

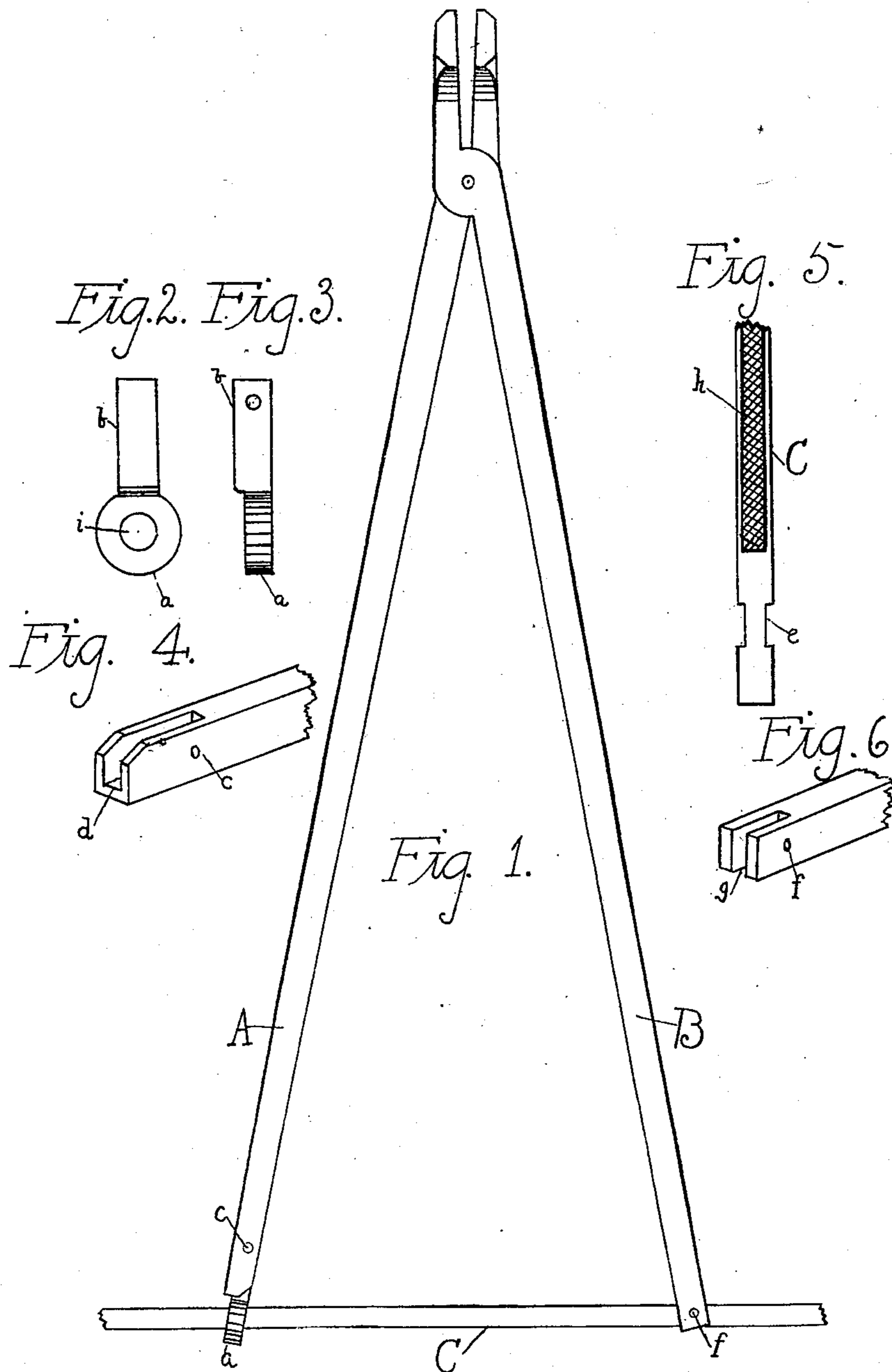
No. 763,396.

PATENTED JUNE 28, 1904.

J. F. HEMPHILL.
VETERINARY SURGEON'S FORCEPS.

APPLICATION FILED JAN. 15, 1904.

NO MODEL.



Witnesses.
F. S. Harkness
W. E. Castello

Inventor.
John F. Hemphill,
By *Hy W. Stackpole*
His Atty.

UNITED STATES PATENT OFFICE.

JOHN F. HEMPHILL, OF ARLINGTON, OREGON, ASSIGNOR OF ONE-HALF
TO ALBERT B. HEMPHILL, OF BROUGHTON, KANSAS.

VETERINARY-SURGEON'S FORCEPS.

SPECIFICATION forming part of Letters Patent No. 763,396, dated June 28, 1904.

Application filed January 15, 1904. Serial No. 189,091. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. HEMPHILL, a citizen of the United States, residing at Arlington, in the county of Gilliam and State of Oregon, have invented certain new and useful Improvements in Veterinary-Surgeons' Forceps, of which the following is a specification.

My invention relates to improvements in veterinary-surgeons' forceps; and it consists in a device for automatically and firmly securing the forceps in its grip upon a tooth or other object desired to be held, and yet admitting of its being readily released therefrom when desired. I attain these objects by means of the device hereinafter described, and illustrated in the accompanying drawings, in which—

Figure 1 is a view in perspective of a pair of molar-forceps equipped with my device; Fig. 2, a detached face view of the ring used in locking the engaged forceps; Fig. 3, a side view of same; Fig. 4, a detail view of the outer end of handle A; Fig. 5, a detail view of the rod or bar C, illustrating the corrugated surface of same and the flattening of the surface where the rod is engaged by the outer end of the handle B; and Fig. 6, a detail view of the outer end of said handle B.

Similar letters of reference indicate like parts throughout the several views.

The outer end of the handle A is grooved on the inner side, as shown in Fig. 4, for admission of shank *b* of the ring *a*, the outer side of said handle at its end forming a shoulder *d*, preventing said ring-shank, which is pivoted at *c*, from swinging outward. The bar or rod C is so flattened at *e*, Fig. 5, as to fit within the slot *g* in end of handle B, (shown in Fig. 6,) said bar being pivoted to said handle at *f* and extending through said ring *a*. The hole *i* in said ring being slightly larger than said bar permits free play thereof upon said bar when the shank *b* is held at approximately right angles therewith, but the natural spring of said handles causing said ring to firmly grip said bar when said handles are released, the said groove then allowing said ring from its friction upon the rod to swing

to an oblique angle with said bar and firmly grip the same. The outer surface *h* of said bar is somewhat roughened or corrugated crosswise thereof to assist said ring in securing such grip.

To operate the forceps equipped with my device, the forceps are placed in contact with the object it is desired to hold, the handles pressed together as closely as may be and then released, when it will be found that said ring by its firm grip upon said rod will firmly lock said forceps in its hold upon such object. To release the hold of said forceps, it is only necessary to again press inward on the handles and hold the ring back against said shoulder *d*, when it will be found that ring *a* may be easily slipped outward on said bar, thus allowing of the separation of the handles and consequent release of the jaws from the object held. A similar appliance might be used conjunctively at the end of each of said handles, and instead of the groove *d* in the handle the ring-shank *b* might be enlarged and provided with a groove similar to that described, while the end of the handle would be reduced to fit within said groove and pivoted therein, and even without any groove whatever said shank might be attached to said handle by a connecting-link, so as to swing back against the end of said handle in lieu of the shoulder *d*; but I consider my construction as described simpler and more effective for the objects desired to attain.

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

1. In a device of the character described, a dental forceps having a pair of pivoted arms, one of said arms having a cut-out portion in its lower end and oppositely-disposed apertures formed therein, a ring having a flattened shank adapted to enter said cut-out portion, means for pivotally securing the shank within the said cut-out portion passing through said shank and the apertures in the arm, and a pivotally-supported bar carried by the other arm having a roughened portion adapted to enter said ring, substantially as set forth.

2. In combination with a dental forceps

comprising two pivotally-connected arms, one
of the arms being recessed upon its inner,
lower face; a ring member having a shank
adapted to lie in said recess and being piv-
5 otally secured to the arm therein, means for
limiting the outward movement of the ring,
and a bar pivotally mounted on the other arm
adapted to engage within the said ring to lock

the arms, substantially as and for the purpose
described. 10

In testimony whereof I have affixed my sig-
nature in presence of two witnesses.

JOHN F. HEMPHILL.

Witnesses:

W. C. SMITH,
J. C. FOWLIE.