

No. 671,325.

Patented Apr. 2, 1901.

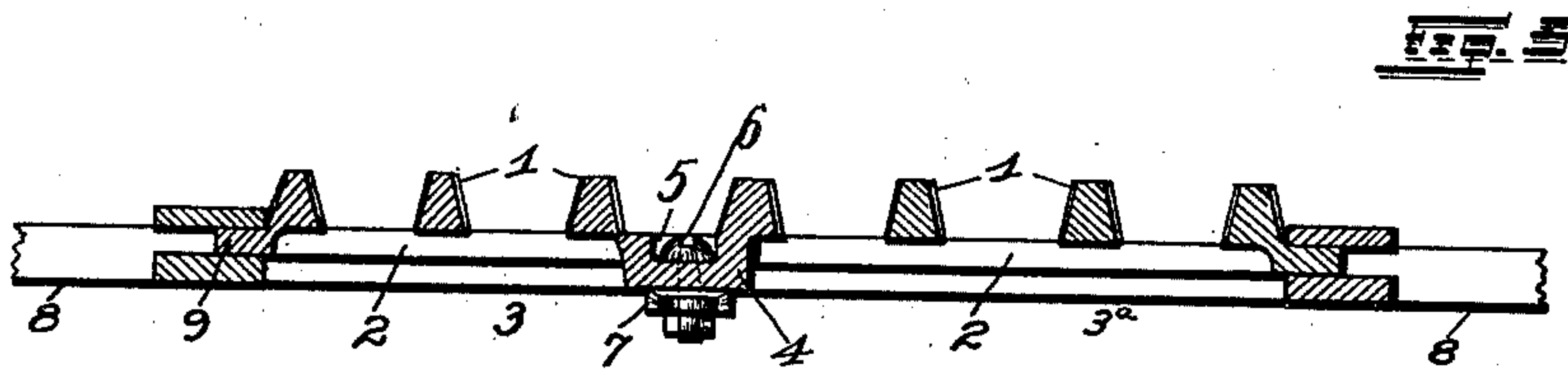
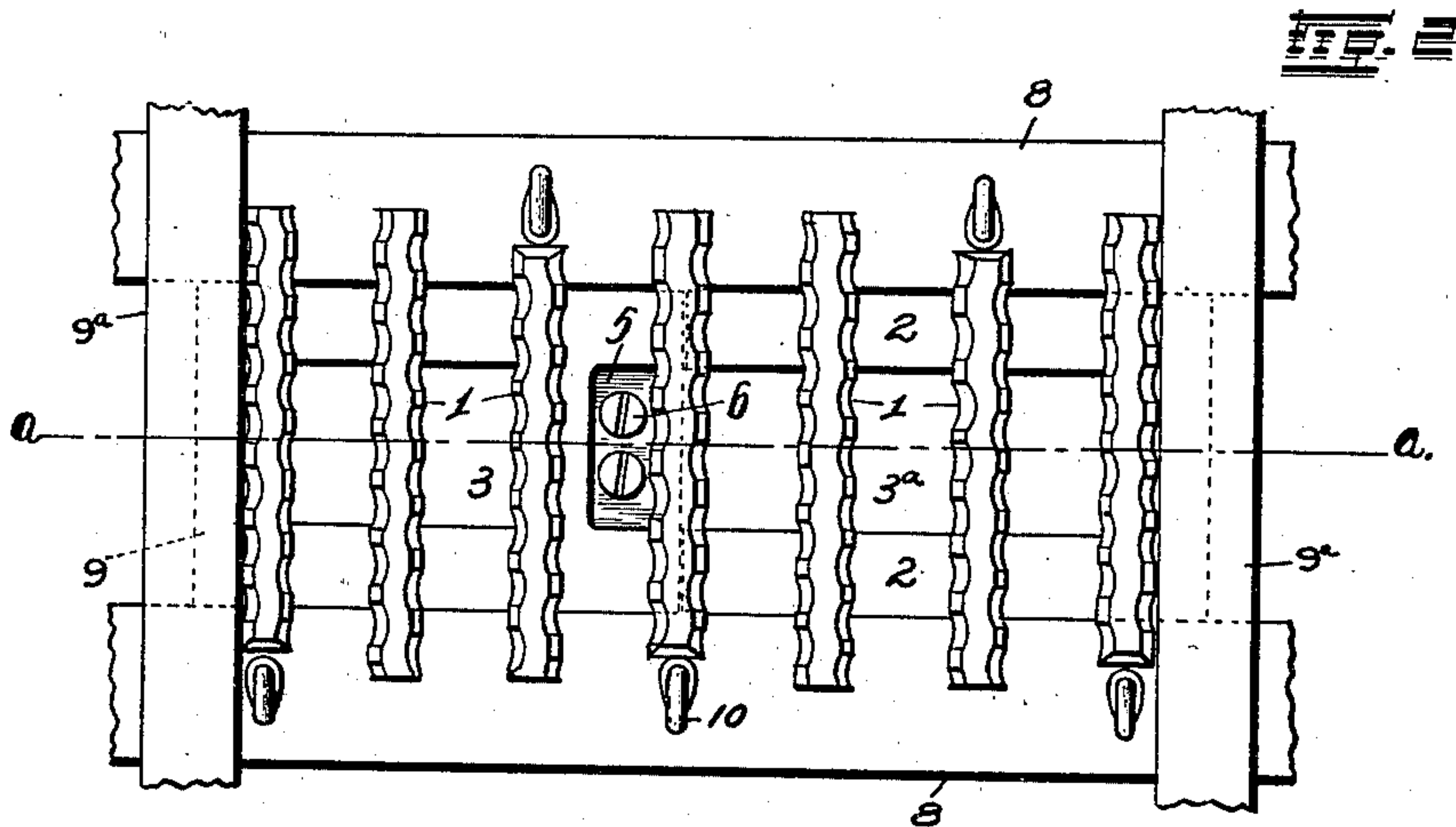
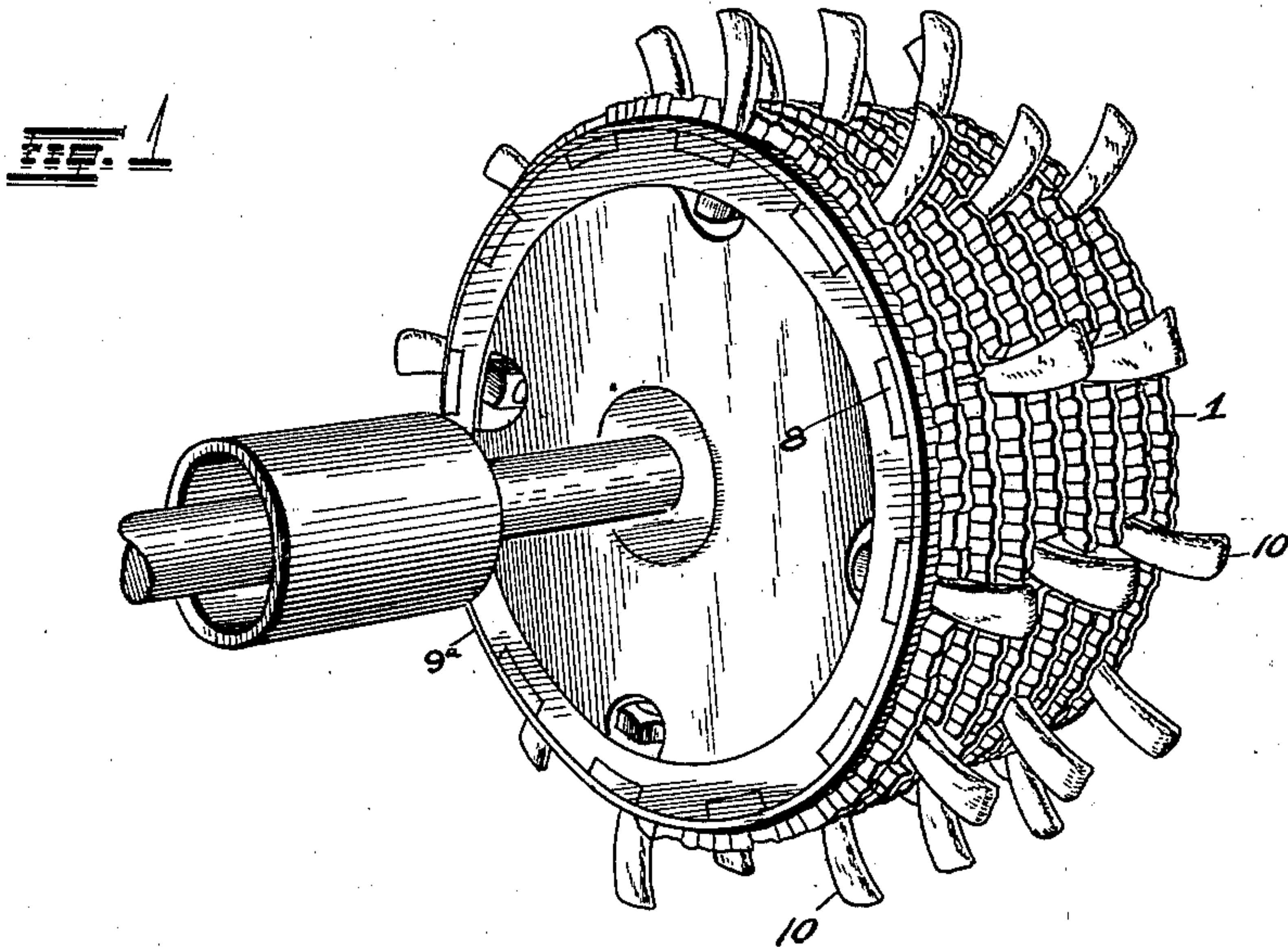
J. RINCK.

ATTACHMENT FOR CYLINDERS IN THRESHING MACHINES.

(Application filed May 4, 1900.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses:

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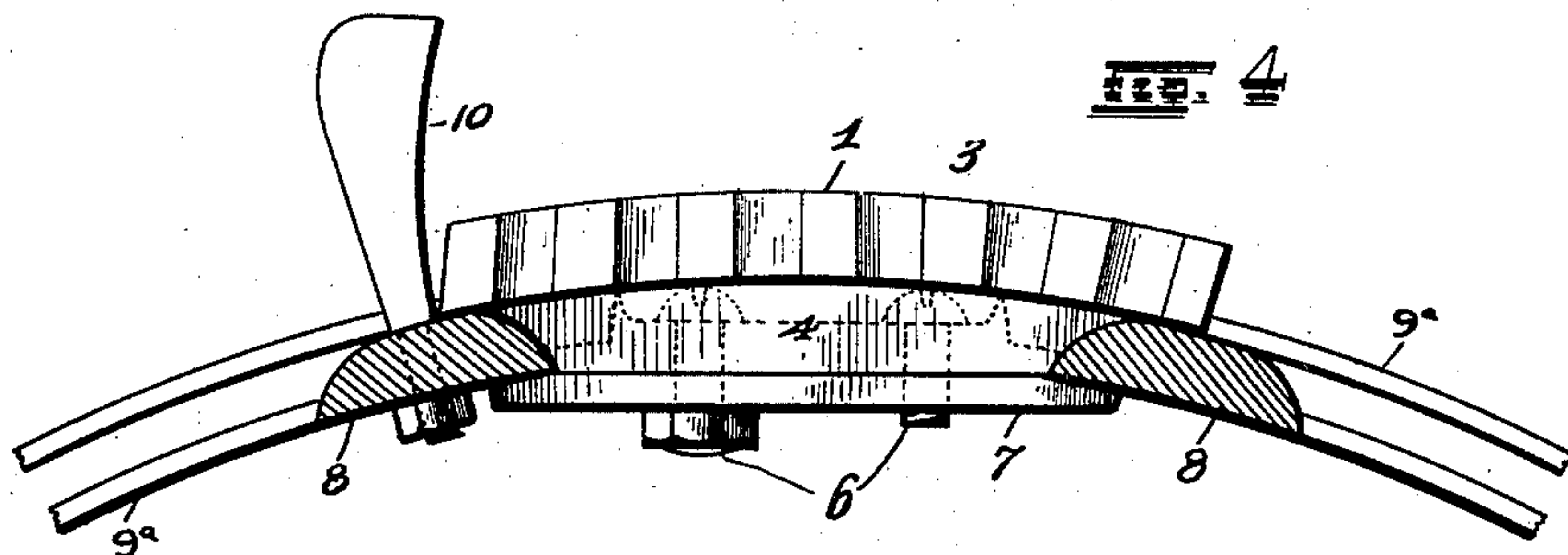
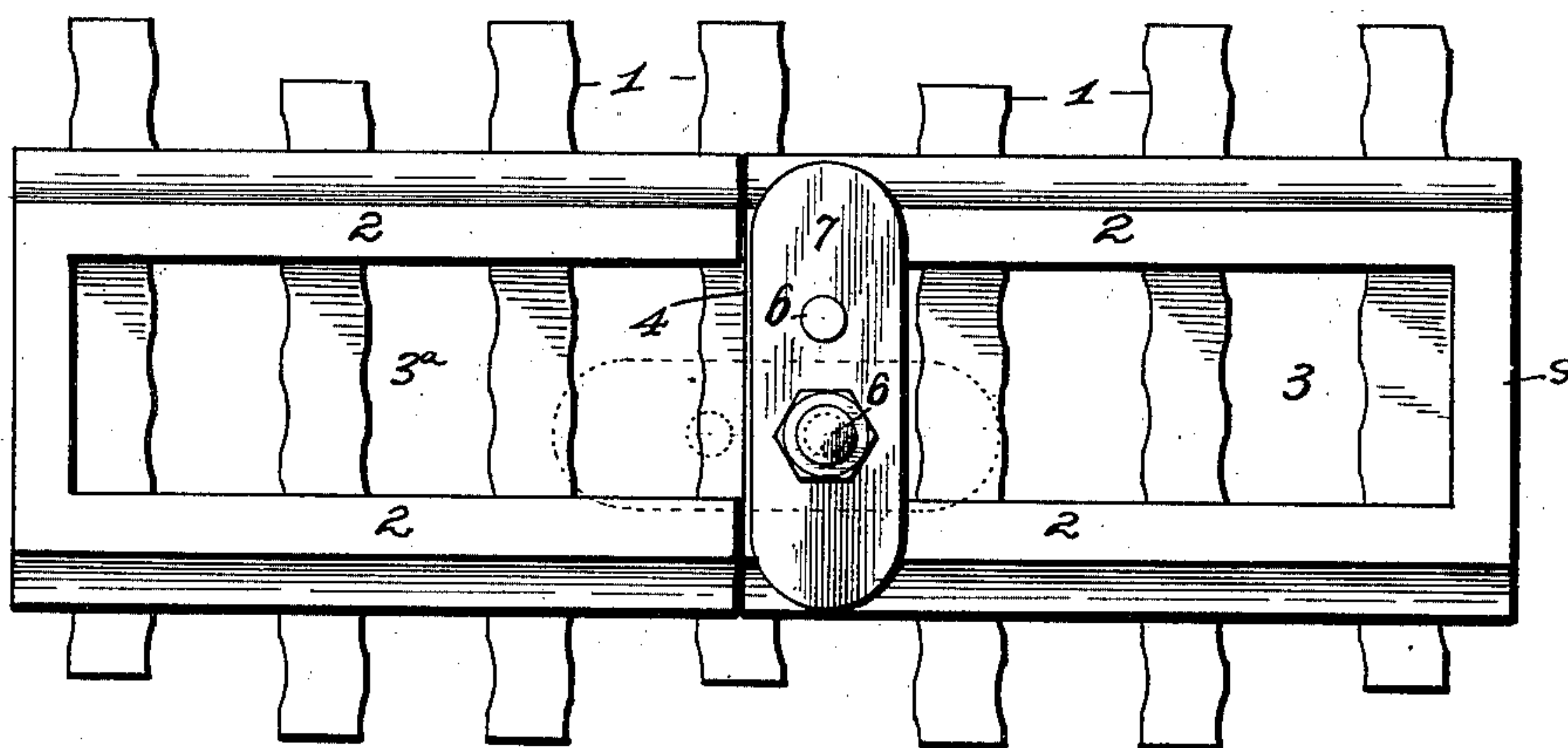


FIG. 5



Witnesses

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UNITED STATES PATENT OFFICE.

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ATTACHMENT FOR CYLINDERS IN THRESHING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 671,325, dated April 2, 1901.

Application filed May 4, 1900. Serial No. 15,469. (No model.)

To all whom it may concern:

Be it known that I, JOHN RINCK, of the city of Belleville, St. Clair county, State of Illinois, have invented certain new and useful
5 Improvements in Attachments for Cylinders in Threshing-Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

10 This invention relates to attachments for cylinders in threshing-machines; and it consists of the novel construction, combination, and arrangement of parts hereinafter shown, described, and claimed.

15 Figure 1 is a view in perspective of a part of a cylinder, showing my improved attachment secured thereto. Fig. 2 is an enlarged plan view of a portion of the cylinder. Fig. 3 is a sectional view taken on the line *a a* of
20 Fig. 2. Fig. 4 is an end elevation of one of the attachments and shows the means which I employ to secure the same upon the cylinder. Fig. 5 is a detail view of the under side of the attachment.

25 This invention consists of integral castings comprising the arcuate ribs 1, cast in corrugated form, and the longitudinal strips 2, the said strips being adapted to project into the cylinder, while the corrugated ribs extend be-
30 yond the surface. The castings are arranged in pairs, the arrangement of which is best shown in Fig. 5, and one lock has been found sufficient to hold both securely in position on the cylinder. The casting 3 in the drawings
35 is provided at one end with an integral portion 4 inwardly from the end rib, and in the outer surface of said portion is a depression 5, which is of a depth sufficient to receive the heads of screws, bolts, or other fastening devices
40 which may be made use of. Through the said portion are arranged a pair of apertures, through which extend screws or bolts 6, and to the inner end of one of said screws is pivotally secured a lock-strip 7, the end of the
45 screw being bradded or flattened for the purpose of more securely holding the lock-strip in position thereon. The screw at the other end is threaded into an aperture in the said strip and may be removed therefrom, in
50 which case the strip may be turned, the remaining screw acting as a pivot. When the

lock-strip is adjusted in position, its ends project a suitable distance beyond the sides of the strips 2 and engage under the horizontal strips 8, rigidly carried by the cylinder. 55
Heretofore threshing-machines have for the most part been constructed with smooth cylinders or cylinders approximately smooth, and by means of these cylinders it is practically impossible to obtain satisfactory results 60
in threshing heavy grain, owing to the fact that by use of such cylinders all the grain cannot be shelled from the head, thereby resulting in much loss and waste.

My invention has for one object to provide 65
a suitable attachment or a series of attachments to be applied to threshing-machine cylinders of ordinary construction, and by means of which all the grain can be removed from the head. These attachments consist, es- 70
sentially, of a series of projecting ribs to be secured upon the periphery or the cylinder and to project outwardly therefrom, and which operate within the depressions usually provided in the concave. By this means the 75
heads of the grain are scratched and rubbed between the concave and the projecting ribs, and all the grain is thereby freed from the heads, allowing it to be separated from the straw and chaff and resulting in much more 80
grain being saved than can be done by use of the ordinary smooth cylinder. These ribs are formed in separate castings, so that when one becomes injured it may be removed and another substituted. 85

Further objects and advantages will appear in the following description, and the particular features of construction of the invention are hereinafter fully set forth.

The device is constructed for use on cylin- 90
ders of any ordinary construction, and to avoid the necessity of using more than one lock I extend the strips 2 integral with the casting 3 a suitable distance beyond the arcuate rib at the end opposite from the lock above de- 95
scribed. The projecting ends are joined by an integral member 9 and when in use on the cylinder fit under the cylinder-band 9^a, which effectually prevents displacement. The arcuate rib at the other end of the casting pro- 100
jects beyond the strips 2 a sufficient distance to receive the projecting ends of the strips 2

integral with the casting 3^a, while the strips at the opposite end of the said casting are in all respects similar to the outer end of the casting 3 and are held in identically the same manner.

As shown, some of the ribs 1 are of shorter length than others. The shorter ribs are intended to abut against the cylinder-teeth 10 in the manner shown in Fig. 2.

In use the attachments are secured upon the cylinder in the manner described, the ends of the annularly adjacent ribs abutting against each other, thereby forming a complete system of ribs entirely around the cylinder. Should any one become injured or useless, it can be easily removed by manipulating the lock hereinbefore described and another can be substituted in its place.

By referring to Fig. 4 it appears that the end of each rib abutting against the cylinder-teeth is cut on a slant, the purpose of which is to allow the teeth to fall out in case they become broken without injury to the ribs.

I claim—

1. The herein-described attachment for threshing-machine cylinders, comprising a casting having integral arcuate ribs, connecting and supporting bars integral with said ribs, and means for locking said attachment on a suitable skeleton cylinder comprising end heads and bands and the longitudinal threshing and toothed bars which the attachment is adapted to engage, externally by the said connecting and supporting bars carrying the arcuate ribs and internally by the said locking device, substantially as specified.

2. A device of the class described, comprising a casting having corrugated arcuate ribs, a skeleton frame integral with said ribs and a movable lock for retaining the device in position, the said device being adapted to be attached to a skeleton cylinder comprising

end heads and bands and the longitudinal threshing or toothed bars which the attachment is adapted to engage by means of the said skeleton frame and the said movable lock, substantially as specified.

3. The herein-described attachment for threshing-machines, comprising a pair of castings having arcuate corrugated ribs, connecting and supporting bars integral with said ribs, a lock carried by one of said castings for holding it on the cylinder, means whereby the casting carrying the lock engages the other casting, the said castings having projections to engage with the bands of the cylinder to which they are adapted to be attached, the castings being adapted to engage the longitudinal threshing-bars of the cylinder, externally by the said connecting and supporting bars and internally by the said lock, substantially as specified.

4. As an article of manufacture, an attachment for threshing-machine cylinders comprising a pair of castings having arcuate corrugated ribs, connecting and supporting bars integral with said ribs, a lock carried by one of said castings, and means whereby the casting carrying the lock engages the other casting, the said castings being adapted to be attached to a skeleton cylinder comprising end heads and bands and longitudinal threshing or toothed bars, which the attachment is adapted to engage, externally by the casting or supporting bars carrying the arcuate ribs and internally by the said locking device, substantially as specified.

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

JOHN RINCK.

Witnesses:

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JOS. L. BUX.