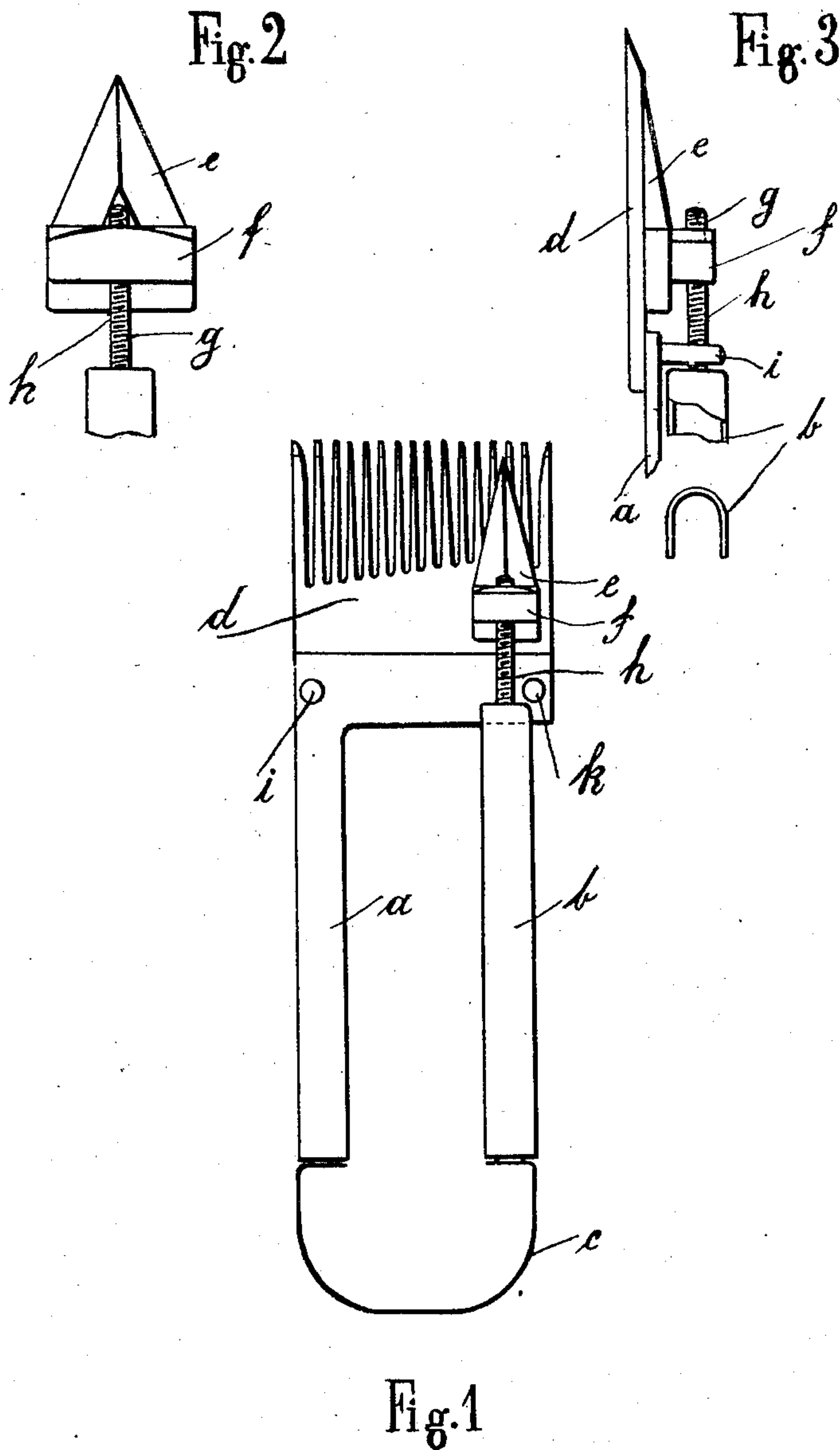


R. KUHLE.  
COMB SHEARS.

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976,581.

Patented Nov. 22, 1910.



Witnesses:  
L. C. Oakley.  
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# UNITED STATES PATENT OFFICE

RICHARD KUHLE, OF BERLIN, GERMANY.

COMB-SHEARS.

976,581.

Specification of Letters Patent.

Patented Nov. 22, 1910.

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*To all whom it may concern:*

Be it known that I, RICHARD KUHLE, a subject of the King of Prussia, and resident of Berlin, Germany, have invented certain new and useful Improvements in Comb-Shears, of which the following is a specification.

With the well known comb shears provided with a lower comb and an upper knife regular cuts cannot be obtained, because the shears only cut toward one side and must be withdrawn from the hair to bring them back into their starting position. This is due to the fact that the knife is rigidly connected with the handle and must be so arranged as to form an acute angle with the comb in the direction of the cut in order to be able to cooperate with the comb, and the said oblique arrangement prevents the backward cut as the cutting edge is directed away from the comb. In order to overcome these objections, the knife is arranged according to the present invention on the actuating member so that it may be rotated on a shaft extending parallel to the teeth of the comb. Thus the knife is adapted to exactly follow the comb and to cut forward as well as backward without it being necessary to withdraw the shears from the hair. By this method of working a regular cut of the hair is obtained and the time required for the work is shortened. If the knife supported as just described is secured to a pivot in such a manner as to be adjustable in the longitudinal direction another advantage is that the knife, even when it has been shortened by repeated sharpening, can always be brought to the correct position with reference to the comb teeth.

Figure 1 is a top plan view of dog and sheep shears embodying my invention; Fig. 2 is a top plan view on an enlarged scale of the knife supporting device; and Fig. 3 is a side elevation view on an enlarged scale of the knife supporting device.

Secured to the spring stirrup *c* is the handle *a* carrying the comb *d* as well as the handle member *b* carrying the pivot *h, g* for supporting the knife *e*, provided with two cutting edges. The handle *a* carries the abutments *i* and *k* for the handle member *b*. The pivot *h, g* is formed by a threaded bolt *g* shown by the drawing, and the knife *e* is

screwed thereupon. As readily seen during the forward and backward movement, the knife *e* follows the surface of the lower comb *d* and slightly rotates forward or backward on the threaded part of the bolt *h, g*. It results, therefore, that the cutting edges of the knife always apply themselves on the various teeth of the comb, so that a correct forward or backward cut is obtained.

If the knife has been shortened by repeated sharpening, it may be screwed outwardly on the threaded bolt *g* to give it such a position that in spite of it having been shortened, it again occupies the correct position with reference to the teeth of the comb.

It is needless to say that in place of the threaded bolt *g*, other means may be used, allowing the knife to be rotated. The above described supporting means for the knife is not only suitable for sheep shears, or the like, operated by hand or by power, but also for simple hair cutting apparatus and beard cutting machines.

Having now fully described my said invention, what I claim and desire to secure by Letters Patent is:—

1. In a comb shear, the combination with a comb having a handle, the handle carrying two abutments, a handle member operating between the abutments, a U-shaped spring connecting the ends of the handle and handle member, and a two-edged cutting knife screwed on the end of the handle member sliding laterally over said comb.

2. In a comb shear, the combination with a comb having a handle, the handle carrying two abutments, a handle member operating between the abutments, a U-shaped spring connecting the ends of the handle and the handle member, a threaded bar projecting from the end of the handle member, and a two-edged cutting knife having a threaded aperture mounted on the bar whereby the knife is rotatably and longitudinally adjustable with relation to the teeth of said comb.

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

RICHARD KUHLE.

Witnesses:

OTTO FRANK,  
HENRY HASPER.