Sept. 5, 1939. J. RUSKAMP 2,171,952

CAP FOR THRESHER BLOWERS

Filed July 27, 1938 2 Sheets-Sheet 1

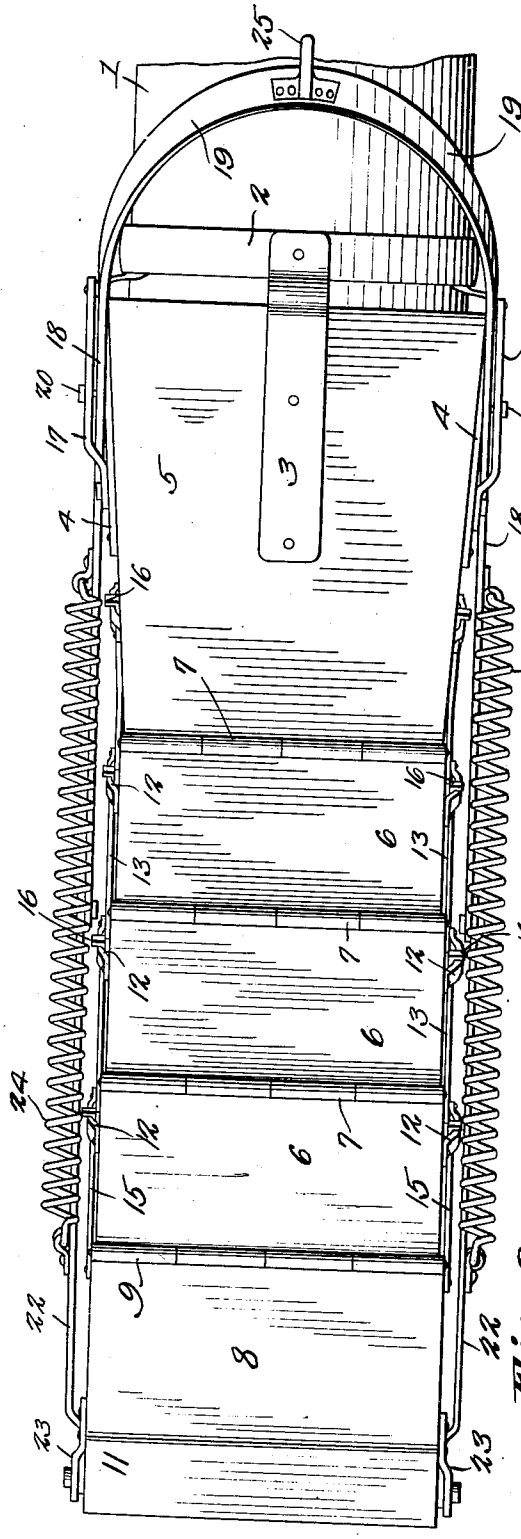


Fig. 2.

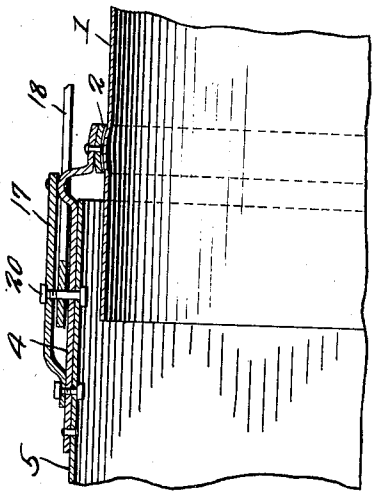


Fig. 6.

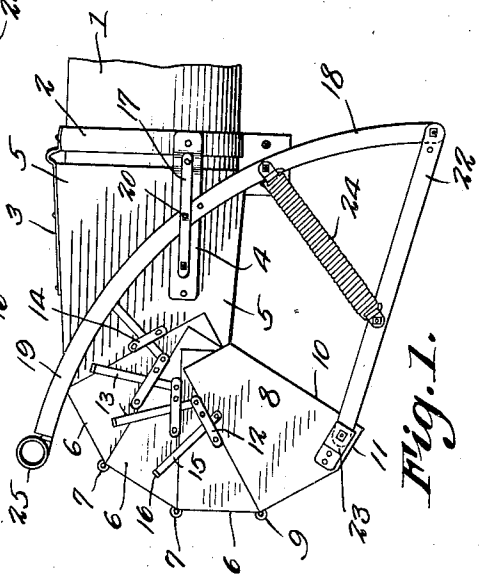


Fig. 1.

Joseph Ruskamp
INVENTOR.

BY Albert Lee.

ATTORNEYS.

Sept. 5, 1939. J. RUSKAMP 2,171,952

CAP FOR THRESHER BLOWERS

Filed July 27, 1938 2 Sheets-Sheet 2

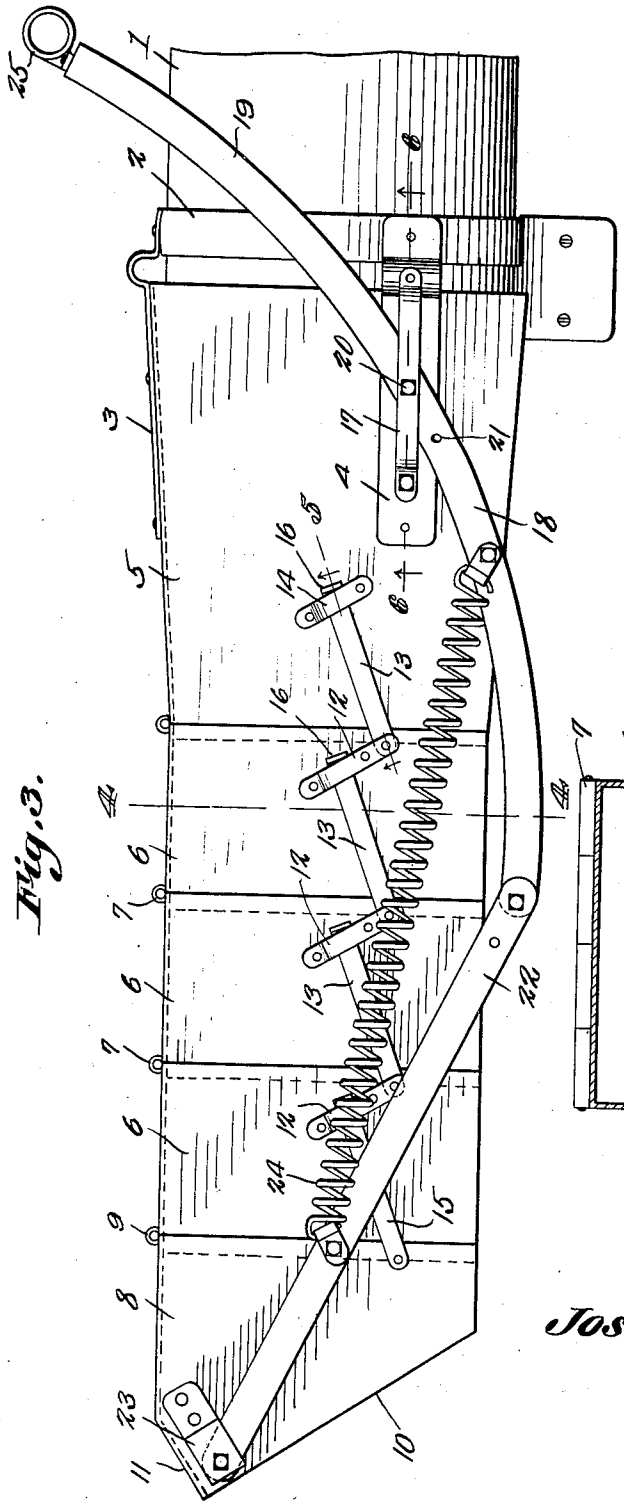


Fig. 3.

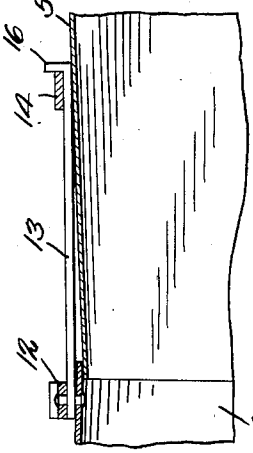


Fig. 5.

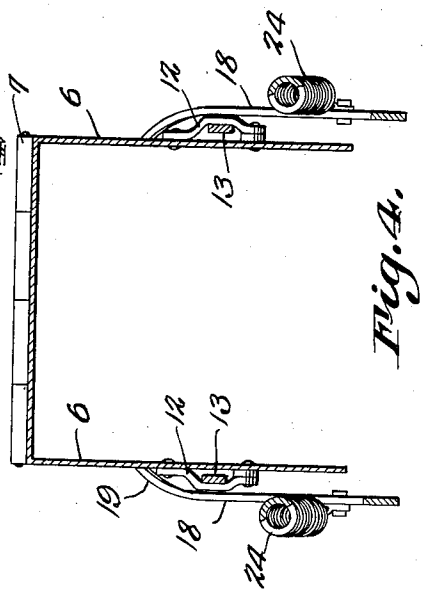


Fig. 4.

Joseph Ruskamp
INVENTOR.
BY C. A. Snow & Co.
ATTORNEYS.

Patented Sept. 5, 1939 2,171,952

UNITED STATES PATENT OFFICE

2,171,952

CAP FOR THRESHER BLOWERS

Joseph Ruskamp, Dodge, Nebr.

Application July 27, 1938, Serial No. 221,618

1 Claim. (Cl. 302—10)

This invention relates to an adjustable cap for use in connection with thresher blowers, one of the objects being to provide an articulated cap the members of which fit together closely at the sides and top so that dust cannot escape therethrough while straw is being stacked.

A further object is to so construct the cap that it will act to blow the straw downwardly onto the stack no matter at what angle the blower may be placed, thus causing the stack to be built up at the top instead of having the straw delivered to the back of the stack after the stack reaches a certain height.

Another object is to provide simple and efficient means for connecting the members of the cap whereby they are held tightly together at the sides and are limited in their relative movement.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claim, it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings

Figure 1 is a side elevation of the cap and the adjacent portion of the chute, the parts being shown in their normal positions.

Figure 2 is an enlarged top plan view of the cap and the adjacent portion of the chute, said cap being shown extended.

Figure 3 is a side elevation of the parts positioned as in Figure 2.

Figure 4 is a section of line 4—4, Figure 3.

Figure 5 is a section on line 5—5, Figure 3, said section being on an enlarged scale.

Figure 6 is a section on line 6—6, Figure 3.

Referring to the figures by characters of reference 1 designates the usual or any preferred form of stacker chute of a thresher to the upper or outlet end of which is secured a collar 2 having an upper arm 3 and side arms 4 extending outwardly therefrom for engaging the top and sides respectively of the base member 5 of the cap. This member is open at the bottom, and the sides thereof are preferably parallel and disposed at an angle to the flat top.

In addition to the base member 5 the cap comprises a series of hingedly connected sections 6 having flat tops and sides disposed preferably at right angles to each other, the hinges 7 serving to connect together the flat tops of the sections and all of the sections being proportioned to swing one upon the other as shown, for example, in Figure 1.

The outlet section 8 of the cap is hingedly connected to the adjacent sections 6 by a hinge 9 and is open not only at the bottom but also at the outer end which is preferably beveled as shown at 10, there being a depending inclined apron or deflector 11 overlying the upper portion of the end outlet and constituting a continuation of the flat top of the section 8.

Secured to each side of each section 6 is a guide strap 12 to the lower end of which is pivotally connected a link 13. The links carried by the straps on the back section 6 are mounted to slide within guide straps 14 secured to the sides of the section 5 while the links extending from the remaining straps 12 are in sliding engagement with the straps 12 on the next adjoining lapped sections 5. Additional links 15 are pivotally connected to the sides of the section 8 and slidably engage the straps 12 on the next adjoining sections 6. All of the links have stops 16 at their free or back ends which prevent their withdrawal from the straps 12 and/or 14 engaged thereby. Consequently when the cap is straightened out as shown in Figure 3, it is impossible for the sides of the sections of the cap to move apart and form openings at the sides of the cap.

Straps 17 are secured to the arms 4 and pivotally mounted between these straps and the arms are the arms 18 of a yoke 19, these arms being held in place by pivot bolts 20 as shown. These bolts can be extended through different openings 21 in the ams 18 should it be desired to adjust the arms longitudinally relative to the straps 17.

The arms 18 are preferably curved downwardly and forwardly and their forward ends are connected by links 22 to brackets 23 secured to the upper forward portions of the sides of section 8. While the springs 24 connect an intermediate portion of the links 22 to intermediate portions of the respective arms 18, these springs are constantly under tension.

Any suitable means, such as an eye 25, can be mounted on the yoke 19 whereby a rope or the like can be attached thereto for the purpose of actuating the yoke.

Under normal conditions the springs 24 hold the links 22 and the yoke arms 18 in the folded position shown in Figure 1 and with the parts thus located the sections 8, 6 and 5 are swung

back relative to each other, this swinging movement being limited by the straps 12 and 14 which constitutes stops as shown.

With the parts thus located the chute 1 can be raised to an upstanding position and when the straw is blown upwardly therethrough, it will be deflected downwardly onto the top of a stack so that the stack will be built up and the straw will not be piled against the back of the stack as is usually the case with other forms of caps employed on thresher chutes.

At the beginning of the stacking operation the cap is arranged with the parts positioned as in Figure 3, these parts being held by pulling on the yoke 18 so as to thrust through the links 22 an elongate spring 24. As the stack is built up, however, and the cap elevated correspondingly, the yoke 18 is gradually released so that the articulated cap can thus gradually fold downwardly until ultimately it assumes the shape shown in Figure 1.

By providing a cap such as herein described it is not only possible to build a stack to a higher level than heretofore but the scattering of dust which would otherwise escape through the sides of the cap is eliminated and all material is directed straight down from the cap as it is delivered thereto from the chute 1.

What is claimed is:

The combination with a thresher chute, of an articulated foldable cap comprising a base section, an outlet section and intermediate sections, all of the sections having their sides disposed in lapped relation and being hingedly connected at their tops, straps secured to the sides of the base and intermediate sections and positioned to lie parallel with and be contacted by the edges of the next adjoining sections when folded, thereby to limit the folding action of the cap, links pivotally connected to the sides of the outlet and intermediate sections and slidable within the straps on the next adjoining sections, means on the links and cooperating with the straps for limiting the unfolding of the cap sections, an actuating yoke embracing and pivotally mounted between its ends at the sides of the base section, a link connecting each free end of the yoke to one side of the outlet section, and springs connecting the yoke and links for holding them normally drawn toward each other and the cap normally folded with its outlet and intermediate sections lapping the base section.

JOSEPH RUSKAMP.