No. 793,402. PATENTED JUNE 27, 1905.

J. STORSBERG.

SHEARS.

APPLICATION FILED MAR. 17, 1905.

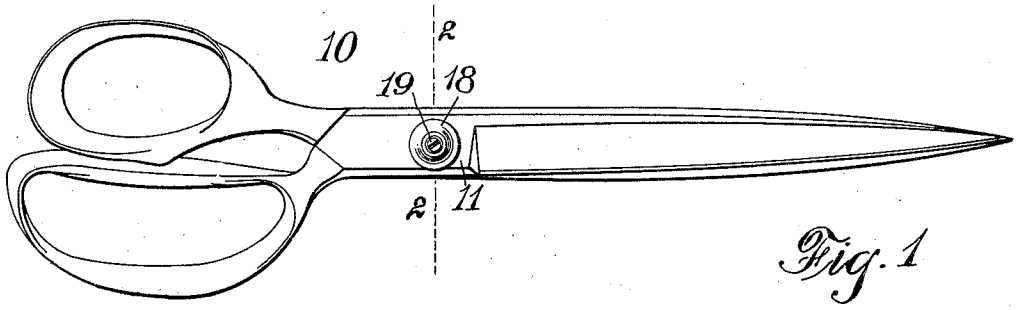



Fig. 1

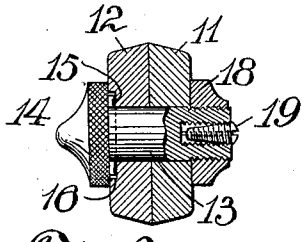



Fig. 2

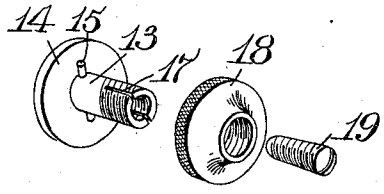



Fig. 3

WITNESSES:

J. C. Banta.

Frank L. Stubbs.

INVENTOR.

Julius Storsberg.

BY

Wm. H. Caulfield. ATTORNEY.

PHOTO-LITHOGRAPHED BY SACKETT & WILHELMS LITHO. & PTG. CO. NEW YORK.

No. 793,402. Patented June 27, 1905.

# UNITED STATES PATENT OFFICE.

JULIUS STORSBERG, OF NEWARK, NEW JERSEY, ASSIGNOR TO THE W. H. COMPTON SHEAR COMPANY, OF NEWARK, NEW JERSEY, A CORPORATION OF NEW JERSEY.

## SHEARS.

SPECIFICATION forming part of Letters Patent No. 793,402, dated June 27, 1905.

Application filed March 17, 1905. Serial No. 250,592.

*To all whom it may concern:*

Be it known that I, JULIUS STORSBERG, of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Shears, of which the following is a full, clear, and exact description.

My invention relates to improvements in shears or scissors, and more particularly to the pivot or journal of the blades and the mechanism for adjusting the blades in relation to each other and for holding them in the proper relation.

In the construction of shears or scissors several things are necessary in order to have them really efficient and in order that their efficiency may be maintained. It is essential that the blades press against one another with just the right amount of friction, that the pivot be constructed so that this friction can be easily maintained and regulated, and that the parts going to make up the joint of the shears or scissors be constructed and arranged so that threads, ravelings, and other things are not likely to be caught in the joint.

The object of my invention is to produce a very simple and efficient means of accomplishing the above results.

With these ends in view my invention consists of certain features of construction and combinations of parts, which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the shears embodying my invention. Fig. 2 is a cross-section on the line 2 2 of Fig. 1 and shows the construction of the joint or pivot, and Fig. 3 is a detail perspective view of the parts which go to make up the pivot or journal of the shears.

The shears or scissors 10 can, so far as the general construction is concerned, be of any usual kind—that is, the blades and handles may be of any usual style, size, or quality. The instrument comprises the two blades 11 and 12, which are held in the usual general relation to each other and which turn on a pivot-pin or journal 13. This pin has a suitable head 14 at one end which bears against one of the blades, as shown in Fig. 2, and the edge of the head is preferably milled, as the drawings show, to the end that it may be gripped firmly in the fingers when the parts of the joint are adjusted, as presently described.

Near the head and just inside the inner surface thereof is a transverse pin 15, which extends through the pivot-pin 13 and which lies in a keyway or recess 16, countersunk in the blade 12. It will be noticed by reference to Fig. 2 that this keyway 16 and the pin or key 15 are fully and completely covered by the head 14, so that the shears when finished look well and at the same time the head prevents any threads, ravelings, dirt, or other material from getting into the joint. It will be further seen that the pin or key and its keyway prevent the pivot-pin 13 from turning and hold it rigid, so that the blades 11 and 12 can turn smoothly on it.

At one end the pin 13 is hollow and split, as shown at 17, and this split end projects through the second blade 11 and is screw-threaded both externally and internally, the outer thread serving to receive the nut 18, which fits against the blade 11 and binds the two blades 11 and 12 between itself and the head 14, while the inner blade receives the tapering screw 19, which serves to expand the split end of the pin 13 and lock the nut 18. It will be seen that by placing the pin 13 in position in the pivot-holes of the blades 11 and 12 and then adjusting the nut 18 the blades can be nicely fixed, so as to have just the requisite friction, and then by turning the screw 19 the nut 18 can be locked and the blades held permanently in this position. It will further be noticed that as the split part of the pivot-pin 13 comes outside the blades 11 and 12 the bearing portion of the pin is left smooth and the blades can be easily operated.

I am aware that pin or bolt heads have been provided with keys or pins to fit into keyways and prevent them from turning, and am

also aware that it is not new to provide an internal screw for use as a nut-lock; but my invention is particularly applicable to shears or scissors blades in that it provides a smooth joint, has the head arranged to prevent the catching of extraneous matter as specified, and has the adjusting part located with reference to the blades so that the movement of the latter is not in any way interfered with.

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

The combination with a pair of shears or scissors blades, one of which is provided with a transverse keyway, of a pivot-pin passing through the blades and having a transverse key to fit in the above-named keyway, and a head to cover the keyway, the said pin having one end projecting through the blades, the said end being split and screw-threaded externally and internally, a nut to fit the external thread and pivot-pin, and a tapering screw to fit the internal thread thereof.

JULIUS STORSBERG.

Witnesses:
WM. H. CAMFIELD,
MAX G. HAMMENDELAY.