

No. 803,570.

PATENTED NOV. 7, 1905.

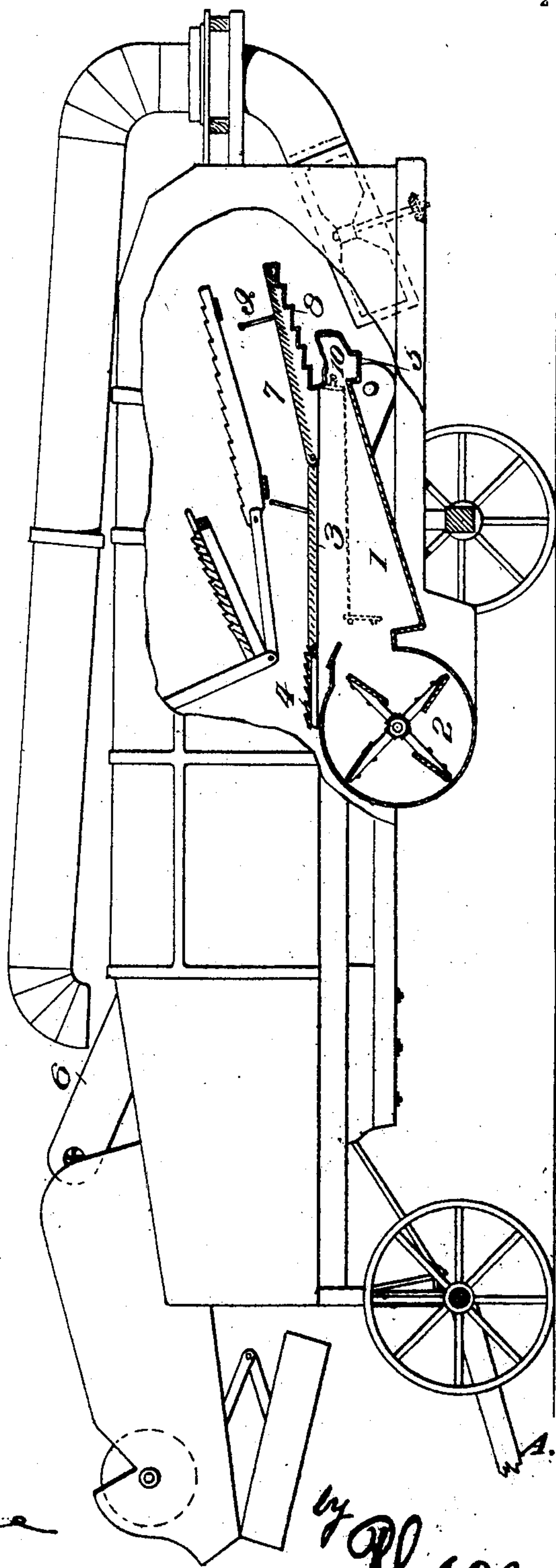
A. D. DUSENBERY.

CHAFER ATTACHMENT FOR GRAIN SEPARATORS.

APPLICATION FILED DEC. 15, 1904.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 2

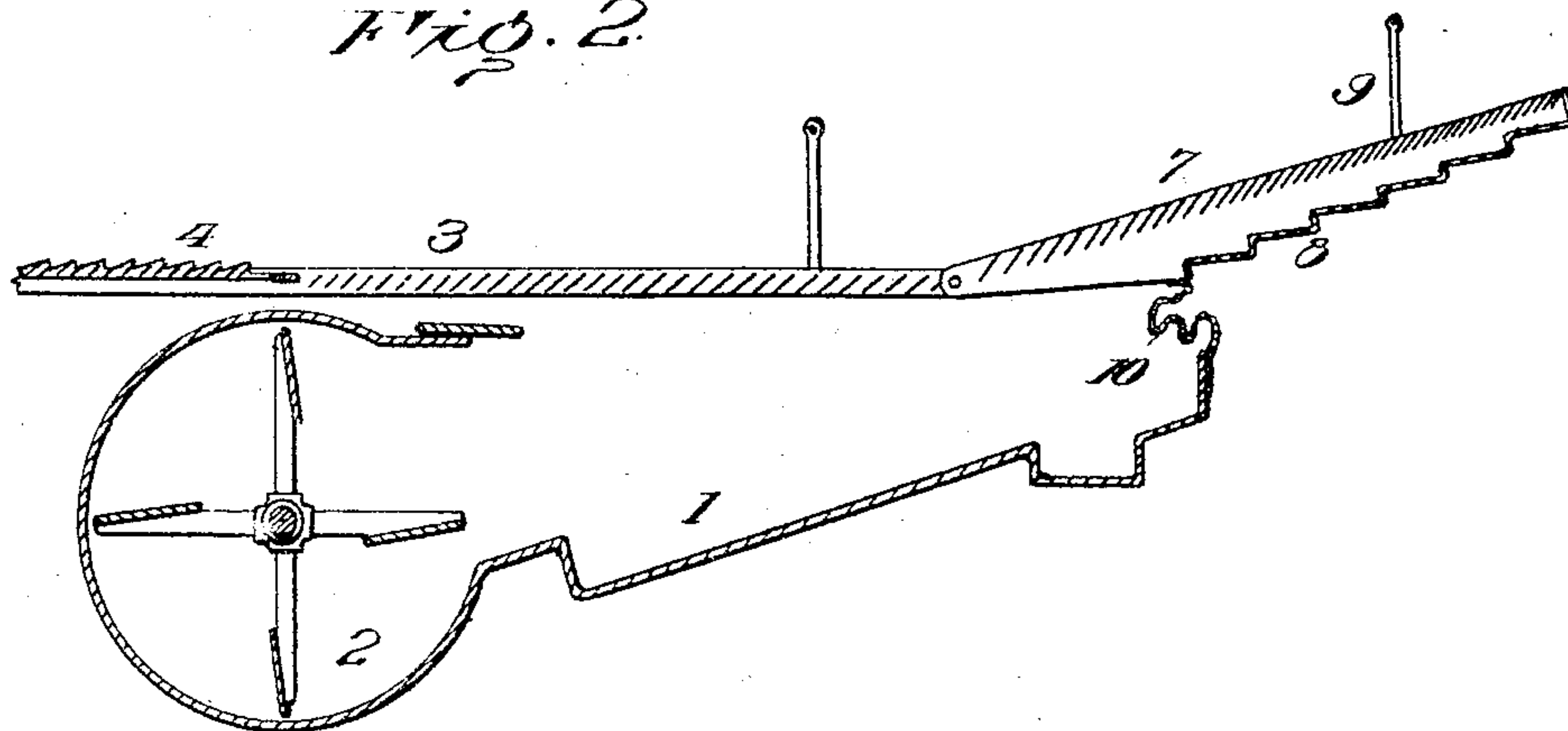


Fig. 3

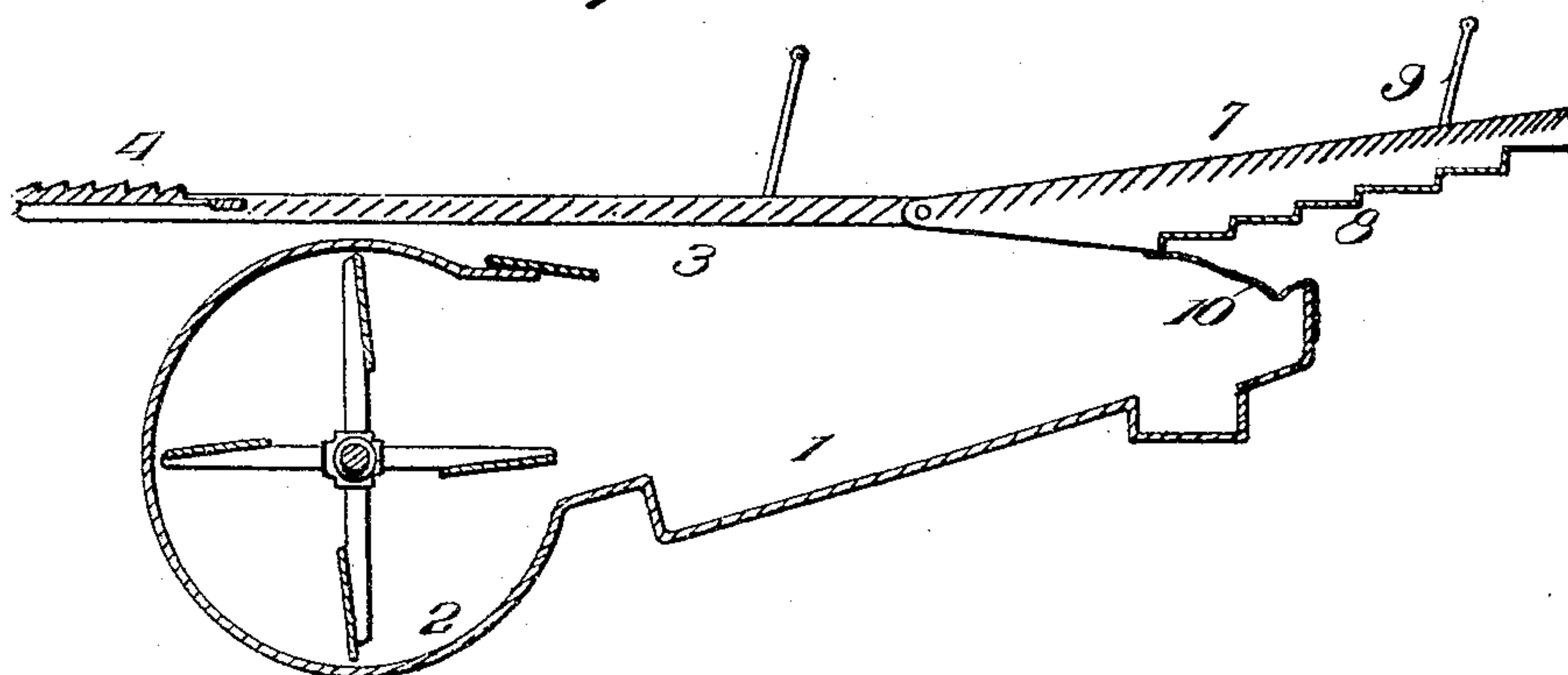
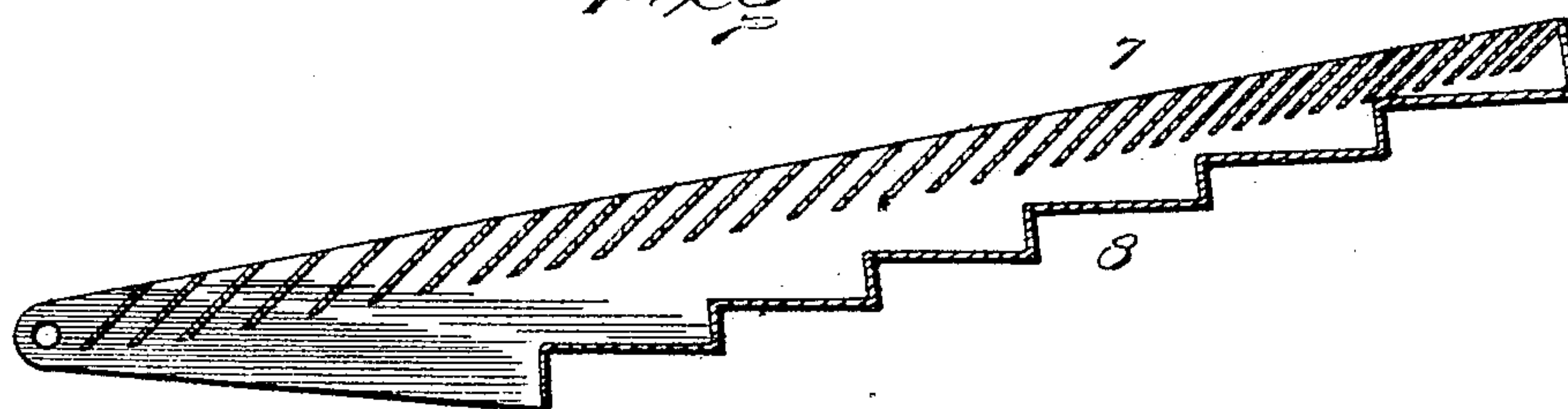


Fig. 4



Witnesses

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UNITED STATES PATENT OFFICE.

ALVEY D. DUSENBERY, OF MANKATO, KANSAS.

CHAFFER ATTACHMENT FOR GRAIN-SEPARATORS.

No. 803,570.

Specification of Letters Patent.

Patented Nov. 7, 1905.

Application filed December 15, 1904. Serial No. 236,985.

To all whom it may concern:

Be it known that I, ALVEY D. DUSENBERY, a citizen of the United States, residing at Mankato, in the county of Jewell and State of Kansas, have invented certain new and useful Improvements in Chaffer Attachments for Grain-Separators, of which the following is a specification.

This invention has for its object to prevent the loss of any grain during the process of separation by being carried over the chaffer along with the straw, chaff, and other material.

In accordance with this invention an auxiliary chaffer is attached to the rear end of the main chaffer and extends upwardly and rearwardly therefrom at such an angle as to insure the removal of all grain from the material discharging over the chaffer.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings.

While the invention may be adapted to different forms and conditions by changes in the structure and minor details without departing from the spirit or essential features thereof, still the preferred embodiment thereof is shown in the accompanying drawings, in which—

Figure 1 is a vertical central longitudinal section of a grain-separator embodying the invention. Fig. 2 is a longitudinal section of the shoe, rear portion of the main chaffer, and the auxiliary chaffer, showing the position of the latter when at the limit of its rearward stroke. Fig. 3 is a view similar to Fig. 2, showing the relation of the parts when the auxiliary chaffer is at the limit of its forward throw. Fig. 4 is a detail view of the auxiliary chaffer forming the attachment.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The grain-separator illustrated is of ordinary construction and arrangement and is shown simply to demonstrate the application of the invention. The separating-shoe 1 is mounted in the accustomed manner and is supplied with air from the fan 2. The chaffer 3 and grain-pan 4 are of ordinary construction and operation, the chaffer 3 extending over the shoe 1. The tailings-spout 5 is at the upper rear end of the shoe and communi-

cates at one end with the tailings-elevator 6, by means of which the tailings are returned to the threshing mechanism.

The attachment or auxiliary chaffer, constituting the subject-matter of the present invention, is located in the rear of the chaffer 3 and comprises chaffer 7 and bottom or deflector 8. The front end of the attachment is pivotally connected to the rear end of the chaffer 3, so as to move therewith. Hangers 9 pivotally support the rear portion of the attachment and are adjustable to admit of elevating the rear end of the attachment more or less as may be required to insure removal of every grain from the material discharged thereover. The hangers 9 are arranged in such a manner as to insure an up-and-down movement of the chaffer 7 simultaneously with its vibratory movement, the disposition of the parts being such that upon rearward movement of the chaffer 3 the rear end of chaffer 7 will be elevated, thereby retarding rearward movement of any grain supported thereby and insuring its discharge upon the bottom 8 and its ultimate deflection forward upon the sieve of the shoe 1. The chaffer 7 is similar in construction to any ordinary chaffer and comprises side pieces and slats, the latter being spaced apart the usual distance at the front end of the chaffer and crowded more closely at the rear end of the chaffer. This arrangement of the slats prevents straw and other particles larger than grain from passing through the rear portion of the chaffer 7 and admits of grain only passing therethrough to the bottom or deflector 8.

When the attachment or auxiliary chaffer is in position, it forms, in effect, a continuation of the main chaffer 3 and being pivoted thereto moves therewith, while at the same time provision is had for a simultaneous up-and-down movement of the rear portion of the chaffer 7 by reason of the employment of the hangers 9. The bottom or deflector 8 is stepped upon its upper side, forming a series of planes at different elevations and intermediate shoulders, the latter engaging with the grain and arresting its rearward movement and carrying the same forward with the attachment in its advance movement. The parts are so arranged that when the chaffer is at the limit of its rearward movement the front end of the bottom or deflector 8 extends over the rear wall of the tailings-spout and when the chaffer is at the limit of its forward movement the front end of the bottom or de-

flector 8 extends over the rear portion of the sieve of shoe 1. A piece of canvas 10 or like flexible material connects the front end of the bottom or deflector 8 with the upper rear wall of the tailings-spout 5 to form a closure and prevent the blast of air carrying off any grain.

Having thus described the invention, what is claimed as new is—

10 In a grain-separator, the combination of a main chaffer, an auxiliary chaffer arranged for simultaneous movement therewith, a bottom or deflector arranged below said auxil-

iary chaffer and having its upper surface stepped, and its front end extended over the tailings-spout of the shoe, and a flexible closure connected at one end to the deflector and at its opposite end to the rear end of the tailings-spout of the shoe, substantially as set forth. 15 20

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

ALVEY D. DUSENBERY.

Witnesses:

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THEROU H. ROSE.