

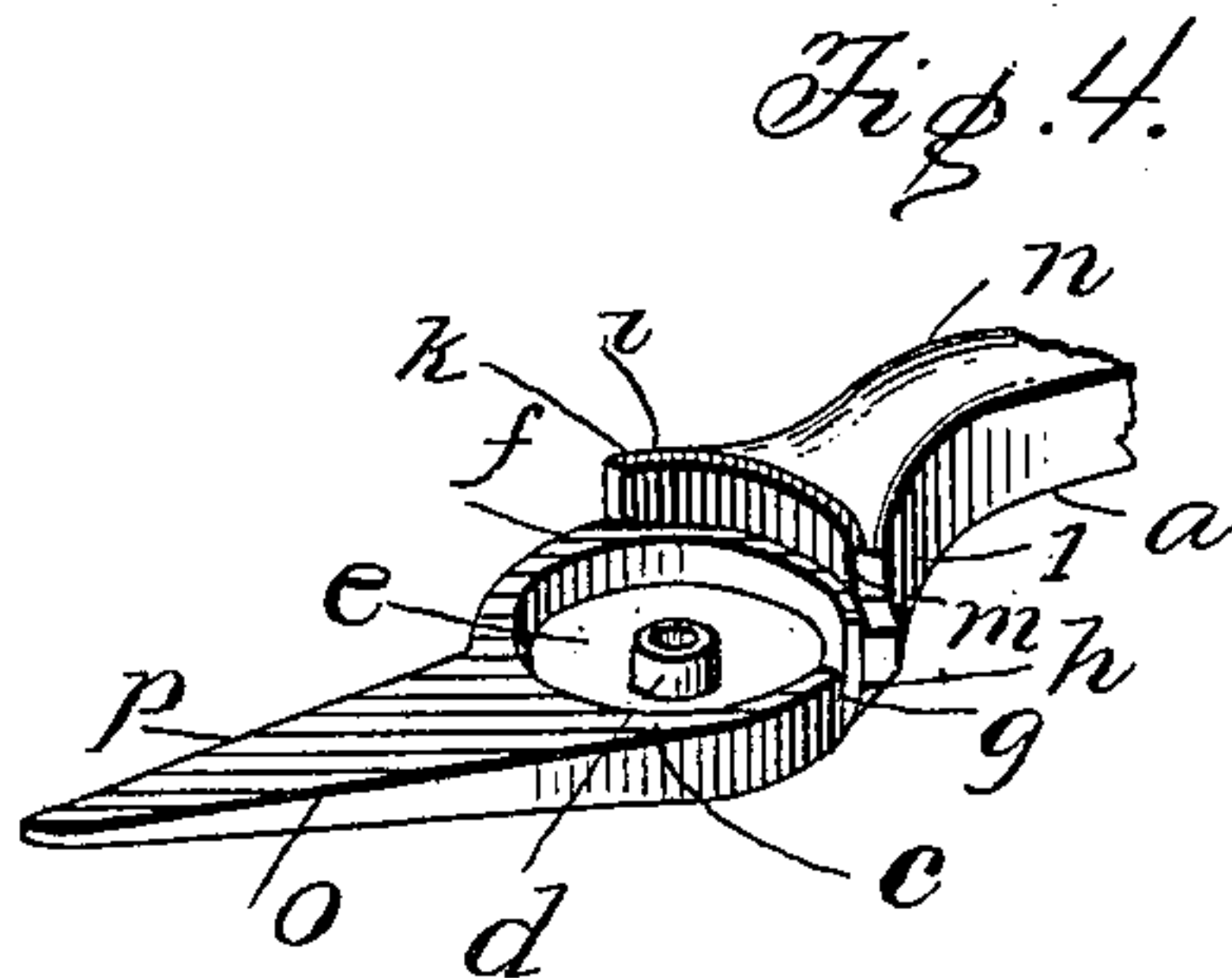
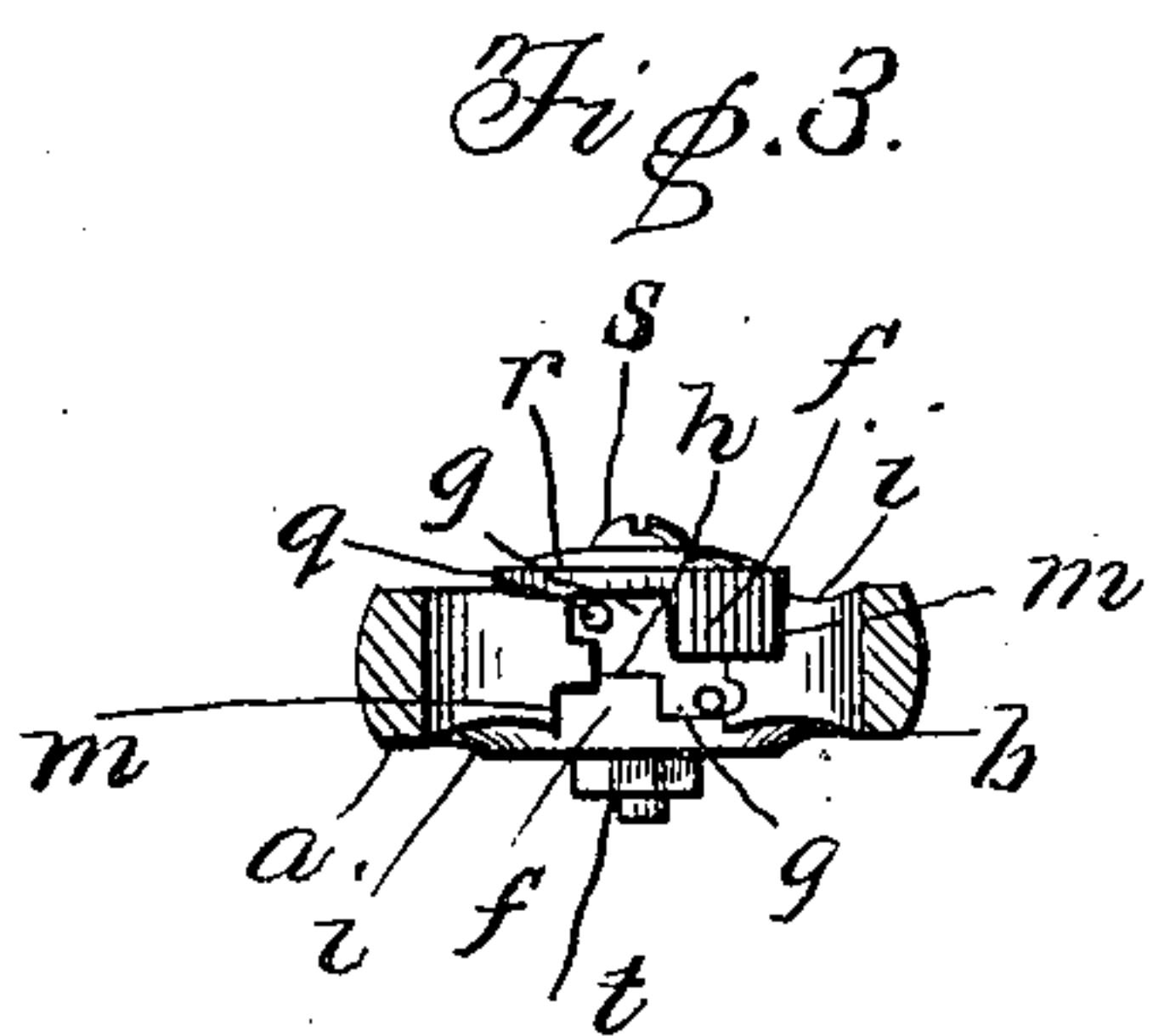
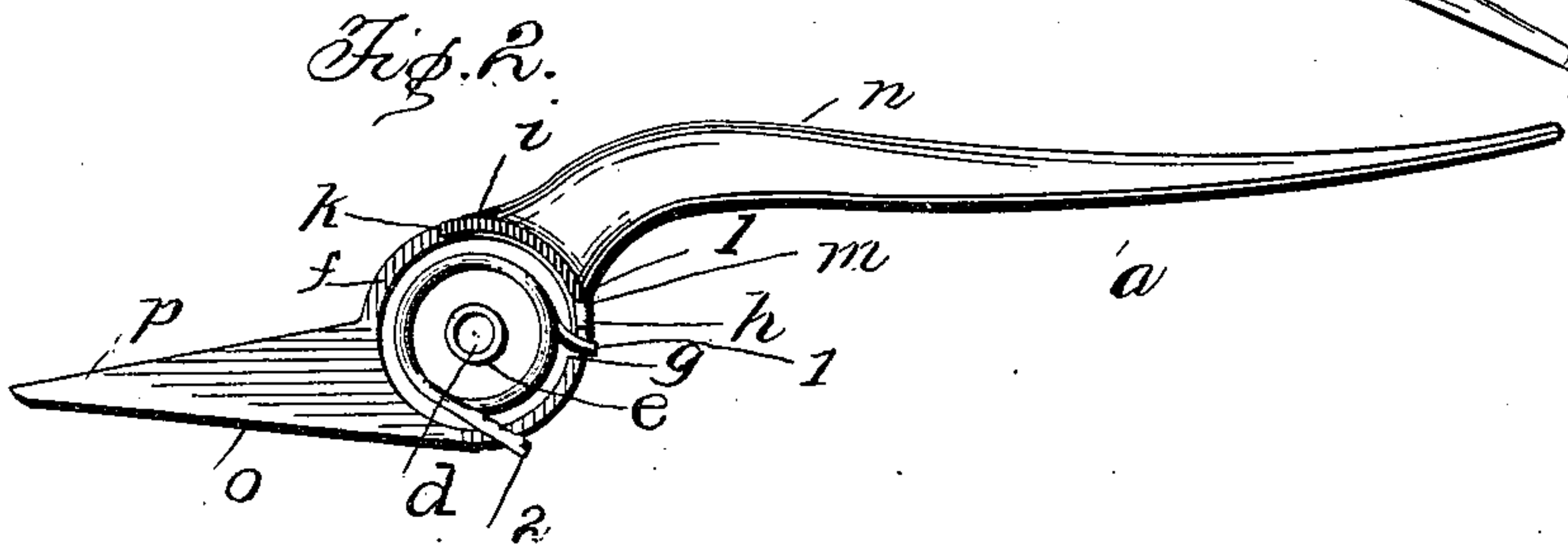
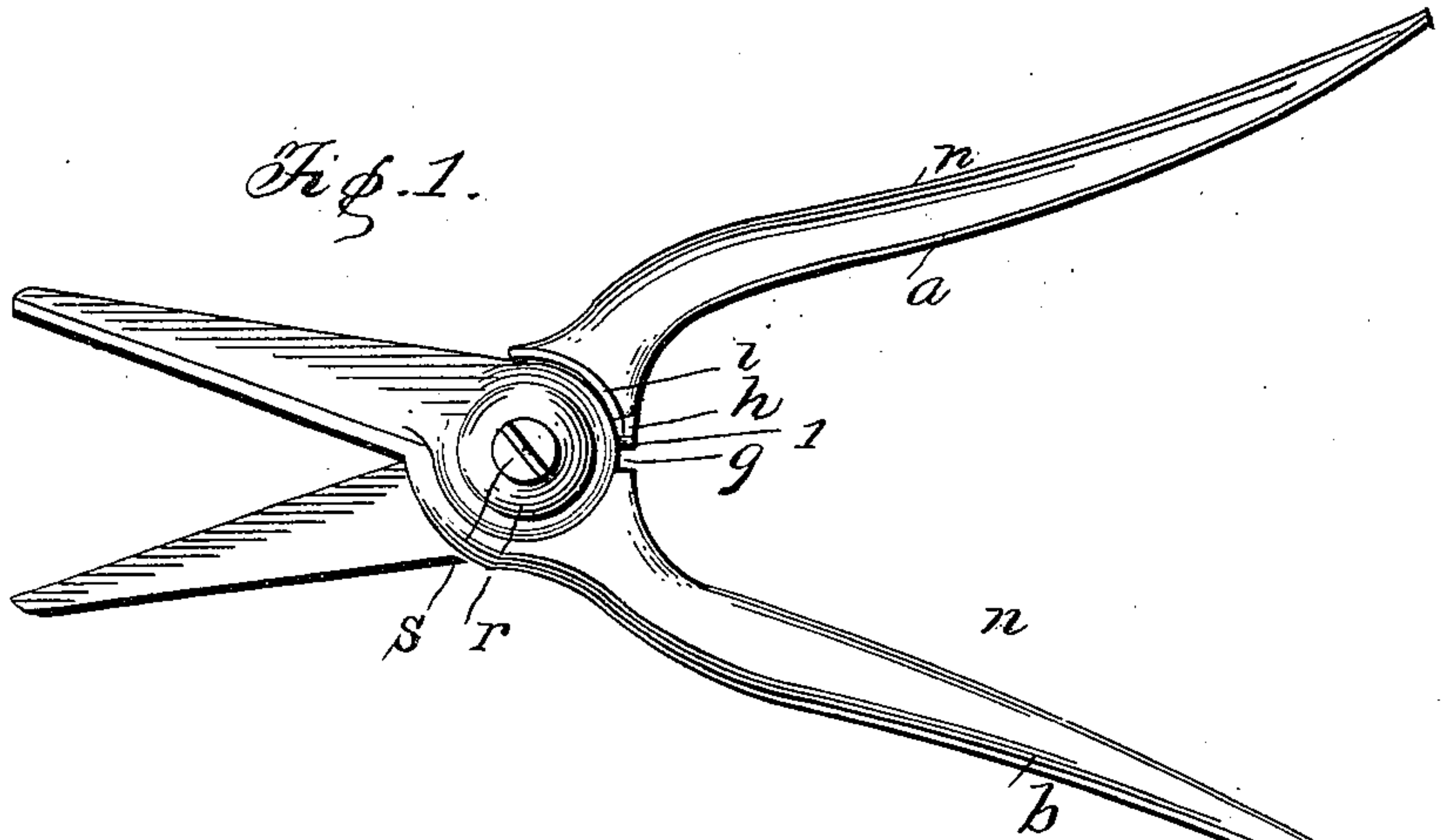
No. 663,565.

Patented Dec. 11, 1900.

O. M. FISHER.
SHEARS.

(Application filed May 18, 1900.)

(No Model.)



WITNESSES.

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UNITED STATES PATENT OFFICE

ORA M. FISHER, OF ERIE, PENNSYLVANIA, ASSIGNOR TO BLASS & GARNOW,
OF SAME PLACE.

SHEARS.

SPECIFICATION forming part of Letters Patent No. 663,565, dated December 11, 1900.

Application filed May 18, 1900. Serial No. 17,168. (No model.)

To all whom it may concern:

Be it known that I, ORA M. FISHER, a citizen of the United States, residing at Erie, in the county of Erie, State of Pennsylvania, have invented certain new and useful Improvements in Shears; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to shears in general, and more particularly to that class used for gathering grapes and similar fruit.

The object of my invention is to provide a pair of shears which shall be cheap of manufacture and which shall remain in a normally open position. With this object in view I have constructed an article of this nature such as is described in this specification and shown in the accompanying drawings, of which—

Figure 1 is a view of my complete invention. Fig. 2 is a side elevation showing a portion of one of the pivoted members removed. Fig. 3 is a rear elevation showing the handles in section, and Fig. 4 is a perspective view of one of the pivoted members.

In the manufacture of a device in accordance with my invention I provide a pair of pivoted members *a* and *b*, and as they are identical in form and may be cast from the same mold I will describe but one of them.

Each member comprises a central portion *c*, having a central perforation *d*, and surrounding the perforation *d* is a concentric groove *e*, resulting in a wall *f*. The wall *f* is cut away at the point *g* to form a radial passage *h*. Beginning at the passage *h* and continuing for about one-fourth of the circumference of the central portion *c* is a vertical flange *i*, concentric with the groove *e*. The flange *i* has vertical ends *k* and *l*, the latter being cut away at its top to form a shoulder *m*. Projecting from the flange *i* and extending to the base of the central portion *c* is a handle *n*, preferably formed in a compound curve, and extending from the opposite side of the central portion *c* to that at which the handle is attached is a cutting-blade *o*, substantially triangular in shape and having a cutting edge *p*.

In connection with a pair of pivoted members as above described I employ a helical spring *q*, having its ends 1 and 2 turned in the same direction to lie parallel. I also employ a slightly frustum shaped spring-washer *r* and a screw *s*, having a nut *t*.

In assembling the parts of my invention I place the spring *q* in the groove *e* of one of the pivoted members in such a manner as to allow its end 2 to fall into the passage *h*. The remaining pivoted member is then placed upon the member just mentioned in such a manner as to allow one side of the spring *q* to fall within its groove *e* and the end 1 to fall within its passage *h*. The washer *r* is then placed upon the screw *s*, with its convex side toward the head of the latter, and the threaded portion of the screw is then passed through the registering perforations *d* of the two members to lie loosely within one of the perforations and in threaded engagement with the other, screw-threads being formed within the latter perforation for this purpose. The screw is provided with the usual slot in its head, and by means of this the two members *a* and *b* are drawn together to the desired extent, after which the nut *t* is placed upon the then protruding end of the screw and turned tightly into place to prevent loosening of the latter. When the parts have been thus assembled, it will be readily seen that the cutting-blades of the two members *a* and *b* will be held in their normally-distended position, and the washer *r* will hold the two members snugly together to cause engagement of the cutting edges of the blades when the two are operated. The blades will be bent to slightly overlap one another, as is customary. When the handles are brought together to close the cutting-blades, the extremities *l* of the flanges *i* will come together to form a stop and the ends of the spring *q* will protrude slightly, so that each will lie between an extremity *l* of one flange and the shoulder *m* of the other.

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

A pair of shears for harvesting grapes comprising a pair of pivotally-connected members, said members being identical in form and each comprising a central portion, a han-

dle portion, and a cutting-blade, perforations in the central portions, a concentric groove surrounding the perforation of each member, resulting in annular flanges between the
5 grooves and the perforations, slots in the outer walls of the grooves, a helical spring lying within the grooves and having an end resting in each of the said slots, segmental flanges rising from peripheries of the central
10 portions, and a pivot passing through the per-

forations, holding the faces of the annular flanges and the outer walls of the grooves in engagement, to form bearings.

In testimony whereof I sign my name, in the presence of two witnesses, on this 14th day 15 of April, 1900.

ORA M. FISHER.

Witnesses:

ALBERT DOERR,

HARRY W. SHERWOOD.