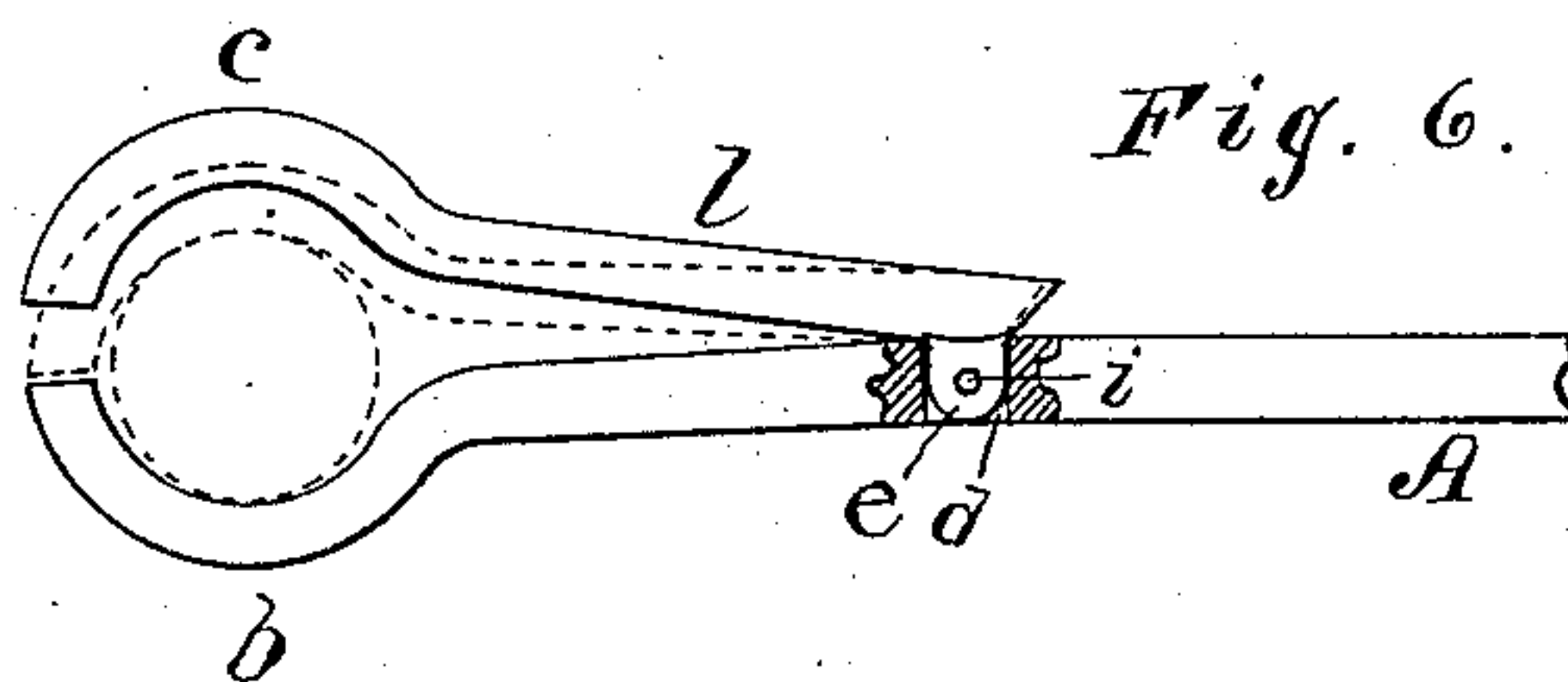
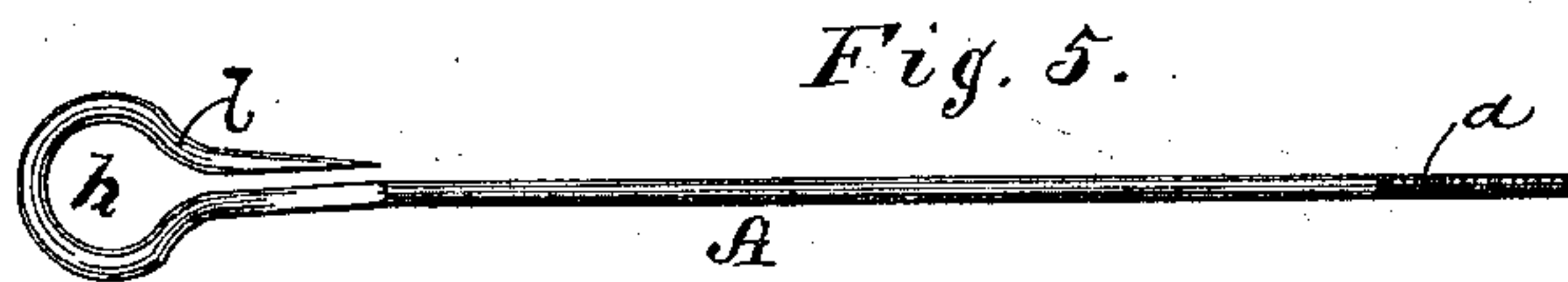
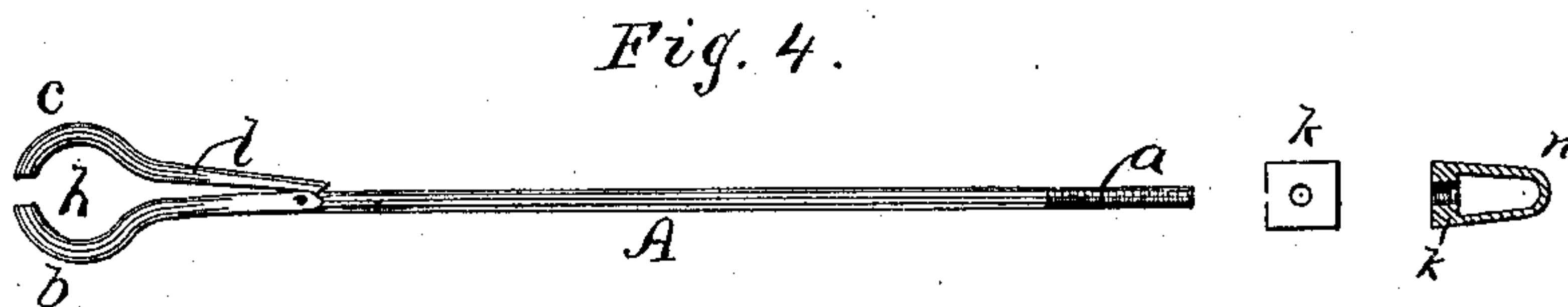
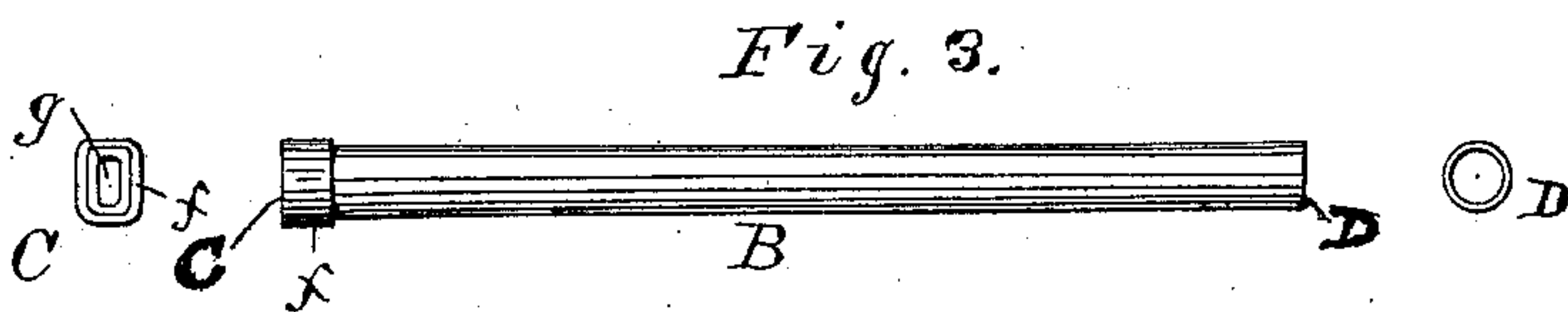
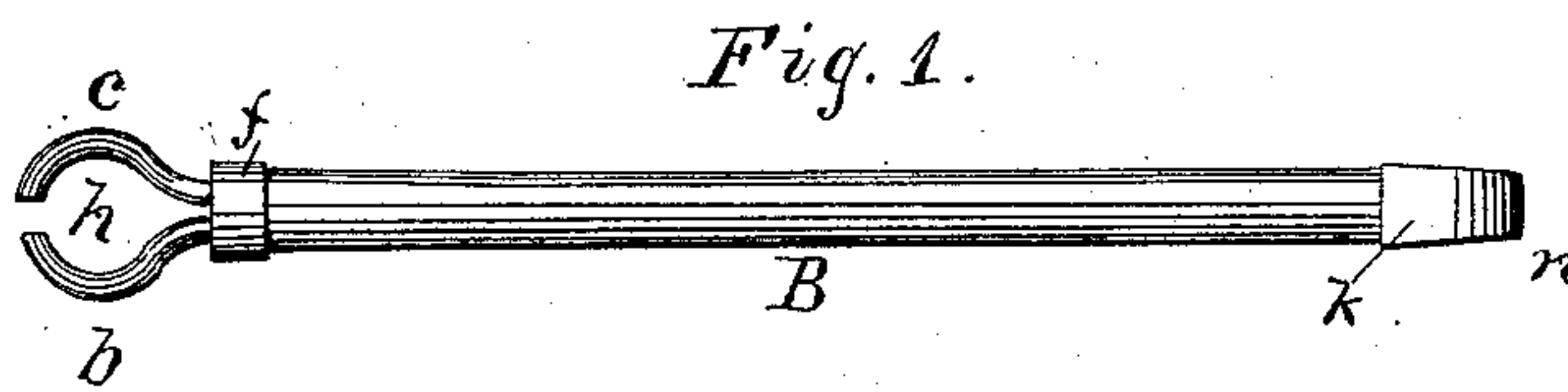
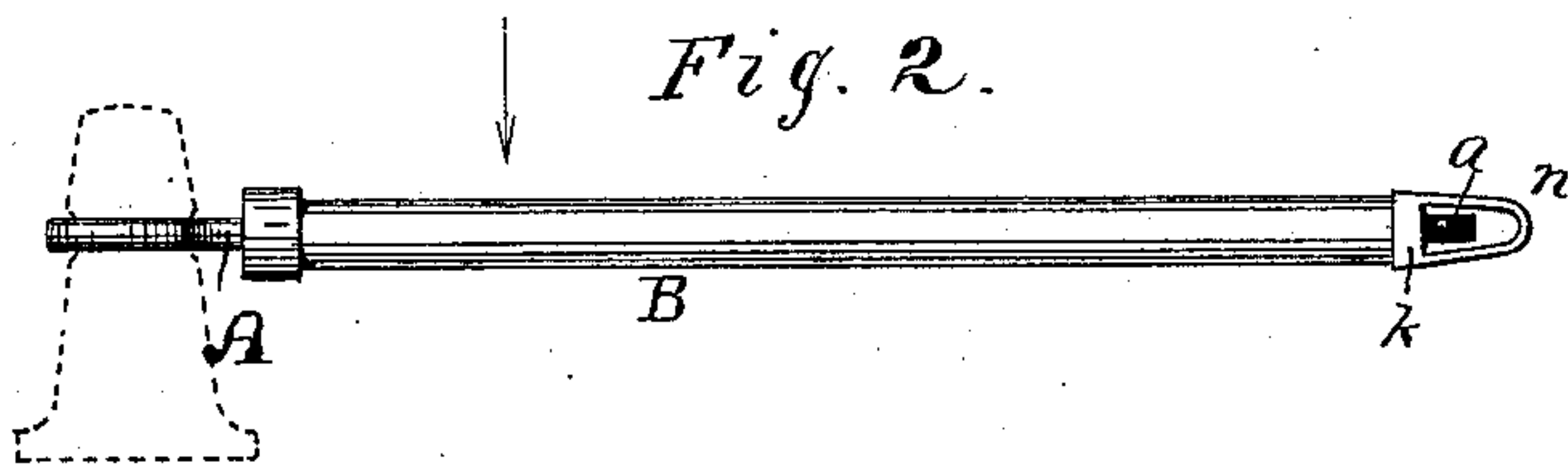


(No Model.)

W. E. WHITTLETON.  
HANDLE FOR BLACKSMITHS' TOOLS.

No. 304,769.

Patented Sept. 9, 1884.



Attest:

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By E. B. Whitmore, Atty.

# UNITED STATES PATENT OFFICE.

WILLIAM E. WHITTLETON, OF ROCHESTER, NEW YORK.

## HANDLE FOR BLACKSMITHS' TOOLS.

SPECIFICATION forming part of Letters Patent No. 304,769, dated September 9, 1884.

Application filed May 22, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM E. WHITTLETON, of the city of Rochester, in the county of Monroe and State of New York, have invented a new and useful Improvement in Handles for Blacksmiths' Tools, which improvement is fully set forth in the following specification and accompanying drawings.

There is a class of blacksmiths' and boiler-makers' tools, including the cold-chisel, flat-ter, fuller, swage, rivet-header, &c., used in forging and boiler-making that are formed to be held upon the work by the principal workman and struck with a sledge by the assistant. These tools are commonly made with eyes or holes through them laterally, in which to receive the ends of wooden handles about twenty inches or two feet long, to be grasped by the principal workman while the helper strikes the head of the tool with a sledge, as stated, to give shape to the work. Piercing these tools with eyes is an expensive operation in the manufacture of them, and, besides, the eyes very much weaken the tools, so the latter are very apt to break across at the eye after being repeatedly struck with the sledge. To avoid the expense and time necessary to form these tools with eyes, blacksmiths sometimes form them solid and bend a piece of wire or light rod of iron around them, bringing the projecting ends of the wire or rod together to be used as a handle, the tool being held in the coil or bend of the same. Tools thus formed last much longer and are made at much less expense; but the crude handles thus formed are troublesome and objectionable, as they do not hold the tools firmly, and, besides, are awkward to grasp or hold in the hand.

To supply a desirable handle for holding these solid or eyeless tools firmly and well, and one to take the place of the crude bent rod, is the object of my invention, which invention consists of a rod with an adjustable eye or loop at one end in which to receive the tool, and a sleeve to receive or cover the shank or rod and effect the expansion or contraction of the eye by longitudinal adjustment, and means to adjust the sleeve thereon so as to expand or contract the eye or loop at pleasure in the act of grasping and holding the tool, which in-

vention is fully set forth in the accompanying drawings, and more particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a side elevation of my improved eyeless tool-holder with all parts in place, a tool being shown in dotted lines; Fig. 2, a view of the same taken as indicated by arrow in Fig. 1; Fig. 3, a view of the sleeve removed from the rod or shank, showing also the form of the ends of the former; Fig. 4, a view of the rod and eye without the sleeve, also the adjustable thread-protecting nut in plan and central longitudinal section; Fig. 5, a modification in the construction of the eye; and Fig. 6, an enlarged figure showing the movable part of the eye in two positions, and the manner of hanging the same to the main part or shank, the latter being sectioned longitudinally to expose the joint.

Referring to the parts, A is a rod of iron, of suitable diameter and length to form a holder for the tools above mentioned, provided with a screw-thread, *a*, at one end, and at the other end curved into a nearly semicircular hook or bow, *b*.

*l* is a short piece of rod of the same diameter as the rod A, bent at *c*, similar to the curved part *b* of the rod, and attached to the latter so that the curved ends of the two parts shall be even, the curves lying in the same plane and concavities of the two curves opposite each other, as shown. The part *l* is joined to the rod A by means of a simple tongue, *e*, projecting from the part *l* into a longitudinal opening, *d*, in the rod A, as shown in Fig. 6, a pin, *i*, passing through both parts to retain them in place, and when thus joined the bowed parts *c* and *b* form a circular loop or eye, *h*, in which to receive the tool.

B is a sleeve for the rod A, preferably made of gas-pipe, re-enforced at one end by a band, *f*.

At C is shown the end of the sleeve surrounded by the band, showing the whole as slightly flattened, making the bore *g* of the pipe thereat oblong or oval. The other end of the sleeve is cylindrical, as shown at D, to be grasped in the hand of the workman. The sleeve is passed over the rod A, as shown in Figs. 1 and 2, the flattened banded end being next the eye *h*, so that the oval or oblong part



5 *g* of the bore covers a portion of the separated  
 or diverging parts *b* and *l* near the point at  
 which they are joined. From this construction  
 of parts it will be understood that if the sleeve  
 10 be urged longitudinally toward the eye *h*, the  
 latter will be contracted by the parts *b* and *l*  
 being brought nearer together, while, if the  
 sleeve be slid back or in the opposite direction,  
 the eye is permitted to expand. The sleeve is  
 15 shorter than the rod, and of such relative  
 length that when placed on the latter the  
 threaded end *a* of the rod projects a short dis-  
 tance to receive the nut *k*, which, when screwed  
 onto the threads at *a*, bears against the end of  
 20 the sleeve. By turning or screwing the nut  
 further on the rod the sleeve will be urged  
 farther over the divided parts forming the eye,  
 and contract the latter upon the tool. The  
 tool may be released by turning the nut *k* in  
 25 the opposite direction and allowing the sleeve  
 to slide back from the eye. The nut *k* is pro-  
 vided with a U-shaped part or bow, *n*, which  
 covers and protects from injury the threaded  
 end *a* of the rod. In throwing these tool-  
 30 handles around carelessly, as workmen are apt  
 to do while using them, the threads at *a* are  
 apt to get marred unless protected. This style  
 of tool-handle is light and durable and conven-  
 35 preferable to the wooden or bent-rod handles  
 first above named.

The form of rod and eyes shown in Fig. 5 is  
 much cheaper to construct, and in some cases  
 may answer just as well, though the extent to  
 which it may be expanded and contracted is 35  
 less than that of the corresponding part shown  
 in Fig. 4. The sleeve being carried over the  
 rod causes the eye to open or close in the same  
 manner in which it causes the eye of the rod  
 shown in Fig. 4 to open and close, as described. 40

What I claim as my invention is—

1. A handle for holding eyeless tools, con-  
 sisting of a rod, *A*, with attached part *l*, which  
 latter, with the rod *A*, is curved to form an  
 eye, *h*, in which to receive the tool, and a 45  
 sleeve, *B*, for the rod, with means to move  
 the sleeve longitudinally upon the rod to ad-  
 just the size or diameter of the eye, substan-  
 tially as shown and described.

2. The rod *A* of a tool-holder, provided at 50  
 one end with a screw-thread, *a*, and at the other  
 end with a part, *l*, joined to the rod by a piv-  
 otal joint, the two parts together forming an  
 eye, *h*, in which to receive a tool, a sleeve, *B*,  
 for the rod, and screw-nut *k*, for the threaded 55  
 part *a* of the rod, said screw-nut being pro-  
 vided with a protector, *n*, for the thread, sub-  
 stantially as set forth.

WILLIAM E. WHITTLETON.

Witnesses:

E. B. WHITMORE,  
 Z. L. DAVIS.