No. 768,771. PATENTED AUG. 30, 1904.

A. H. RIEGNER.

KNURLING TOOL HOLDER.

APPLICATION FILED AUG. 17, 1903.

NO MODEL.

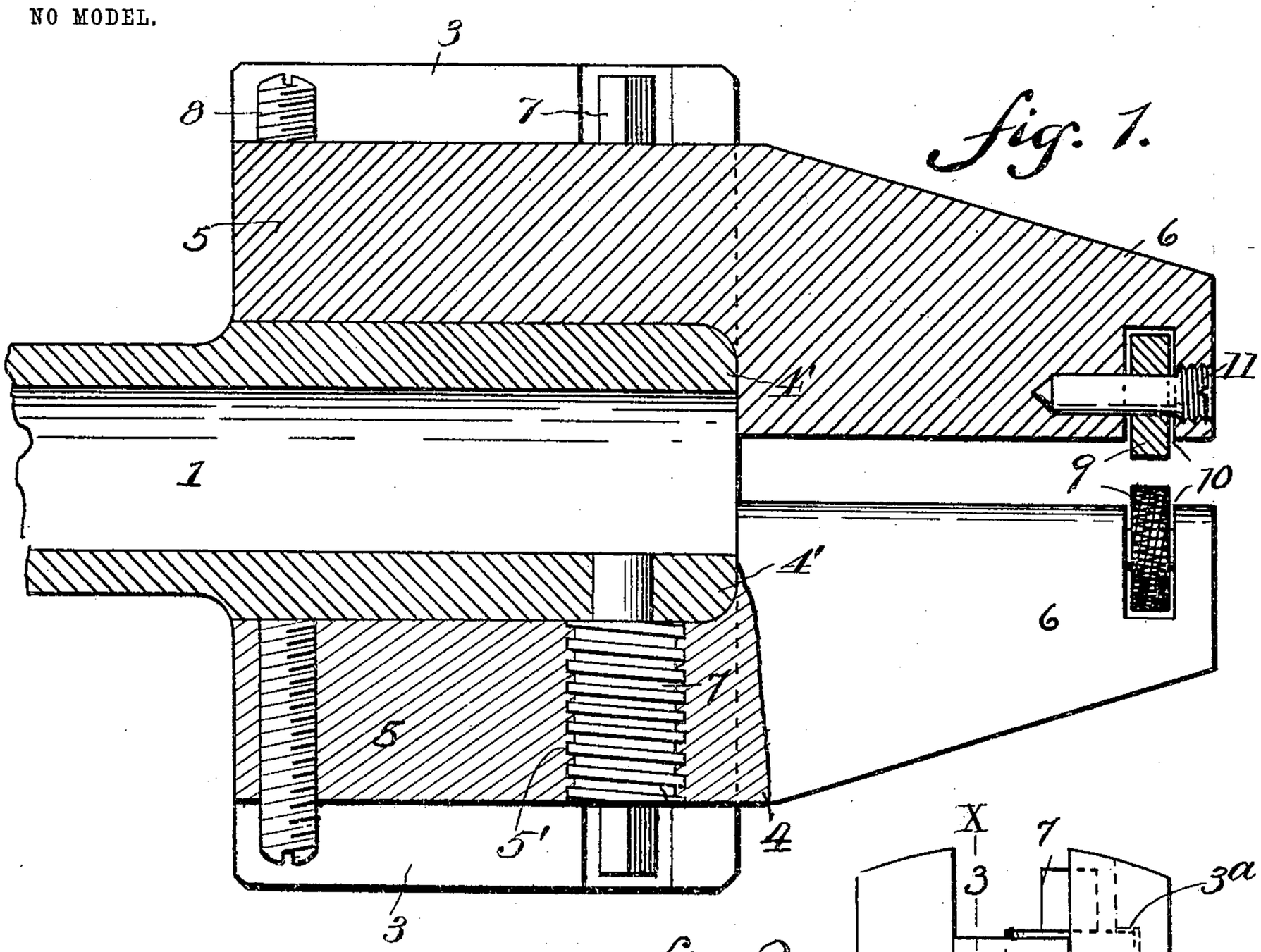


Fig. 1.

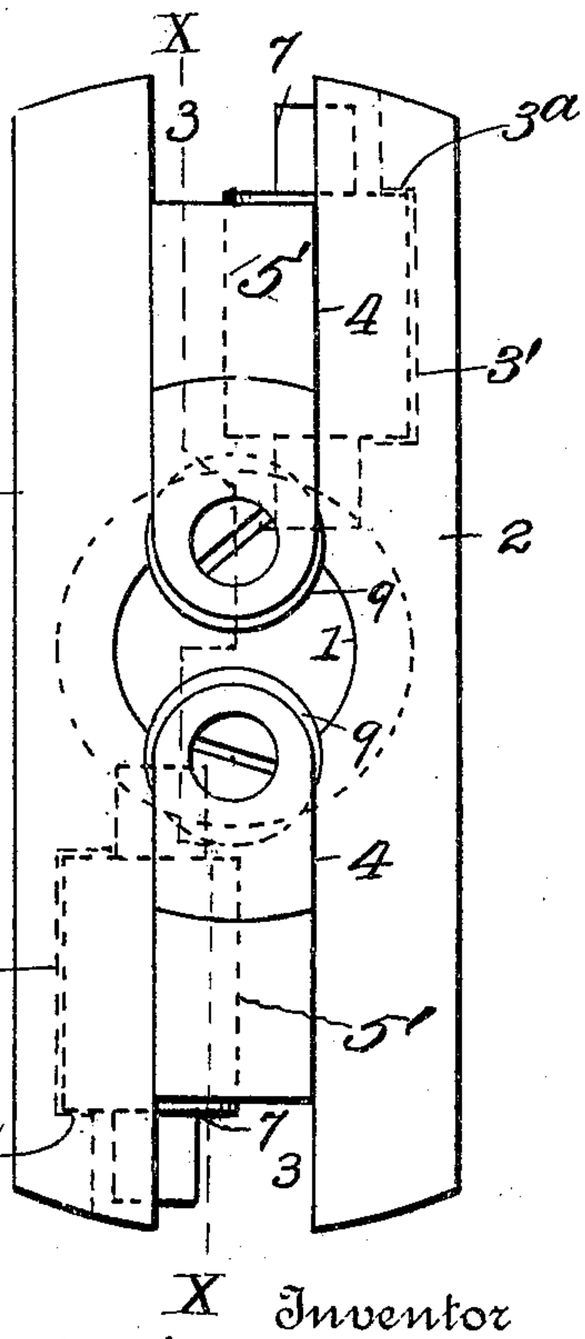
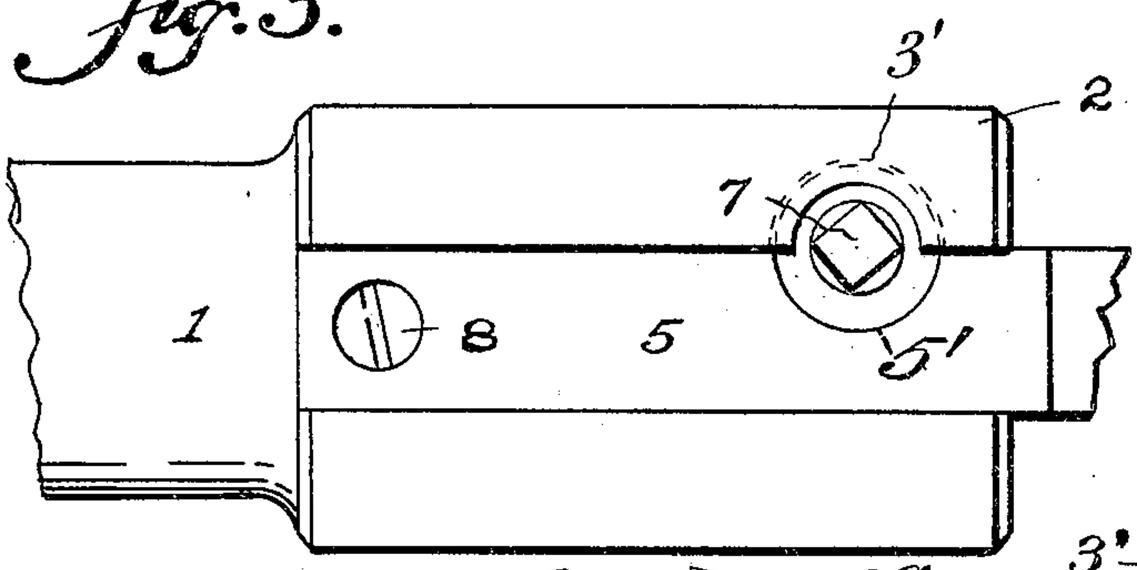


Fig. 2.

Fig. 3.



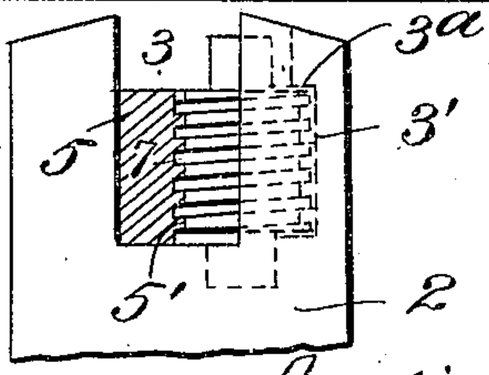


Fig. 4.

Witnesses
Florence Kelly
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Austin H. Riegner,
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By Attorney E. A. Kelly.

No. 768,771. Patented August 30, 1904.

UNITED STATES PATENT OFFICE.

AUSTIN H. RIEGNER, OF READING, PENNSYLVANIA.

NURLING-TOOL HOLDER.

SPECIFICATION forming part of Letters Patent No. 768,771, dated August 30, 1904.

Application filed August 17, 1903. Serial No. 169,708. (No model.)

To all whom it may concern:

Be it known that I, AUSTIN H. RIEGNER, a citizen of the United States, residing at Reading, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Nurling-Tool Holders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in nurling-tool holders; and the object of the same is to provide a device for nurling the outer surface of cylindrical bodies which is simple in construction and effective in operation; and to this end my invention consists in the details of construction and arrangement of the several parts, as hereinafter more fully set forth in the accompanying specification and illustrated in the drawings, in which—

Figure 1 is a longitudinal sectional view on the line *x x* of Fig. 2. Fig. 2 is a front view. Fig. 3 is a plan view of my device, and Fig. 4 is a detail view of a portion of the head-piece and adjusting-screw.

Referring more particularly to the drawings, the numeral 1 designates a hollow shaft which is formed with a head-piece 2. This head-piece is provided with two diametrically opposite open slots 3. One of the walls or faces of each of the slots is provided with a smooth semicircular opening or recess 3′, which communicates with the said slots 3. These openings are so constructed as to form a shoulder 3ª at the upper portion thereof.

The numeral 4 designates tool-carriers, which are provided with reduced rear ends or shanks 5 and tapered forward ends or jaws 6. These reduced ends or shanks 5 rest and are adapted to move in the slots 3 by means of the screws 7 in the following manner: Each of the shanks 5 is provided with a semicircular opening or recess 5′, which is so located that it stands directly opposite the opening or recess 3′ in the head member when the said shank is in position, and said recess or opening is provided with screw-threads. To assemble these parts, the screw 7 is first placed in position in the recess 3′ on each side of the head, so that the shoulder 3ª projects over a portion of its upper end, which will allow a portion of the body thereof to project beyond the face of the wall and into the slot 3. The shank of the tool-carrier is then placed in the slot, so that the threads in the opening 5′ are engaged by the screw 7, and said screw is then turned, which will cause the jaw 6 to be forced downward. After it is once in position said jaw may be adjusted at will by simply turning the screw 7. It will be seen that with this construction it is impossible for the parts to drop out of position, as the screw 7 is held in place by the shoulder 3ª and the jaw 6 by means of the threads in the opening 5′ being engaged by the threads on the said screw.

A supplemental regulating-screw 8 is mounted in each of the shanks 5, near the rear end thereof, and passes entirely through the same to engage the head-piece 2 for the purpose of taking up the throw of the jaws when they are set to take a given diameter, bringing their inner faces on parallel lines and keeping the carriers in rigid position in the holder.

It will be noted that the reduced ends or shanks 5 of the tool-carriers 4 form shoulders 4′, which engage the end of the head-piece 2 and serve as a means for relieving the strain exerted by the endwise pressure of the jaws 6 upon the adjusting-screws 7.

In the ends of the jaws 6 are secured revolving nurling-tools 9. These tools are of ordinary construction and are revolubly mounted in openings 10 by means of screw-pins 11 entering the front ends of the jaws and passing through said tools.

It will also be noted that with my device the tools are always held in perfect alinement and bear upon directly opposite points of the body to be operated upon, thereby tending to prevent bending or bearing away from the tool.

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

1. A device of the class described, comprising a hollow shaft, a head-piece secured to said shaft and being provided with diametrically opposite open slots, tool-carriers, each of said carriers being provided with a reduced rear

end, said ends being adapted to be adjustably seated in the slots, an adjusting-screw engaging each of the reduced ends and the head-piece, means carried by the reduced portions for regulating the carriers, and rotating nurling-tools mounted in the carriers.

2. A device of the class described, comprising a shaft, a head-piece secured thereto and provided with diametrically opposite open slots, tool-carriers, said carriers being provided with reduced rear ends, said ends being adapted to be adjustably seated in the slots, an adjusting-screw engaging the side of each of the reduced ends and the head-piece, and a supplemental regulating-screw carried by each end, and adapted to engage the head-piece, a shoulder formed on each of the carriers by the reduced end, said shoulders engaging the end of the shaft, and a rotating tool mounted in each of the carriers.

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

AUSTIN H. RIEGNER.

Witnesses:

ED. A. KELLY,

GEO. M. MILLER.