form the discharge-outlet 5 into the trunk 6 of the stacker or elevator 7. This trunk carries at its inner end a part-cylindrical casing 7^a, formed on a slightly-greater radius than the fan-casing 1, which it is designed to partly encircle for a distance approximately two-thirds the cir-

cumference thereof, to the end that the stacker may be swung from side to side and always maintain communication with the interior of the fan-casing. The trunk-casing 7^a is curved so as to fit closely against the circumferential wall of the fan-casing, being guided in its movements by upper and lower grooved ways 8, secured to the top and bottom of the fan-casing. It is further held to the fan-casing and guided in its axial movements thereon by rollers 9, fitting in upper and lower retaining-tracks 10, attached to the top and bottom of the fan-casing 1, such rollers being mounted in the ends of overlapping brackets 12, secured to the trunk-casing. In this way the latter is always held sufficiently tight against the non-rotary fan-casing and is yet free to be swung from side to side by any suitable means.

It will be noted from what has been said that the line of discharge from a stacker or elevator is readily controlled by the axial turning of the trunk-casing on the fan-casing and that by reason of my invention not only is the weight of the stacker removed from the fan-shaft, but as less weight is involved its turning may be accomplished with greater ease than heretofore. The range of movement of the stacker is limited by the length of the retaining-tracks, which are about co-extensive with the discharge-opening of the fan-casing.

The advantages of my invention will be at once apparent to those skilled in the art to which it appertains.

I claim as my invention—

1. The combination with a threshing-machine, of a pneumatic elevator and stacker comprising a fan, a shaft therefor, a stationary casing inclosing the fan having a discharge-opening, and a second casing to which the stacker-trunk is secured adjustable concentrically to the fan and its casing but independently of the fan-shaft.

2. The combination with a threshing-machine, of a pneumatic elevator and stacker comprising a rotary fan and shaft therefor, a stationary circular casing for said fan having in its side an extended discharge-opening, and

a second circular casing to which the stacker-trunk is secured, said second casing partly surrounding and adjustable axially on the stationary fan-casing and designed at all times to
5 extend over a portion or portions of said discharge-opening.

3. The combination with the fan and its circular casing, the latter having a discharge-opening, of the trunk, and means axially
10 mounted on and partly surrounding the fan-casing, permitting it to be turned axially thereon, said discharge-opening being always in line with said trunk.

4. The combination with the circular fan-casing having a discharge-opening therein
15 and upper and lower guides, of the stacker-trunk, a second casing to which the trunk is secured encircling a portion of the fan-casing and working in said guides, a portion or por-

tions of such trunk-casing always extending- 20
over said discharge-opening.

5. The combination with the circular fan-casing having a discharge-opening therein and upper and lower guides, of the stacker-trunk, a second casing to which the trunk is
25 secured encircling a portion of the fan-casing and working in said guides, upper and lower retaining-tracks secured to the top and bottom of said fan-casing, and brackets carried by the trunk having rollers fitted in said retain- 30
ing-tracks.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

EDWARD J. VRAALSTAD.

Witnesses:

M. J. TODD,

G. L. PRENTICE