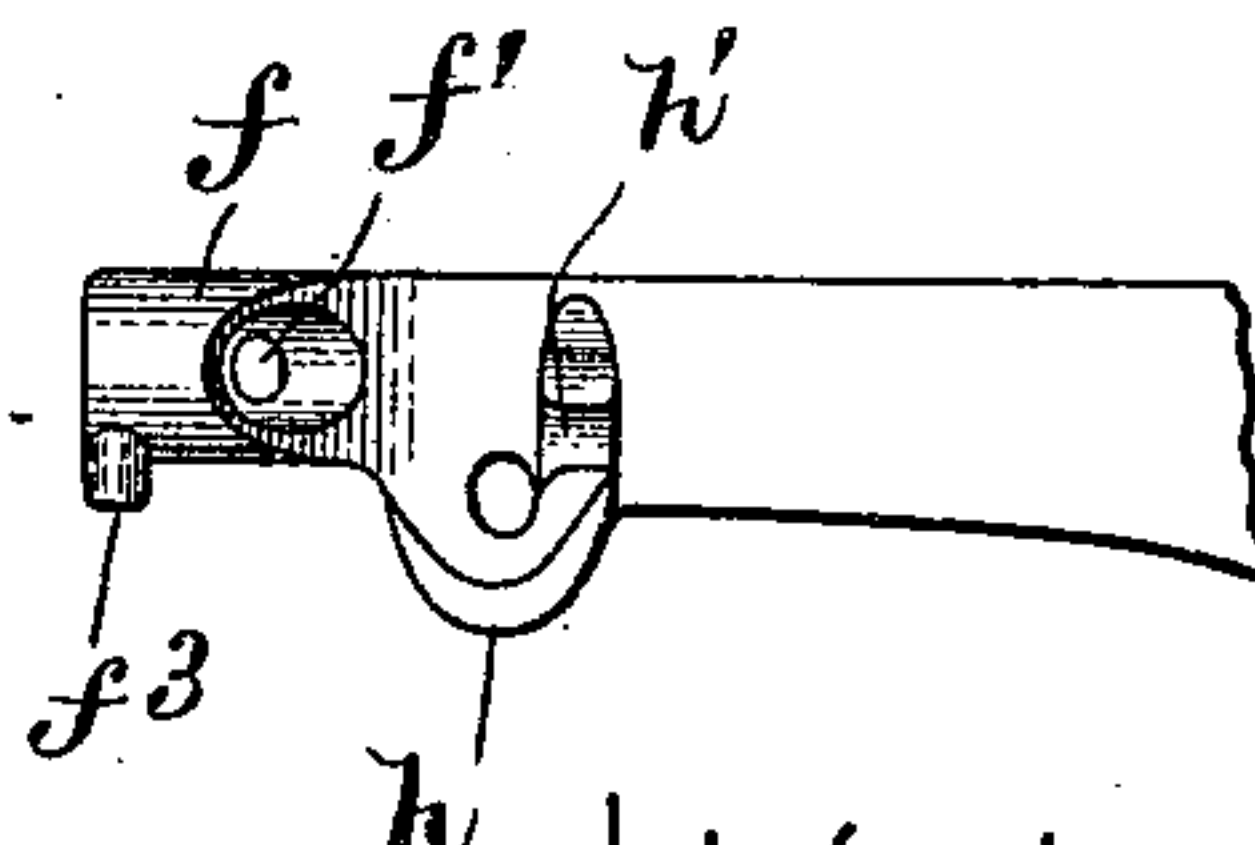
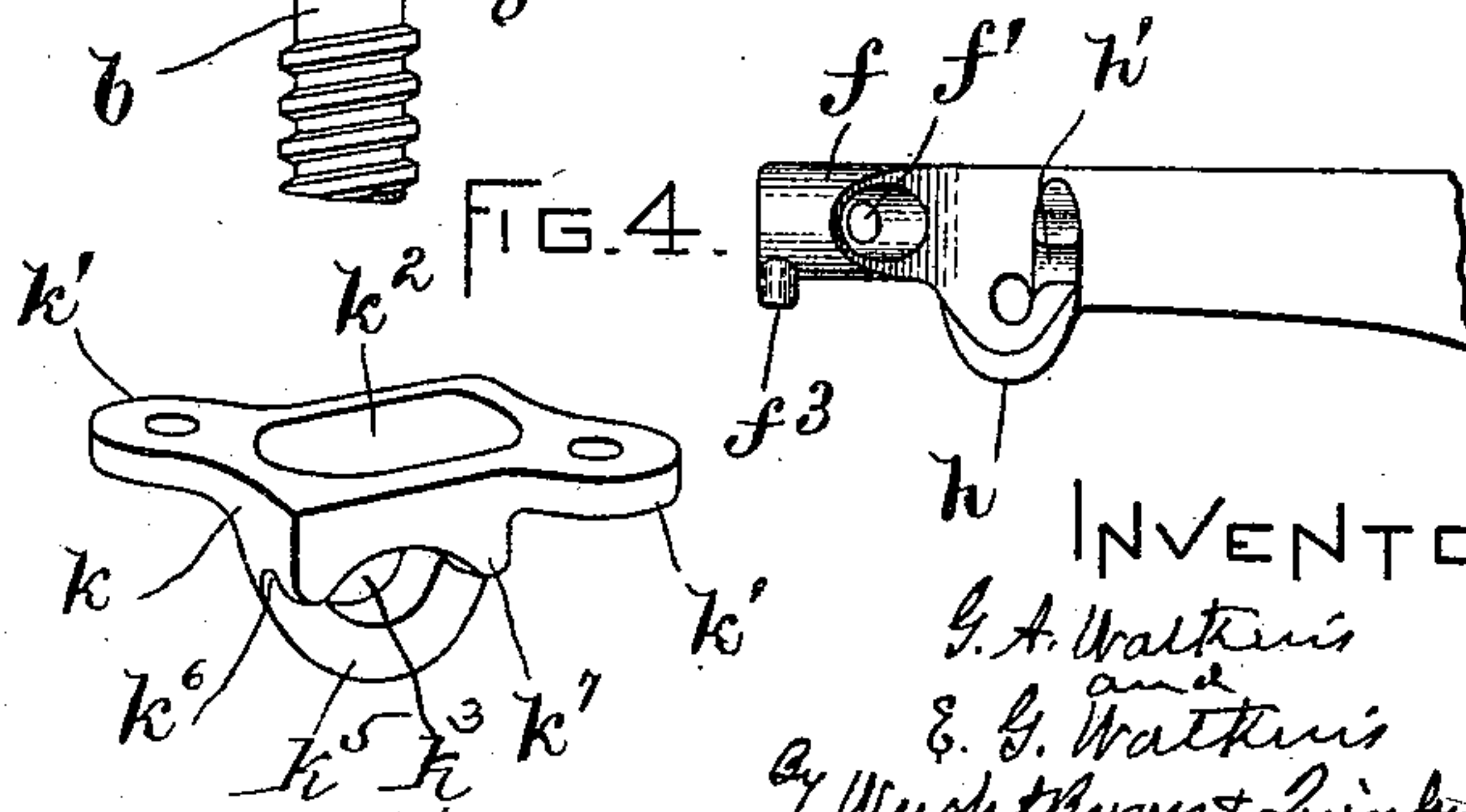
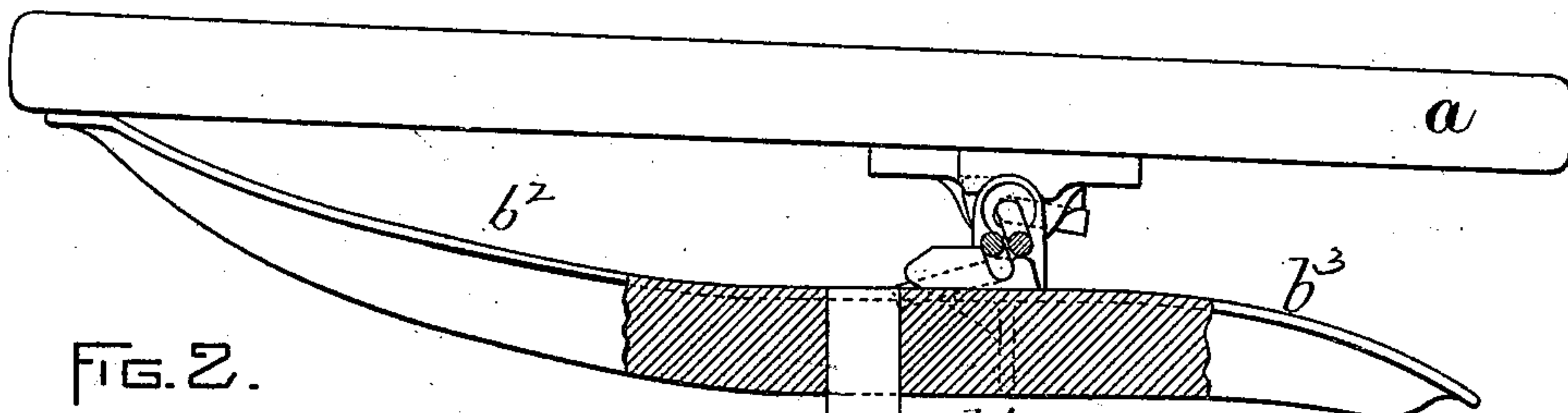
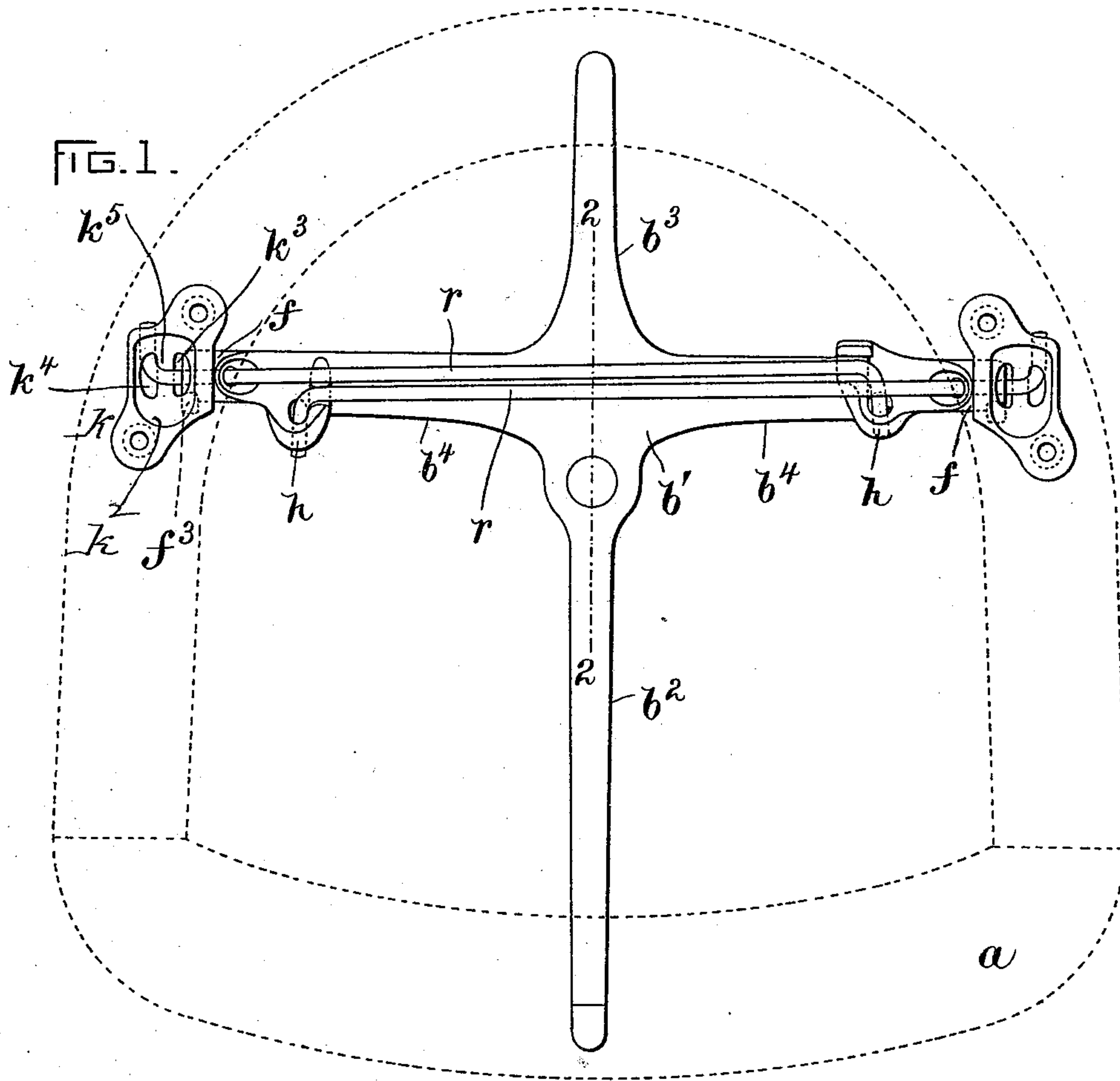


(No Model.)

G. A. & E. G. WATKINS.  
SPIDER ATTACHMENT FOR CHAIRS.

No. 551,701.

Patented Dec. 17, 1895.



WITNESSES:  
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By Wright, Burrows & Linsley, Attys.



# UNITED STATES PATENT OFFICE.

GARDNER A. WATKINS AND EDWARD G. WATKINS, OF GARDNER, MASSACHUSETTS, ASSIGNORS TO HEYWOOD BROTHERS & CO., OF SAME PLACE.

## SPIDER ATTACHMENT FOR CHAIRS.

SPECIFICATION forming part of Letters Patent No. 551,701, dated December 17, 1895.

Application filed August 17, 1895. Serial No. 559,641. (No model.)

*To all whom it may concern:*

Be it known that we, GARDNER A. WATKINS and EDWARD G. WATKINS, of Gardner, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Spider Attachments for Chairs, of which the following is a specification.

This invention relates to a new and improved spider attachment for chairs; and it consists in the novel features of construction and relative arrangement of parts hereinafter fully described in the specification, clearly illustrated in the drawings, and particularly pointed out in the claims.

Reference is to be had to the accompanying one sheet of drawings, forming a part of this application, in which like characters indicate like parts wherever they occur.

In the drawings, Figure 1 represents a top plan view of our improved spider attachment, the frame for the seat-panel being indicated in dotted lines in position thereon. Fig. 2 represents a sectional view on the line 2 2 of Fig. 1. Fig. 3 represents a detailed view of the lug. Fig. 4 represents a detailed view of the end of one of the side arms of the spider.

Our invention has in view the construction and arrangement of the spider whereby the several parts when assembled are locked together under tension and may be shipped in this state ready for attachment to a chair.

$b$  represents a spindle upon which is mounted the spider  $b'$  having front and rear arms  $b^2$   $b^3$  and the side arms  $b^4$ .

$a$  represents the frame of the chair for supporting the seat-panel, and it is to this frame that this spider is connected by means of the side arms, and against which the end of the front arm strikes when the chair is at rest, as shown in Fig. 2. The rear arm acts as a stop for the chair when it is tipped back. The ends of the side arms are formed with extensions  $f$  apertured as at  $f'$  for the passage of a rod hereinafter described. Upon this extension  $f$  there is formed a rib  $f^3$ , as shown in Figs. 1 and 4. The ends of the arms  $b^4$  are also formed with side projections  $h$ . If desired, the arms  $b^4$  in the vicinity of the projections  $h$  may be formed with depressions  $h'$  in which the rods  $r$  rest when in position.

$k$  represents a lug formed at its top part with apertured ears  $k'$ , by means of which the lug can be secured to the chair-seat with a cup-shaped depression  $k^2$  having two openings  $k^3$   $k^4$ , (see Figs. 1 and 3,) but one of these openings being shown in Fig. 3. This lug is also formed with a groove  $k^6$  to prevent the lug slipping off the end of the arm when the parts are in position.

In assembling the members forming the spider attachment, one end of the rods  $r$  is inserted in the extension  $h$ , and the other ends of said rods are passed through the extension  $f$  and through the openings  $k^3$   $k^4$ , and bent up beneath the lug, as shown in Fig. 1, passing over the bars  $k^5$ . By this means the lug is yieldingly and rotatively secured to the ends of the arms, but is prevented from slipping off by means of the ribs  $k^7$  that form the groove  $k^6$  engaging the rib  $f^3$ , the latter being arranged in said groove.

When constructed and assembled as described, it will be manifest that the whole attachment can be shipped, all put together ready to be secured to the chair by screws or other attaching devices passed through the ears  $a'$ .

Having thus explained the nature of our invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all of the modes of its use, what we claim, and desire to secure by Letters Patent, is—

1. A spider attachment for chairs, comprising in its construction a spider having side arms  $b^4$ , the ends of said arms being formed with apertured extensions  $f$  and  $h$ , a rib formed on the extremity of the extension  $f$  combined with a lug constructed for attachment to a chair seat and formed with two openings separated by a bar, a groove formed on one side of said lug arranged for engagement with said rib and rods  $r$ ,  $r$  having one of their ends arranged in extensions  $h$ , and their other ends passed through the extension  $f$  and the apertures in the lug, and over the bar thereof, substantially as and for the purpose set forth.

2. A spider attachment for chairs comprising in its construction a spider, side arms upon said spider, lugs formed for attachment to a

chair seat, rods having one of their ends connected to said arms and their other ends pivotally connecting said arms with said lugs, and means consisting of an interlocking rib  
5 and groove for preventing said lugs from slipping off the ends of said arms, substantially as and for the purpose set forth.

3. A spider having side arms, the ends of said arms being formed with apertured extensions *f* and *h*, and a rib formed upon the extension *f*, substantially as and for the purpose set forth.  
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4. A lug for chair supports constructed for attachment to a chair seat, said lug being

formed upon one side with a groove and upon 15 its top side with a depression having two openings *k*<sup>3</sup>, *k*<sup>4</sup> separated by a bar *k*<sup>5</sup>, substantially as and for the purpose set forth.

In testimony whereof we have signed our names to this specification, in the presence of 20 two subscribing witnesses, this 2d day of August, A. D. 1895.

GARDNER A. WATKINS.  
EDWARD G. WATKINS.

Witnesses:

DAVID R. COLLIER,  
DESRIE A. STOWELL.