

(No Model.)

W. T. WILKINS.

GRAIN SAVING ATTACHMENT FOR THRESHING MACHINES.

No. 597,630.

Patented Jan. 18, 1898.

Fig. 1.

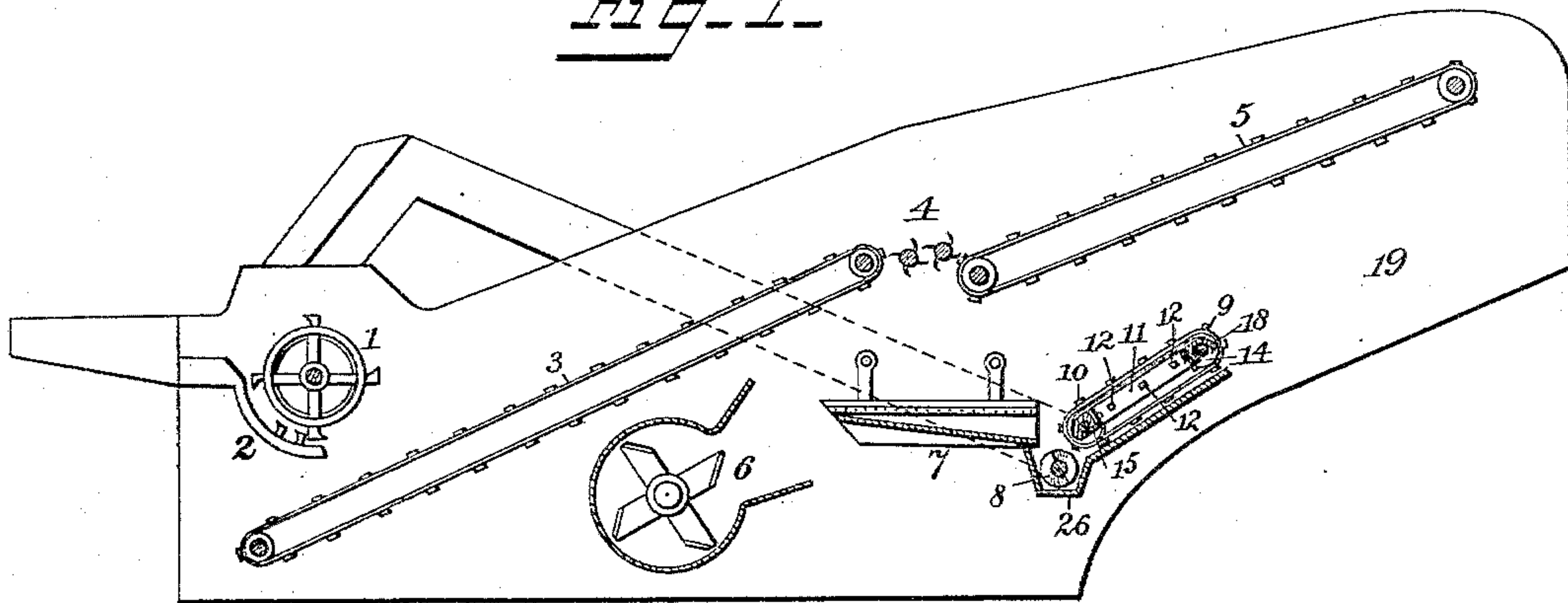


Fig. 2.

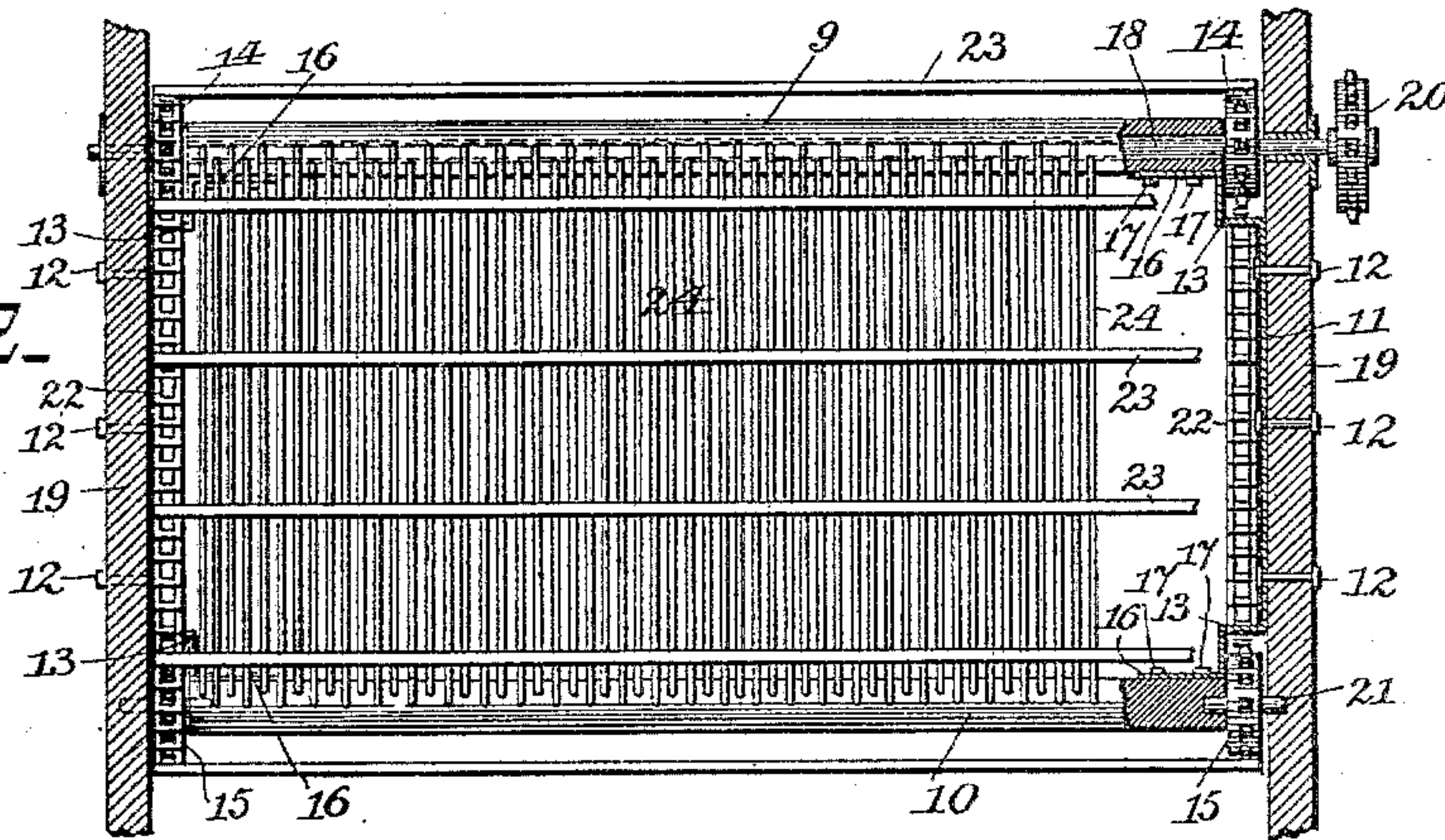
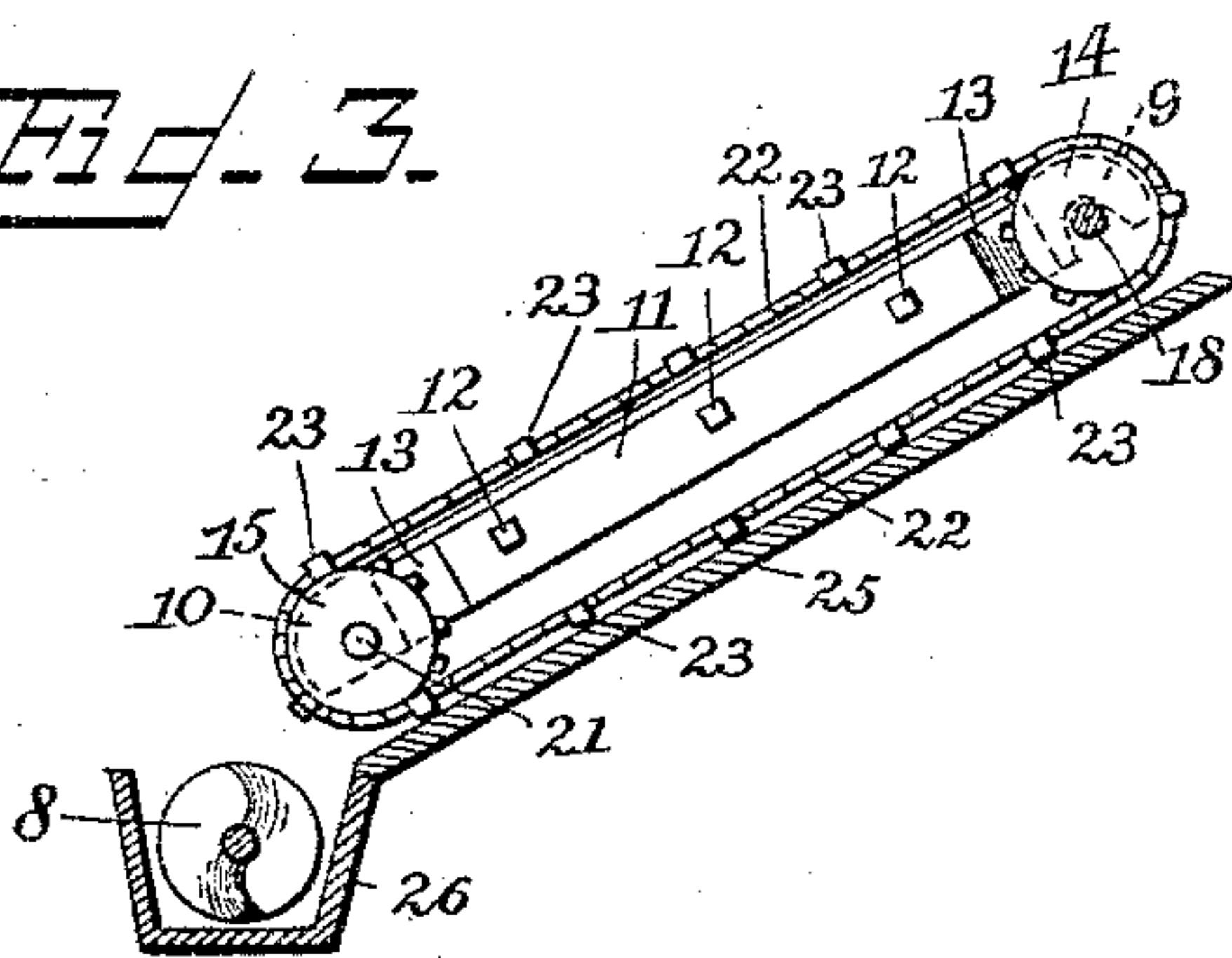


Fig. 3.



Inventor

Witnesses

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# UNITED STATES PATENT OFFICE.

WILLIAM THOMAS WILKINS, OF GRIMES LANDING, CALIFORNIA.

GRAIN-SAVING ATTACHMENT FOR THRESHING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 597,630, dated January 18, 1898.

Application filed March 17, 1897. Serial No. 627,961. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM THOMAS WILKINS, a citizen of the United States, residing at Grimes Landing, in the county of Colusa and State of California, have invented a new and useful Grain-Saving Attachment for Threshing-Machines, of which the following is a specification.

This invention relates to threshing-machines, its object being to provide a grain-saving attachment for machines of this class whereby the grain, chaff, &c., that is blown over the shoe will be arrested and separated and the grain conveyed to the return-auger, while the straw and most of the chaff will be discharged from the machine.

With this object in view the invention consists in the novel details of construction and combination of parts hereinafter fully described, and particularly pointed out in the claim.

In the drawings, Figure 1 is a skeleton sectional view of a threshing-machine provided with my attachment. Fig. 2 is a plan view of the attachment, with part of the machine-frame in section. Fig. 3 is an end view of the attachment, also showing the return-auger and the trough in which it works in section.

Similar reference-numerals indicate similar parts in the several figures.

The frame of the machine, with its cylinder 1 and concave 2, may be of any ordinary or desired construction, as also may be the grain and straw carrier 3, the beaters 4, endless straw-carrier 5, fan 6, shoe 7, and return-auger 8.

The attachment consists of the upper and lower cross-bars 9 and 10, of such length as may be required to adapt them to the width of the machine to which the attachment is applied, and they are preferably made from hard wood. These cross-bars are connected at their ends to the side bars 11, preferably of metal, and the middle portions of these bars are bolted to the opposite sides of the machine by the bolts 12. The end portions of the side bars 11 are bent outwardly at a right angle and then again at a right angle to form the recesses 13 for the reception of upper and lower sprocket-wheels 14 and 15. The ends 16 of the side bars are then bent at a right angle and firmly secured to the cross-bars 9

and 10 by bolts 17 or other suitable fastenings. The upper sprocket-wheels 14 are fast on a shaft 18, which is journaled in suitable bearings in the sides 19 of the machine, and one end of the shaft extends outwardly beyond the side of the machine and is provided with a pulley 20, adapted to be driven from some moving part of the machine. The lower sprocket-wheels 15 are loosely mounted on shafts 21, secured in the sides 19 of the machine-frame and the ends of the lower cross-bar 10. Sprocket-chains 22 run over the sprocket-wheels 14 and 15, and to these sprocket-chains are secured the cross-slats 23. To the cross-bars 9 and 10 are secured in any suitable manner a series of iron rods (indicated by 24) which extend parallel to each other and to the sides of the machine. These bars are preferably placed about a quarter of an inch apart, so that grain can pass between them readily; but most of the chaff and short straw that is blown onto them will not pass through them. The cross-slats 23 work in close proximity to the upper surfaces of these rods 24 and will thereby carry any chaff or straw that may be lodged upon them upwardly and discharge it over the top cross-bar 9, whence it will be discharged in any convenient manner from the machine. Below the rods 24 an inclined bottom 25 is formed, extending across the machine and supported in any suitable manner by the sides of the machine. The lower end of this inclined bottom rests upon the rear edge of the trough 26, in which the return-auger 8 works. This inclined bottom 25 is so arranged that the cross-slats 23 will work upon it and thereby carry any grain, &c., that will fall through between the rods 24 into the trough, whence it will be conveyed by the return-auger to be carried through the machine again in the usual manner.

By the use of this attachment it will be seen that any grain, straw, chaff, &c., that is blown from the shoe 7 by the fan 6 will be arrested by the rods 24 and the grain will be separated from the straw and chaff and fall onto the inclined bottom 25 and be returned by the auger 8 to again pass through the machine in the ordinary way, and this grain, that would otherwise be lost, is thus saved. It is obvious that as the cross-slats 23 work in close proximity to the rods 24 the straw



and chaff will be positively carried up by them and discharged from the machine, and there is, therefore, no chance for the attachment to become clogged, and it is also obvious that the grain which falls upon the inclined bottom 25 will also be positively carried into the trough 26 by the cross-slats 23.

It will be understood that changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described my invention, what I claim is—

15 In a threshing-machine, the combination with the fan, shoe, and return-auger, and the trough in which the auger works, of a grain-saving attachment consisting of an upper and a lower cross-bar of less length than the width  
20 of the machine, bars secured to the sides of the machine and having their ends offset and

connected to the ends of the cross-bars to support the latter with a space between their ends and the respective sides of the machine, a screen supported by said cross-bars, an inclined imperforate bottom supported below the screen parallel thereto to discharge into the trough, upper and lower sprocket-wheels mounted to revolve in the respective spaces between the ends of the cross-bars and the sides of the machine, and a slotted chain-carrier running around said wheels to engage the screen and the inclined bottom, substantially as described. 25 30

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses. 35

WILLIAM THOMAS WILKINS.

Witnesses:

GEORGE W. THORN,  
BENNETT SCHILLIG.