

No. 675,452.

Patented June 4, 1901.

J. V. STRADLEY.

CORN SHELLER.

(Application filed May 9, 1900.)

(No Model.)

Fig. 1.

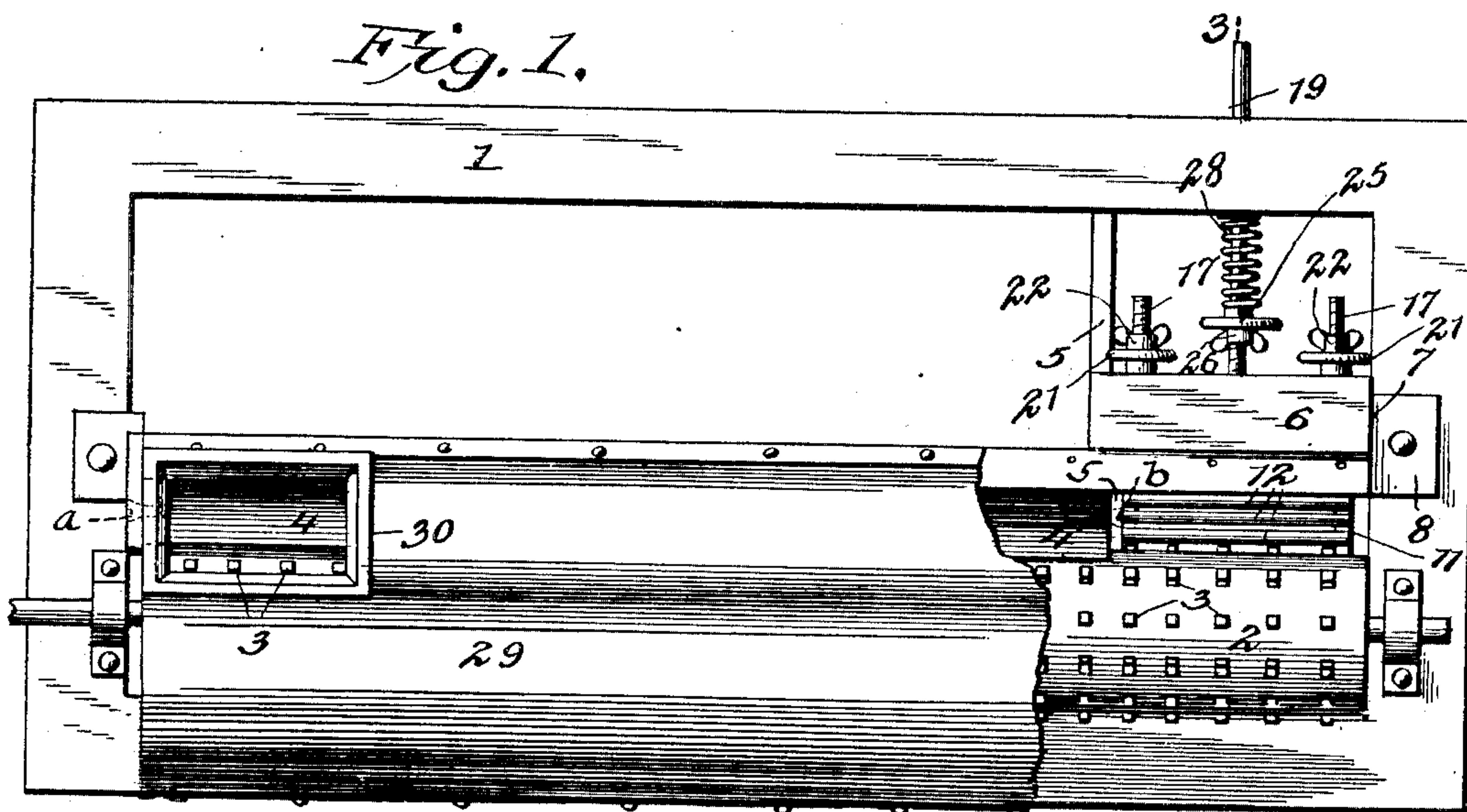


Fig. 2.

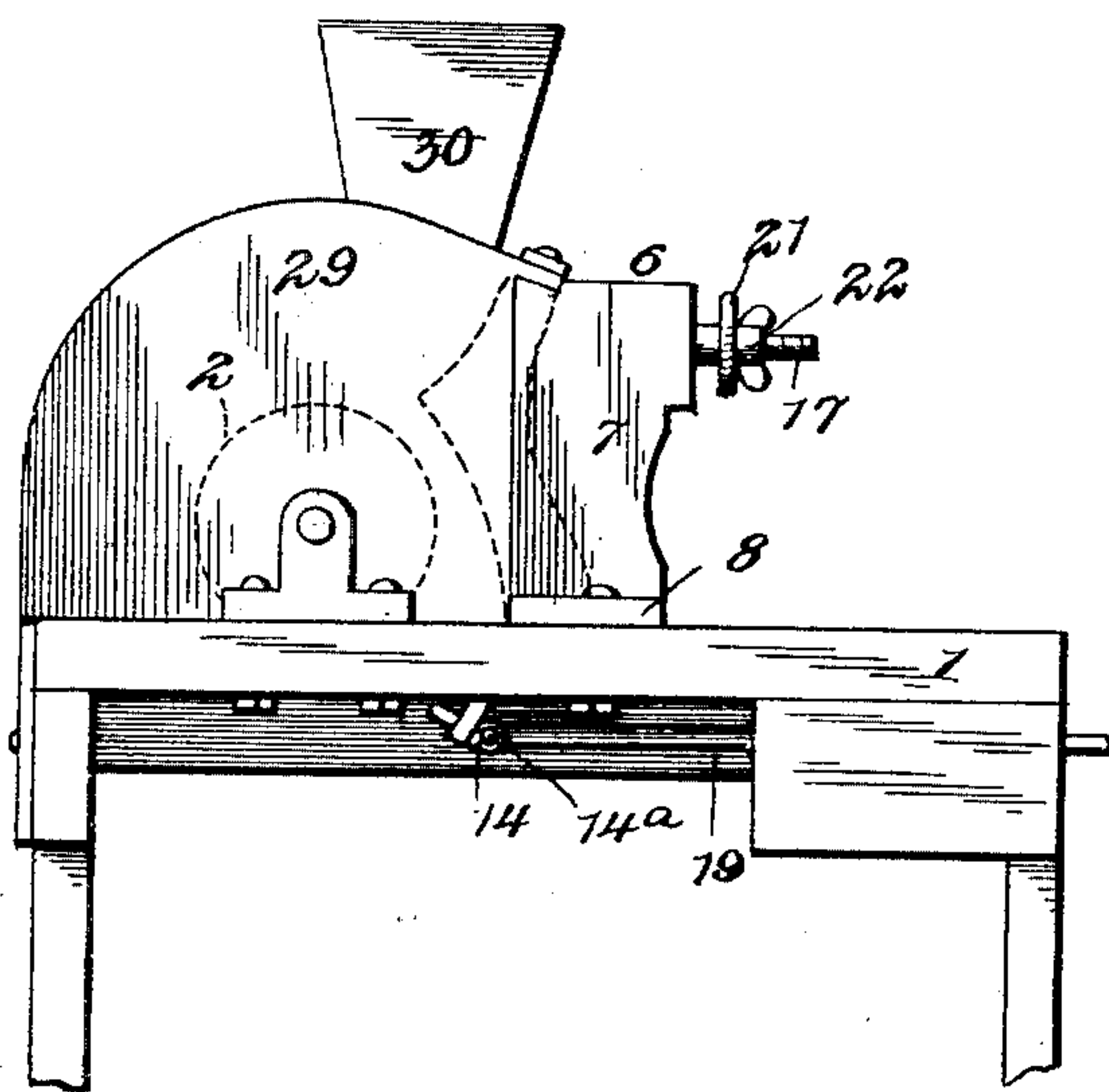
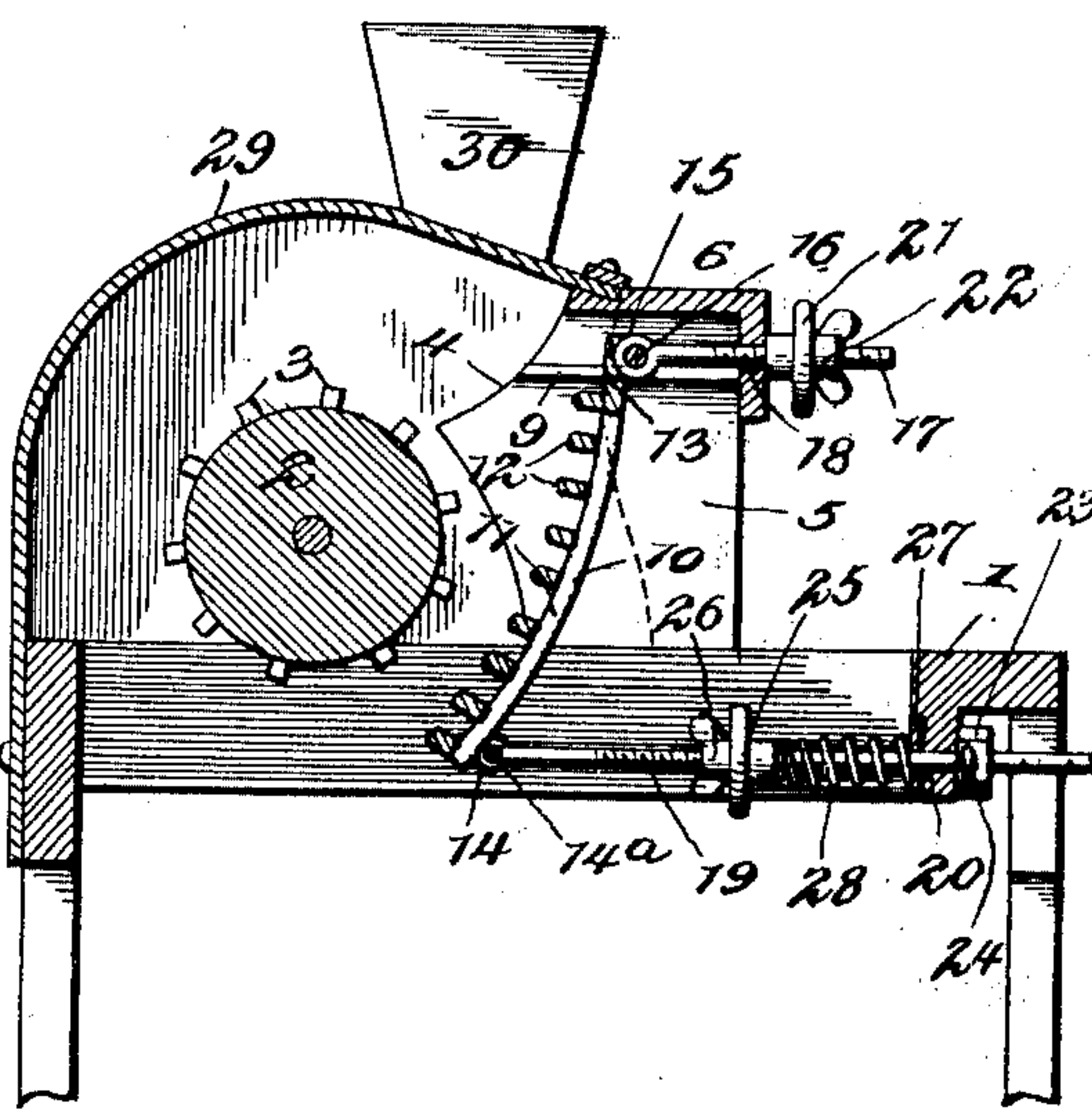


Fig. 3.



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JOHN V. STRADLEY, OF GREENWOOD, NEBRASKA.

CORN-SHELLER.

SPECIFICATION forming part of Letters Patent No. 675,452, dated June 4, 1901.

Application filed May 9, 1900. Serial No. 16,006. (No model.)

To all whom it may concern:

Be it known that I, JOHN V. STRADLEY, a citizen of the United States of America, residing at Greenwood, in the county of Cass and State of Nebraska, have invented certain new and useful Improvements in Corn-Shellers, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to corn-shellers, and particularly to that class in which revolving cylinders are employed in connection with a concave or breasting; and it has for its primary object the provision of means whereby
15 the corn is effectually shelled.

A further object of the invention is to provide, in combination with the cylinder, a breasting and grate whereby the cob after traveling between the breast and cylinder is
20 deposited on the grate and finally discharged.

Furthermore, the object of the invention is to provide a grate and in combination therewith novel means whereby its inclination may be varied with relation to the cylinder
25 with which it coacts.

Furthermore, the object of the invention is to provide novel means for affording a yielding action of the grate and in the provision of mechanism for adjusting the tension of
30 said yielding means.

With the above and other objects in view the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully
35 set forth and claimed.

In describing the invention in detail reference will be had to the accompanying drawings, forming part of this specification, wherein like characters denote corresponding parts
40 in the several views, and in which—

Figure 1 is a top plan view of the invention. Fig. 2 is a cross-section on line 2 2 of Fig. 1, and Fig. 3 is a side view in elevation and partly in section.

45 In the drawings, 1 indicates a frame of any ordinary construction, and 2 a cylinder suitably journaled and having teeth 3 of convenient form on its surface.

50 Stationed at the rear of the cylinder, a suitable distance therefrom, is a breasting 4, having its inner surface concaved, said breasting having one end secured to the frame in

any suitable manner—as, for instance, by a screw *a*—and its opposite end secured to a standard 5 of the housing 6 by a screw *b*. This housing is also provided with a standard 7, 55 having a foot 8 formed integral therewith, said foot bearing against the frame and being secured thereto. Secured near the top on the inner surfaces of the standards are 60 horizontally-disposed ribs 9 for the purpose to be hereinafter set forth. Within this housing is a cob-grate 10, consisting of a series of concaved ribs 11, a series of cross-strips 12, and a plate 13 at the top, all formed 65 integral with the ribs. The lower cross-strip is provided with apertured lugs 14, which receive the pivot 14^a of the rod, to be hereinafter described. Near the top the ribs have apertures 15, adapted to receive a cross-bar 70 16, which extends beyond the sides of the grate and is adapted to bear against the upper surfaces of the ribs 9 for supporting the grate. Eyebolts 17 are secured to the cross-bar 16 of the grate and have their free ends 75 passing through apertures 18 in the rear of the housing. A rod 19 is secured at one end on the pivot of the lugs 14 and has its free end passing through the frame at 20. Threaded on the free ends of the eyebolts 17 are 80 hand-wheels 21 and lock-nuts 22. On the outer end of the rod 19 is threaded a nut 23 and a spring-key 24, which passes through both the nut and rod. Approximately midway of the rod 19 are threaded a hand-wheel 85 25 and a lock-nut 26, and bearing between the wheel 25 and an apertured plate 27, bolted to the frame and registering with the aperture for the rod, is a spring 28. A drum 29 is fastened at the top of the breasting and laps over 90 the cylinder and is bolted to the frame. A hopper 30 is provided at one end of the cylinder, and it will be understood that operating means for the cylinder will be used.

The operation of the device is as follows: 95 Corn is fed to the machine through the hopper 30 and is engaged by the teeth 3 of the revolving cylinder 2 and is carried along under the drum 29. When nearly all of the corn has been shelled, the cob is discharged 100 between the breasting and the cylinder. What corn is left on the cob is shelled while passing down around the cylinder and against the grate.

In order to meet the varying conditions, the grate is adjustable by means of the bolts 17 and the rod 19, and is held in its adjusted positions by means of the hand-wheels 21 and nut 23, and in order that the cobs may have free exit a tension 28 is employed, which may be varied by means of the wheel 25.

At a suitable distance below the sheller is placed a separating-table of any preferred construction, the object of which will be fully understood by those familiar with the art.

It will be remembered that changes in the proportions and details of construction may be resorted to without departing from the spirit or scope of the invention, and it is thought that the minor details of operation will be fully understood from the foregoing description.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination, a frame, a suitable cylinder, a housing supported by two standards, one of said standards having a foot adapted to bear against and be secured to the frame, ribs on the inner surfaces of the standards near the top, a grate consisting of a series of ribs and cross-strips supported within the housing, and a breasting having one end secured to the frame and the other to the housing, as and for the purpose set forth.

2. In combination, a frame, a suitable cylinder, a housing supported by standards, ribs on the inner surfaces of the standards near the top, a grate consisting of a series of concaved ribs and cross-strips secured within the housing, a breasting suitably placed with relation to the cylinder, and means whereby the grate is adjusted, as and for the purpose set forth.

3. In a corn-sheller the combination of a frame, a suitable cylinder, a housing supported by standards, a grate consisting of a series of concaved ribs and cross-strips, said ribs having apertures near the top, ribs on the inner surfaces of the standards near the top, a cross-rod passing through the apertures of the ribs of the grate and adapted to bear against the upper surface of the ribs of the standards, and a concaved breasting suitably placed with relation to the cylinder, as and for the purpose set forth.

4. In a corn-sheller a housing supported by standards, said standards having ribs on their inner surfaces near the top, a grate consisting of a series of concaved ribs and cross-strips, a cross-strip adapted to pass through apertures in the ribs of the grate and to bear against the upper surfaces of the ribs of the standards, apertured lugs projecting from the lower cross-strip, eyebolts secured to the cross-bar and having their free ends passing

through apertures in the rear of the housing, a rod pivotally secured to the apertured lugs of the grate and having its free end passing through an aperture of the frame, securing means on the end of the eyebolts and rod, and means on the rod whereby a tension is allowed.

5. In a corn-sheller, a housing suitably supported by standards, said standards having ribs on their inner surfaces near the top, a grate consisting of a series of concaved ribs and cross-strips within the housing, said concaved ribs having apertures near the top, a cross-rod through the apertures adapted to bear against the upper surfaces of the ribs of the standards, apertured lugs projecting from the lower cross-strip, eyebolts secured to the cross-bar and having their free ends passing through apertures in the rear of the housing, a rod pivotally secured to the lug of the grate and having its free end passing through an aperture in the frame, hand-wheels threaded on the free ends of the bolts and adapted to bear against the outer surface of the rear of the housing, lock-nuts also threaded on the free ends of the bolts, a nut threaded on the free end of the rod, a spring-key passing through both the nut and rod, a tension on the rod, and means whereby the tension may be varied.

6. In a corn-sheller, a housing suitably supported by standards, said standards having ribs on their inner surfaces near the top, a grate consisting of a series of concaved ribs and cross-strips within the housing, said concaved ribs having apertures near the top, a cross-rod through the apertures adapted to bear against the upper surfaces of the ribs of the standards, apertured lugs projecting from the lower cross-strip, eyebolts secured to the cross-bar and having their free ends passing through apertures in the rear of the housing, a rod pivotally secured to the lugs of the grate and having its free end passing through an aperture in the frame, hand-wheels threaded on the free ends of the bolts and adapted to bear against the outer surface of the rear of the housing, lock-nuts also threaded on the free ends of the bolts, a nut threaded on the free end of the rod, a spring-key passing through both the nut and rod, a hand-wheel threaded on the rod approximately midway of its length, a lock-nut for the wheel, an apertured plate bolted to the frame and registering with the aperture for the rod, and a spring on the rod abutting the wheel and plate, as and for the purpose set forth.

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

JOHN V. STRADLEY.

Witnesses:

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M. C. NOONAN.