

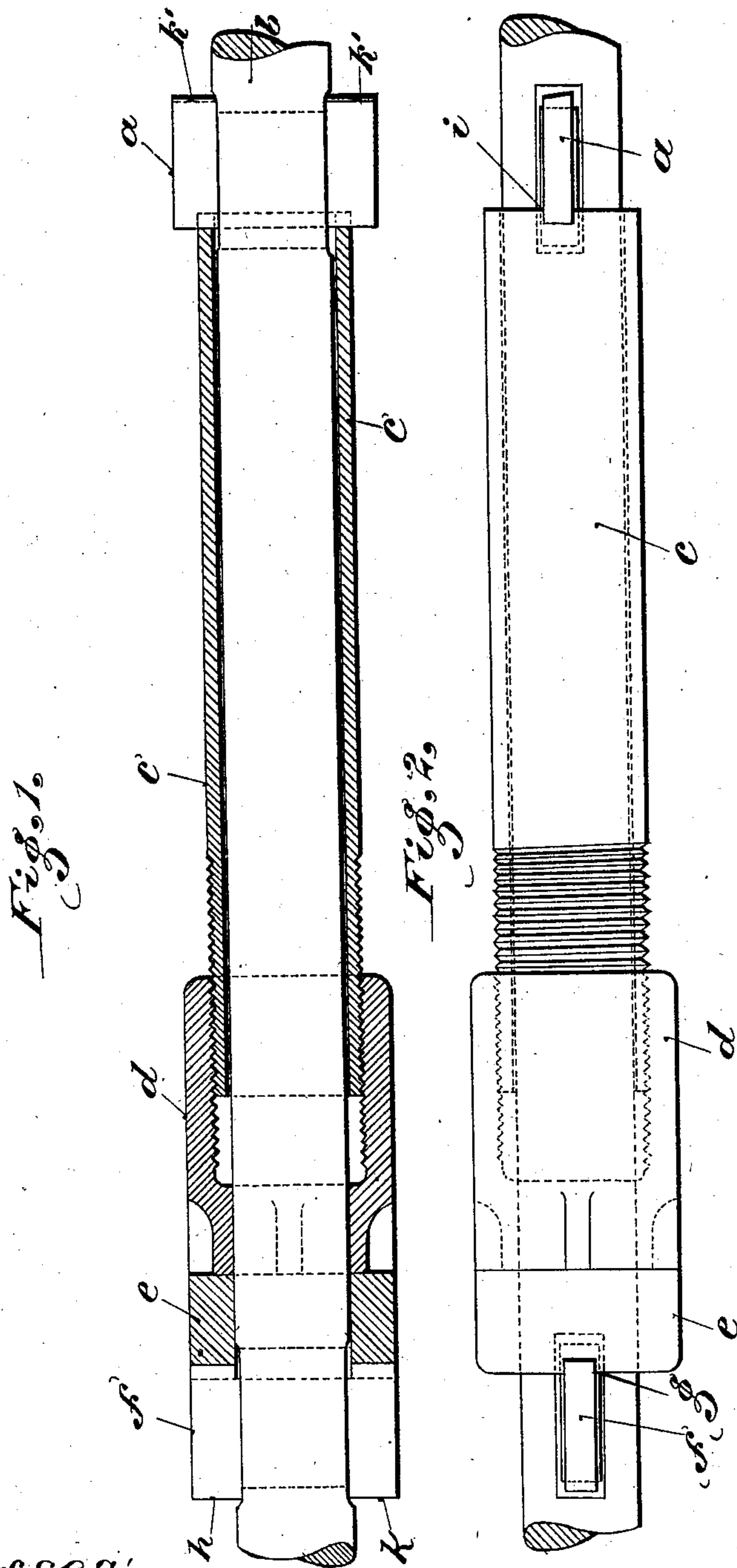
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F. H. LÖSER.  
BORING OR CUTTING TOOL HOLDER.

APPLICATION FILED SEPT. 3, 1902.

NO MODEL.



Witnesses:

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By

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# UNITED STATES PATENT OFFICE.

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## BORING OR CUTTING TOOL HOLDER.

SPECIFICATION forming part of Letters Patent No. 721,056, dated February 17, 1903.

Application filed September 3, 1902. Serial No. 121,987. (No model.)

*To all whom it may concern:*

Be it known that I, FRANZ HEINRICH LÖSER, engineer, a subject of the King of Prussia, Emperor of Germany, residing at Weissenfels-on-the-Salle, in the Kingdom of Prussia, German Empire, have invented certain new and useful Improvements in or Relating to Boring or Cutting Tool Holders or Securing Devices, of which the following is a specification.

10 This invention relates to certain new and useful improvements in holders for boring or cutting tools, and aims to overcome the objection of the employment of wedges or set-screws for securing the tool or cutter in position in or to the boring-rod.

15 The invention further aims to construct a holder for a boring or cutting tool which shall be simple in construction, strong, durable, efficient in its use, and comparatively inexpensive to manufacture; and to this end the invention consists of the novel combination and arrangement of parts hereinafter more specifically described, illustrated in the accompanying drawings, and particularly pointed out in the claim.

20 In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, wherein like reference characters denote corresponding parts throughout both views, and in which—

Figure 1 is a sectional elevation of the device as applied to a slotted boring-rod, and Fig. 2 is a side elevation thereof.

35 Referring to the drawings by reference characters, *c* denotes a sleeve exteriorly screw-threaded at one end and which is adapted to be mounted upon a slotted boring-rod. The screw-threaded portion of the sleeve *c* carries an adjustable clamping-nut *d*, which is adapted to engage a binding-ring *e*. The latter when in position is adapted to surround the slotted boring-rod and is provided with a notched lower end *g*, in which engages the key *f*. The latter is adapted to extend through an opening or slot formed in the rod. The reference character *a* denotes a cutter, which also extends through a slot in the boring-rod and engages in the notches *i*, formed in the upper end of the sleeve *c*.

50 When the parts are in position, as set forth, the cutter *a* is secured in position by the turn-

ing of the nut *d*, which bears against the binding-ring *e*, the latter engaging the key *f*, and by the turning of the nut *d* the sleeve *c* is driven forward against the cutter *a*, which is thereby secured in its slot within the boring-rod with absolute certainty. The binding-ring is not absolutely necessary; but it affords a better abutment for the nut and simplifies the turning of the latter.

As before stated, the key *f* extends through a slot in the boring-rod, and the key *f* is preferably provided with two projections *h* *k*, adapted to prevent it from falling out of the rod before the nut *d* is tightened up. As before stated, the ring *e* and the sleeve *c* are provided with notches *g* *i*, which engage the key *f* and cutter *a*, respectively; but these notches *g* *i* are also adapted to prevent the rotation of the ring *e* and sleeve *c* during the screwing up of the nut *d*. The cutter *a* is provided with two projections, as at *k'* *k'*, which extend over the boring-rod, and thus effect a precise centering of the cutter *a*. The length of the sleeve *c* is governed by the distance of the slots in the boring-rod from one another.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

A tool-holder comprising in combination with a slotted boring-rod, a sleeve mounted upon the rod and having its upper end notched and its lower end exteriorly screw-threaded, a cutter extending through one of the slots of the rod and engaging in the notched end of the sleeve, an adjusting clamping-nut mounted upon the screw-threaded portion of said sleeve, a binding-ring mounted upon said rod, engaged by said nut and provided with a notched lower end, and a key extending through one of the slots in the rod and engaging in the notched end of said ring, said key retained in position through the clamping action of the nut upon the binding-ring.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRANZ HEINRICH LÖSER.

Witnesses:

FREDERICK J. DIETZMAN,  
B. H. WARNER, Jr.