No. 670,235.

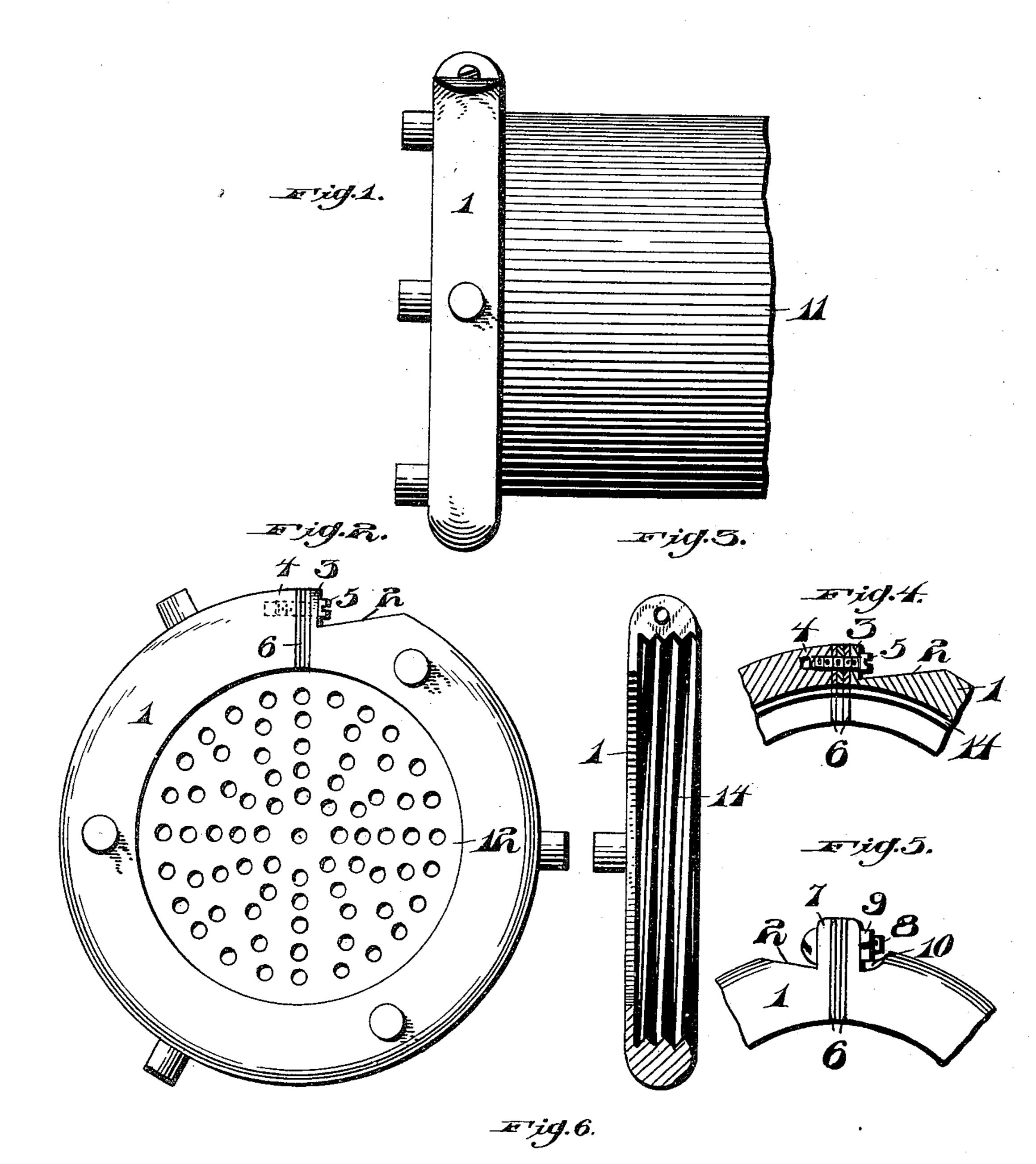
Patented Mar. 19, 1901.

## M. J. IRLBACHER.

## ADJUSTABLE RING FOR MEAT CHOPPERS.

(Application filed Sept. 11, 1900.)

(No Model.)



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## IJNITED STATES PATENT OFFICE.

MICHAEL J. IRLBACHER, OF PITTSBURG, PENNSYLVANIA.

## ADJUSTABLE RING FOR MEAT-CHOPPERS.

SPECIFICATION forming part of Letters Patent No. 670,235, dated March 19, 1901.

Application filed September 11, 1900. Serial No. 29,696. (No model.)

To all whom it may concern:

Beitknown that I, MICHAEL J. IRLBACHER, a citizen of the United States of America, residing at Pittsburg, in the county of Alle-5 gheny and State of Pennsylvania, have invented certain new and useful Improvements in Adjustable Rings for Meat-Choppers, of which the following is a specification, reference being had therein to the accompanying ro drawings.

This invention relates to certain new and useful improvements in meat-choppers, and relates more particularly to the securing-ring which holds the plate, feed-screw, and knife

15 within the cylinder of the chopper.

The object of the invention is to provide means whereby this ring may be readily and easily adjusted to compensate for the wear and tear upon the thread of the same inci-20 dent to the necessary frequent removal of the ring for the purpose of cleansing the parts or for various other purposes. I have found that the frequent removal of this ring causes the threads thereof to become worn, necessi-25 tating either a new ring or the recutting of the threads, both of which are expensive. 1 obviate this by splitting the ring and providing means whereby the same may be tightened to compensate for the wear upon the 30 threads, the ring when in use being the same as a solid one.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and where-35 in like numerals of reference indicate like parts throughout the several views, in which—

Figure 1 is a side view of a portion of a chopper, showing my improved ring in position. Fig. 2 is a front view of the same. Fig. 40 3 is a transverse vertical sectional view of the ring. Fig. 4 is a horizontal sectional view of a portion thereof. Fig. 5 is a front elevation of a portion of the ring, showing a modified form of connection. Fig. 6 is a detail plan 45 view of one of the removable washers (on an enlarged scale) which are placed in the ring.

To put my invention into practice, I provide the ring 1, which is of the ordinary form generally employed, with the exception that I 50 split this ring from its periphery to the inner circumference, and on the periphery adjacent to one of the ends of the ring formed by split-

ting the same I provide an inclined notch 2. This forms a lug or ear 3 at one end of the ring, which is provided with an aperture that 55 registers with a threaded aperture in the end 4 of the ring and is adapted to receive a setscrew 5, which may readily be inserted in the apertures through the inclined notch 2. I preferably mount upon this screw 5 a series of 60 extremely thin metallic washers 6, so shaped as to conform to the shape of the ring 1 in cross-section and to the shape of the ends of the said ring.

In Fig. 5 of the drawings I have shown a 55 modified form of construction in which I provide the ring at its meeting ends with a pair of lugs 7 similar in construction to the lug or ear 3, each of these lugs 7 being provided with an aperture to receive an adjusting screw or 70 bolt 8, which is held in position by a nut 9. In this construction the periphery of the ring is recessed, as at 10, adjacent to one of the lugs 7 and adjacent to the other lug 7 is provided with an inclined notch 2, as in the other con-75 struction, the bolt or screw 8 being inserted through the apertures by way of the inclined notch 2 and engaged with the nut 9, the opening of which has been previously brought into registration with the screw-threaded openings 80 in the ears. The cylinder 11 and plate 12 which I have shown are of the ordinary form of construction and are merely illustrated herewith in order to more clearly describe and show my invention.

When the threads 14 of the ring have become worn, the adjusting-screw 5 or 8, as the case may be, is removed and one of the washers 6 detached from the said screw, and the latter is again placed in position and screwed up 90 tightly, which will bring the abutting ends of the ring closer together, compensating for the wear of the thread. In general practice I have found that one of the machines will last, as to its parts, three or four times the life of 95 the ring, necessitating new rings or a new machine, as when the threads 14 become worn the ring consequently forces and holds the knife and plate in proper position so as to give the desired result.

It will of course be observed that in constructing the ring the same is preferably made solid and the threads cut therein and afterward split so that the threads may be made

perfect in order to fit with those on the end of the cylinder. I have found in the use of this invention that the same works perfectly as to the compensation of the wear of the 5 thread without the interposing of the washers 6 upon the screw 5; but the strings or sinews of the meat are frequently forced through the opening between the ends of the ring, and it is therefore preferable to inter-10 pose these washers upon the adjusting-screw and remove one or more of the same when it is desired to adjust the ring to compensate for the wear upon its thread.

It will be noted that various changes may 15 be made in the details of construction without departing from the general spirit of my

invention.

Having thus fully described my invention, what I claim as new, and desire to secure by 20 Letters Patent, is—

In combination with the threaded end of the

barrel of a meat-chopping machine, a ring having internal threads and an inwardly-extending flange in its outer edge, said ring being split on one side and having a threaded 25 hole extending inwardly, the abutting end having a peripheral recess back of the end wall, the portion between the recess and the end having a hole, a screw for adjustably connecting the ends and a washer having a de- 30 pending member, said washer being interposed between the ends of the ring and the depending member thereof guarding the space between the ends of the flange of the ring, substantially as described.

In testimony whereof I affix my signature

in the presence of two witnesses.

MICHAEL J. IRLBACHER.

Witnesses:

JOHN NOLAND, H. C. EVERT.