A. ROSENTHAL.

CORN HUSKING MACHINE.

APPLICATION FILED JAN. 18, 1904.

945,005. Patented Dec. 28, 1909.

Fig. 1.

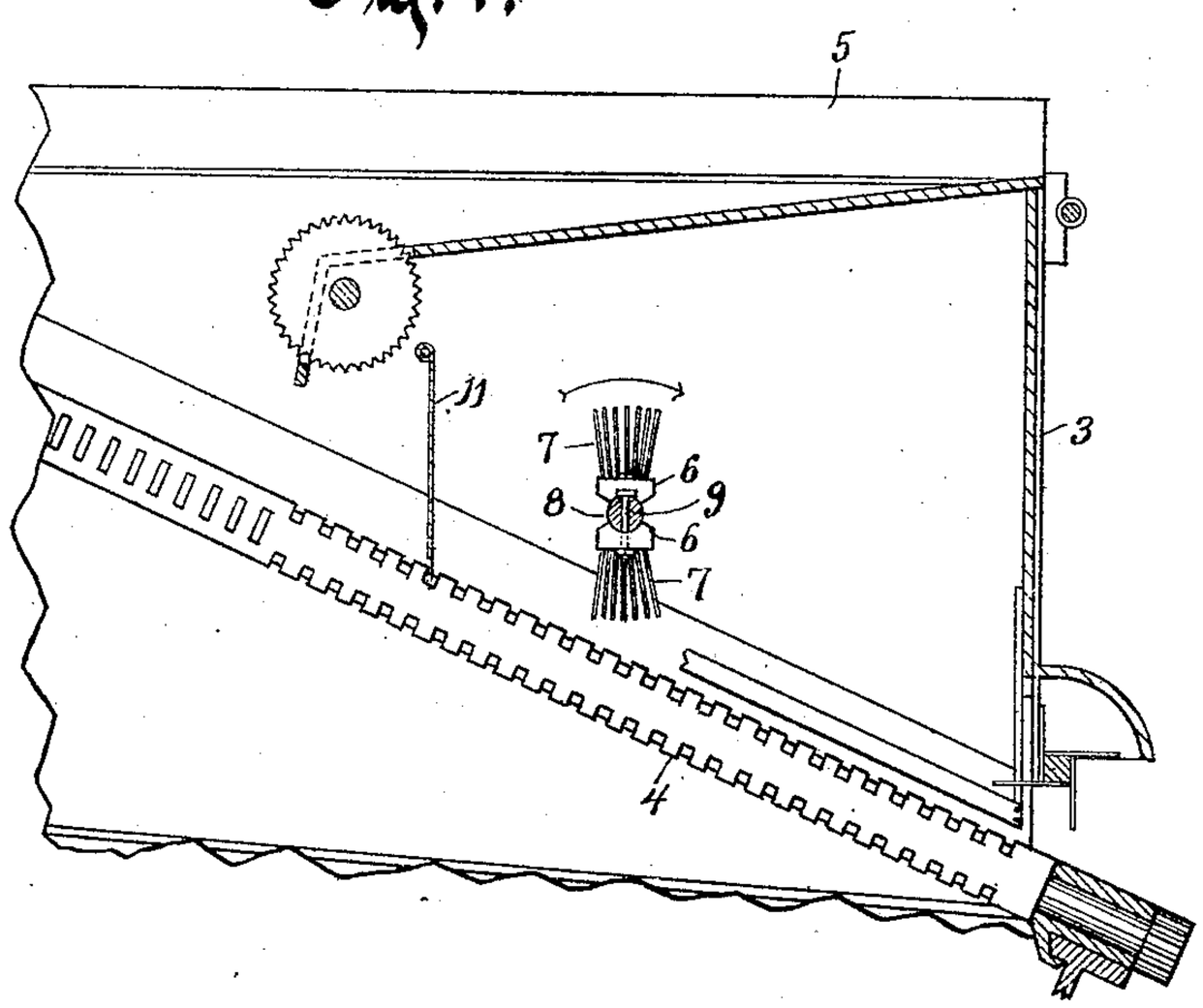
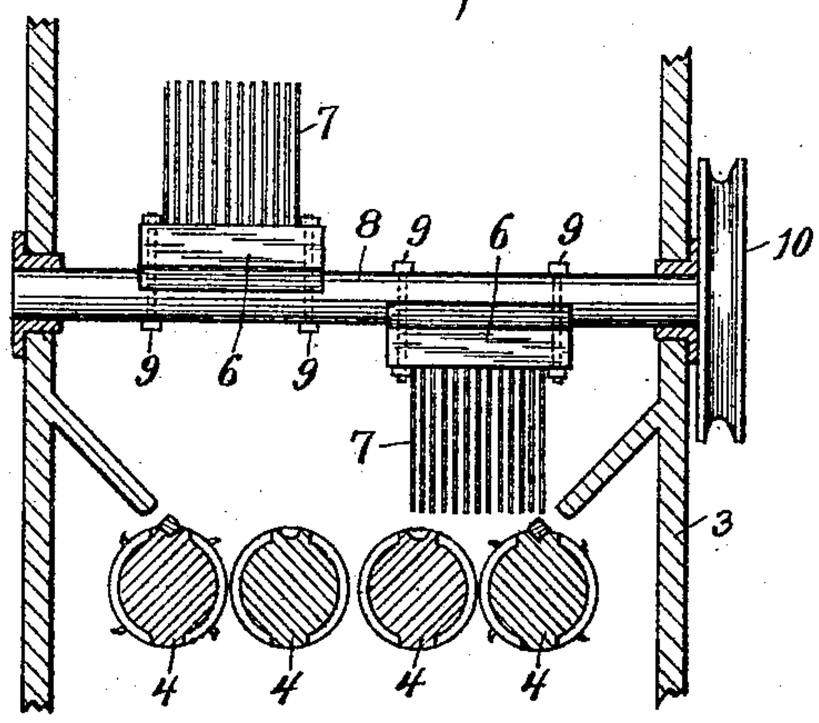


Fig. 2.



Witnesses.

A. Keeney.

Anna F. Schmidtbauer

Inventor.

August Rosenthal -

By Benedict and Morsell -

Attorneys.

UNITED STATES PATENT OFFICE.

AUGUST ROSENTHAL, OF MILWAUKEE, WISCONSIN, ASSIGNOR TO ROSENTHAL MANUFACTURING COMPANY, OF MILWAUKEE, WISCONSIN.

CORN-HUSKING MACHINE.

945,005. Specification of Letters Patent. **Patented Dec. 28, 1909.**

Application filed January 18, 1904. Serial No. 189,415.

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 of the type wherein the ears of corn pass longitudinally along husking rolls, usually arranged at a decline from the forward end of the machine to the rear thereof. In corn-husking machines of this character, the ears of corn passing longitudinally along the rolls are quite liable to pile one on top of the other, so that the husking pins are prevented from acting on the ears which are not directly against the rolls.

It is the primary object of my invention to provide an improved construction whereby a plurality of brushes are employed, said brushes projecting from opposite points of a shaft which extends across and above a plurality of sets of rolls, each set consisting of two rolls, and each brush being so positioned as to coöperate with a set of the rolls, and act to sweep the material longitudinally along said rolls toward the forward ends thereof while the brush of the other set of rolls is inactive or pointing in a direction away from the rolls, and vice versa.

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

In the accompanying drawing, Figure 1 is a longitudinal, sectional view of so much of a corn-husking machine as is necessary to illustrate the application of my invention, and Fig. 2 is a transverse section of Fig. 1.

Referring to the drawing, the numeral 3 indicates a fragment of the frame of a corn-husking machine, from the front to the rear of which extends the husking rolls 4, generally arranged on a declination from the front to the rear of the frame. These rolls are of a usual and well known form of construction, such, for instance, as described in U. S. Letters Patent issued to me under date of November 14, 1905, No. 804,434, for improvements in corn huskers, and hence require no specific description herein. I have shown in the accompanying drawing two pair of these rolls. The corn-stalks with the attached ears are deposited lengthwise in a hopper 5 at the upper end of the frame and arrange themselves longitudinally on the rolls. At the upper end of the rolls, as is usual in this class of machines, the stalks are separated from the ears and pass between the rolls, while the ears continue to travel longitudinally along the rolls to and off of the rear ends thereof.

Each brush preferably consists of a single flexible member, or a plurality of yielding or flexible members, composed of any desirable flexible or yielding material, such as thin flexible steel, spring coil wires, or any other form of member or members that will give or yield. In case only one yielding or flexible member is employed, this member should be of some width, in order to extend over the two rolls of a pair.

In the special form of the invention illustrated in the accompanying drawing each brush is shown as composed of a back piece 6 having a plurality of thin flexible wires 7 (preferably of steel) extending therefrom. The said brush back is shown as secured to a transverse rotatable shaft 8 by means of bolts 9. The shaft 8 has its bearings in the side pieces of the frame and may be rotated in any desirable manner. In the drawing, I show a belt pulley 10 on one end of the shaft which may be belted up to any suitable rotatable part of the mechanism of the husking machine in order to cause a rotation of the shaft in the direction indicated by the arrow in Fig. 1, so that the brush as it rotates with the shaft is carried around in a direction to act on the ears of corn and sweep the same back or toward the front end of the machine. Two of these brushes are mounted on the shaft, one for each pair of rolls. It is obvious, however, that more can be used, although where the speed of rotation is high, as is generally the case, one brush for each pair of rolls will be sufficient.

Of course instead of the flexible or yielding member or members of each brush extending from the back piece secured to the shaft, said flexible or yielding member or members could extend directly from the shaft.

By arranging the brushes as shown in the accompanying drawing, that is one brush positioned on the shaft so as to sweep over

two of the rolls of a set, and push the material back toward the forward ends of the rolls, and the other brush extending from a diametrically opposite point of the shaft, and so positioned as to sweep over the two rolls of the other set, the brushes are caused to alternately act upon their respective rolls; in other words, while one brush is active the other is inactive. If both brushes projected from corresponding points of the shaft, considerable power would necessarily be required to rotate the shaft as against the retarding influence exerted by the material to be swept back against the two brushes simultaneously. By the arrangement described, however, in which only one brush acts at a time a considerable less power is necessary.

I prefer to employ just in advance of my improved form of brushes a swinging or pivoted plate 11. This swinging or pivoted plate assists in causing the ears of corn to arrange themselves singly upon the husking portions of the rolls, instead of piling one upon the other. This swinging or pivoted plate, however, does not positively effect this result, inasmuch as a bunch or pile of the ears of corn may be so wedged together as to swing the pivoted plate rearwardly. It is for this reason that I provide the additional safe guard of the improved form of brush herein before described. This brush also, performs the additional function of sweeping short stalks, husks, and other rubbish back or toward the front of the machine.

From the foregoing description it is thought that the advantages of my improved construction will be readily appreciated. By my improved construction, wherein the brush is preferably formed of a flexible or yielding member or members the danger of shelling the corn is avoided, and at the same time the brush has the effect of brushing back the top ears of corn in a pile or bunch to thereby cause each ear to arrange itself against the surfaces of the rolls so as to be acted upon by the husking pins. Also all rubbish, and husks and short pieces of stalks are also brushed back toward the front end of the machine, so that when the husked ears of corn are discharged from the rear ends of the husking rolls, they are practically free from all foreign matter.

What I claim as my invention is:

In a corn husking machine, the combination of a frame, a plurality of sets of husking rolls supported therein and adapted to have the ears of corn travel longitudinally thereon, and to discharge from the rear ends thereof, each set comprising two coacting rolls, a shaft journaled in the frame and arranged above and extending across the rolls, brushes for each set of rolls, consisting of thin, flexible bristles arranged to form straight noncircular brushes disposed in the plane of the longitudinal axis of the shaft and projecting respectively from diametrically opposite points of the shaft, whereby the brush for one set of rolls will sweep longitudinally over the rolls of said set, while the brush for the other set of rolls is pointing in a direction away from the rolls, and vice versa, and means for rotating the shaft in a direction to cause the sweep of the brushes to be toward the forward ends of the rolls.

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

AUGUST ROSENTHAL.

Witnesses:
A. L. MORSELL,
ANNA F. SCHMIDTBAUER.