

No. 685,298.

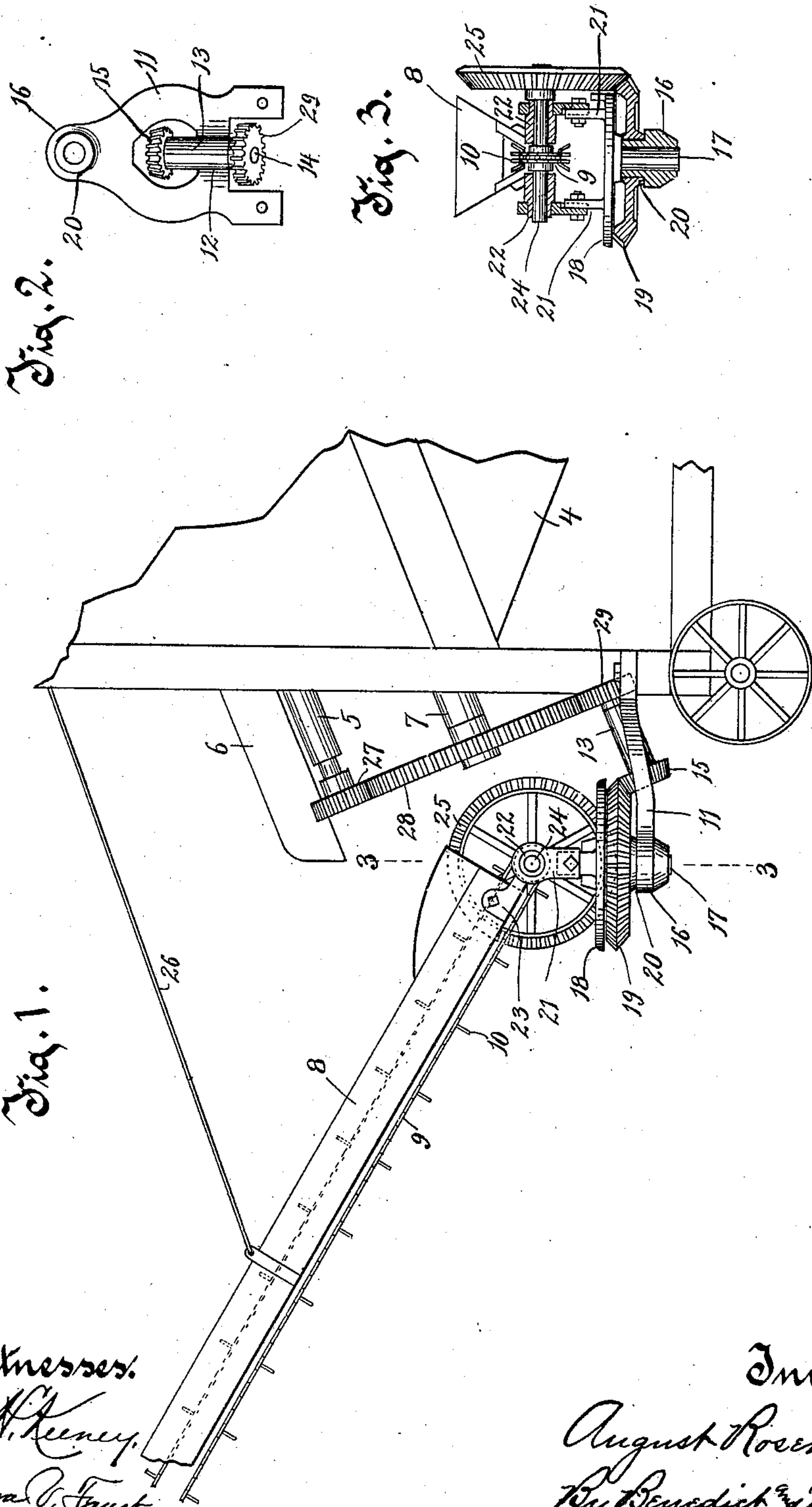
Patented Oct. 29, 1901.

A. ROSENTHAL.

CONVEYER FOR CORN HUSKING AND SHREDDING MACHINES.

(Application filed Mar. 23, 1901.)

(No Model.)



Witnesses.

A. Keeney.

Anna V. Faust.

Inventor.

August Rosenthal.

By Benedict & Morrell.

Attorneys.



# UNITED STATES PATENT OFFICE.

AUGUST ROSENTHAL, OF MILWAUKEE, WISCONSIN, ASSIGNOR TO ROSENTHAL-HUSKER COMPANY, OF MILWAUKEE, WISCONSIN, A CORPORATION OF WISCONSIN.

## CONVEYER FOR CORN HUSKING AND SHREDDING MACHINES.

SPECIFICATION forming part of Letters Patent No. 685,298, dated October 29, 1901.

Application filed March 23, 1901. Serial No. 52,642. (No model.)

*To all whom it may concern:*

Be it known that I, AUGUST ROSENTHAL, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and useful Improvement in Corn-Husking Machines, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

My invention has relation to improvements in corn-husking machines.

The object of the invention is to provide in a corn-husking machine having conveyer mechanism a means for driving the endless conveyer of said conveying mechanism from the husking and shredding rolls, whereby the rotation of said rolls is not only utilized for accomplishing their main function—i. e., that of husking and shredding the corn—but it is also utilized for driving the conveyer-belt.

With the above primary object in view the invention consists of the devices and parts or their equivalents, as hereinafter more fully set forth.

In the accompanying drawings, Figure 1 is a side elevation of a corn-husking machine equipped with my improvements, a fragment only of the machine being shown. Fig. 2 is a detail of the supporting-casting, and Fig. 3 is a section on the line 3 3 of Fig. 1.

Referring to the drawings, the numeral 4 indicates the framework of the machine; 5, one of a set of husking-rolls; 6, the feed-hopper, and 7 the rotatable shaft which carries the shredding or cutting mechanism.

The general form and construction of the conveyer is a well-known type, embodying the hopper 8 and the endless belt 9, provided with the usual fingers 10. The means by which this conveyer is connected to the corn husking and shredding machine or analogous machine will now be described. The numeral 11 indicates a casting (shown in detail in Fig. 2) which at its inner end is firmly secured to the framework of the machine in any desirable manner. The attachment is preferably secured by bifurcating the inner end of the casting and firmly bolting the furcate parts to the frame. The casting at an intermediate

point is formed with a cross-piece 12, and this cross-piece in turn is formed with a longitudinally-extending tubular box 13, which forms a bearing for a shaft 14. On the outer end of this shaft is mounted a beveled pinion 15. The outer end of the casting is provided with a box 16, which forms a bearing for a short upright shaft 17, said shaft having mounted fast on its upper end a turn-table 18. Beneath the turn-table and loosely surrounding the box 16 is a double-beveled gear-wheel 19, said gear-wheel supported on an annular shoulder 20, formed on the box 16. The lower beveled teeth of this wheel are engaged by the beveled pinion 15. Extending upwardly from the turn-table are uprights 21 21. These uprights are provided with openings near their upper ends, which form bearings for journal-boxes 22 22, said journal-boxes being provided with extensions 23, which extensions are firmly bolted to the side pieces of the hopper 8. The journal-boxes also form bearings for a transverse shaft 24. Around a sprocket-wheel mounted on this shaft passes the endless conveyer-belt 9, the outer end of said belt passing around another sprocket-wheel. (Not shown.) On one end of shaft 24 is mounted a beveled gear-wheel 25, which meshes with the upper bevel-teeth of the double-bevel gear-wheel 19. Connected to an intermediate point of the conveyer is a rope or cable 26, which is extended to the machine in convenient position to be reached by the operator.

It is obvious that the rotation of the shaft 14 is imparted to the double-bevel gear-wheel 19, and said gear-wheel in turn rotates the bevel gear-wheel 25, and the rotation of this latter wheel causes an actuation of the endless conveyer-belt 9, which belt carries the material dumped into the hopper 8 from the machine to the place of deposit.

The novel means for rotating the shaft 14 from the husking-rolls will now be explained. I show a system of gearing for rotating the shaft consisting of a pinion 27, mounted on the end of one of the husking-rolls, which pinion is in mesh with and drives a large toothed wheel 28, mounted on the end of the shredder-shaft 7, and this toothed wheel in



turn is in mesh with a pinion 29 on the inner end of the shaft 14. By this arrangement when the husking-roll carrying the pinion 27 is driven rotation is necessarily imparted to the shaft 14 through the described gearing. In husking-machines it is of course necessary that the husking-rolls be rotated in order to effect their function, and by my invention, as described, this rotation of the husking-rolls is also utilized for effecting an additional function—viz., for rotating the shaft 14, and which shaft 14 operates the conveyer mechanism.

The conveyer herein shown and described is of such construction that if it is desired to raise the discharge end thereof all that is necessary to be done is to pull on the rope 26, and the boxes 22 will then turn on the shaft 23 as a pivot, or if it is desired to lower said discharge end of the conveyer the rope 26 is slackened. When it is desired to swing the conveyer in a horizontal arc, so as to bring its discharge end into proper position with relation to the place of deposit, a lateral pull in the proper direction is exerted on the rope or cable, and this will cause the turn-table 18

to swing, the shaft 17 acting as a pivot therefor.

What I claim as my invention is—

In a corn-husking machine, the combination of the frame, the rotatable husking-rolls mounted therein, one of said rolls having a pinion mounted on the end thereof, the shredder-shaft, said shaft also having a toothed wheel mounted thereon and in mesh with the pinion of the husking-roll, a bearing extending from the frame, a shaft mounted in said bearing and having a gear-wheel on its inner end meshing with the toothed wheel of the shredder-shaft, a conveyer having its inner end supported by the bearing, and a system of gearing between the shaft of the conveyer mechanism and the shaft which is mounted in the bearing extending from the frame, said system of gearing adapted for driving the endless conveyer.

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

AUGUST ROSENTHAL.

Witnesses:

A. L. MORSELL,  
ANNA V. FAUST.