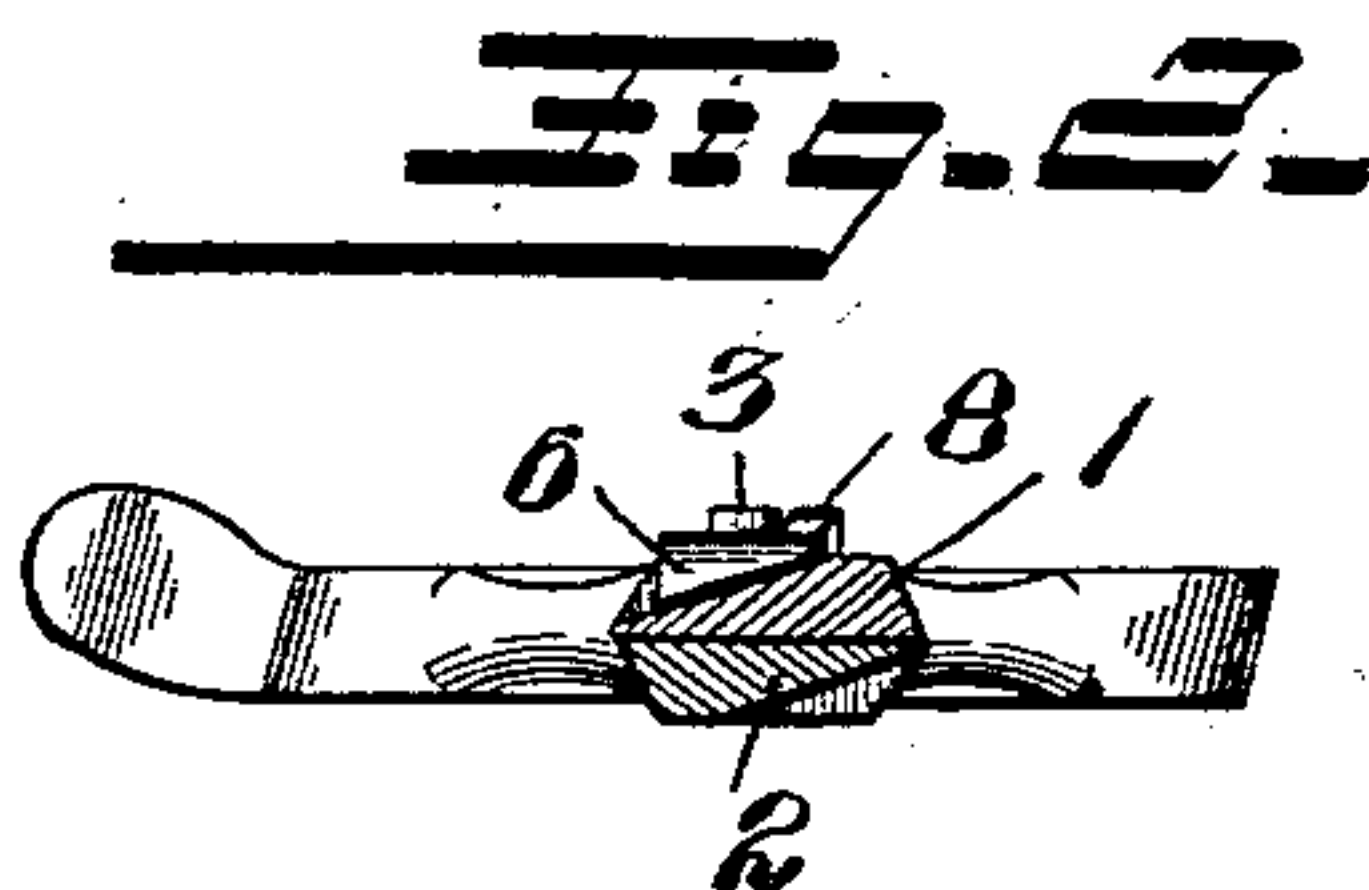
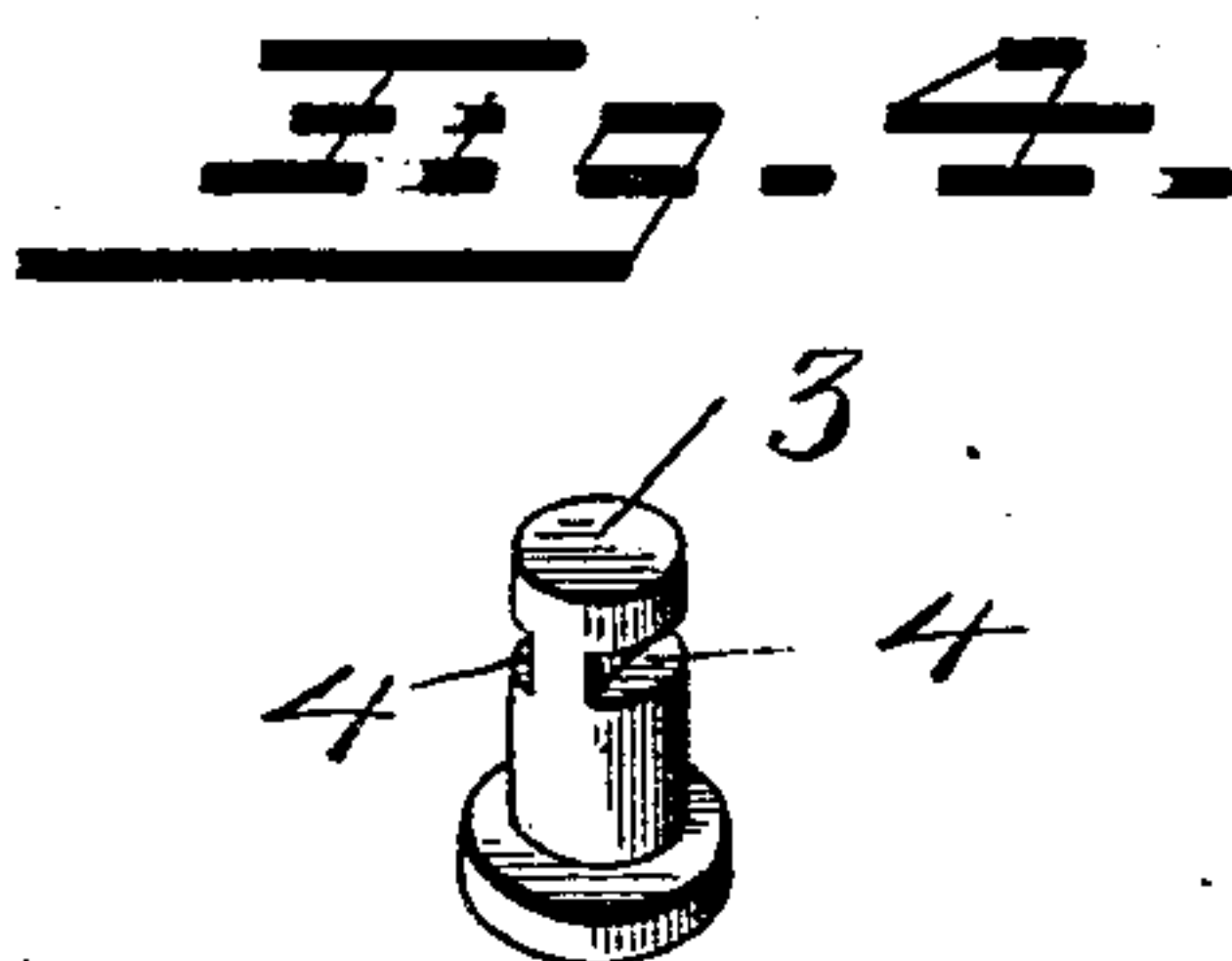
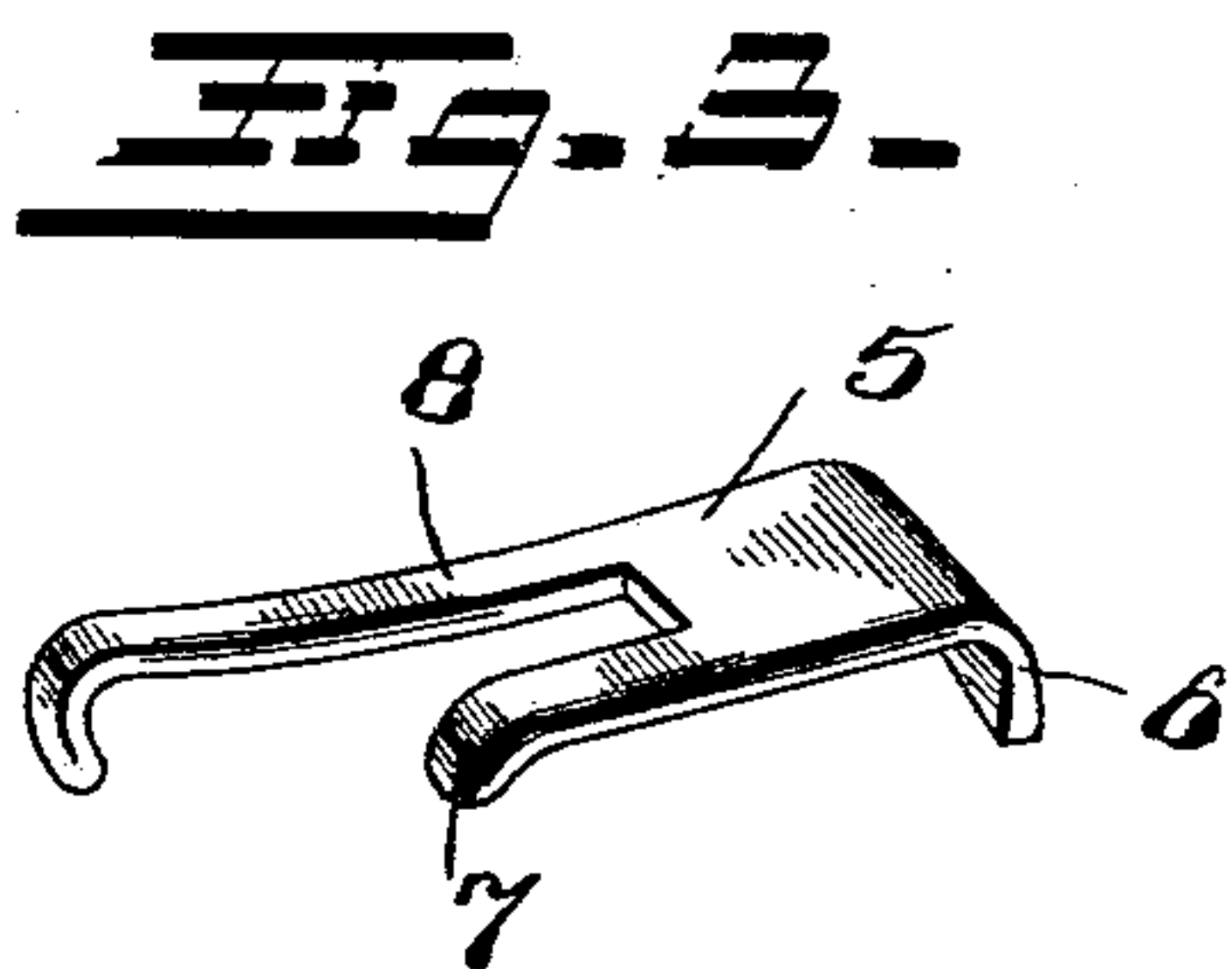
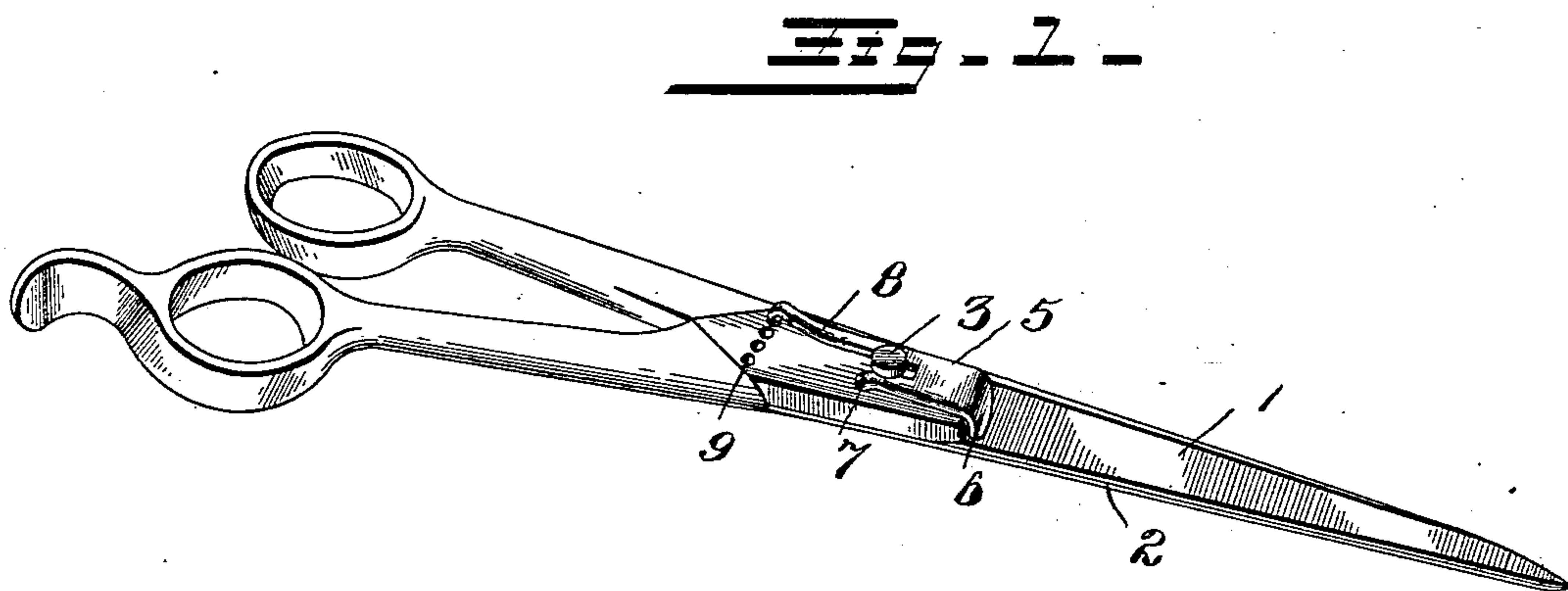


(No Model.)

J. F. SHULTZ.  
SCISSORS OR SHEARS.

No. 560,237.

Patented May 19, 1896.



Witnesses

*W. J. Koerth.*  
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By *his* Attorneys,

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# UNITED STATES PATENT OFFICE.

JACOB FULTON SHULTZ, OF SAN JACINTO, CALIFORNIA.

## SCISSORS OR SHEARS.

SPECIFICATION forming part of Letters Patent No. 560,237, dated May 19, 1896.

Application filed July 31, 1895. Serial No. 557,720. (No model.)

*To all whom it may concern:*

Be it known that I, JACOB FULTON SHULTZ, a citizen of the United States, residing at San Jacinto, in the county of Riverside and State of California, have invented a new and useful Device for Fastening Shear-Blades, of which the following is a specification.

This invention relates to an improvement in shears or scissors, and has for its object to provide a simple and efficient fastening and tension device wherein provision is made for readily connecting and disconnecting the blades and for regulating the relative pressure of said blades upon each other.

With the above objects in view the invention consists in a pair of shears or scissors comprising a pair of blades united by a common pivot formed with oppositely-disposed notches and a spring-tension key slotted to engage with said notches and provided at its forward end with an inclined edge or cam-face bearing against the beveled portion of the adjacent blade, said spring-tension key having its rear end hooked or deflected to engage with any one of a series of sockets or depressions formed in the face of the blade upon which said tension device rests.

The invention also consists in certain novel features and details of construction and arrangement of parts, as hereinafter fully set forth, illustrated in the drawings, and finally embodied in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a pair of shears, showing the manner of applying my improved fastening and tension device thereto. Fig. 2 is a transverse section through the same, showing the manner in which the inclined or cam edge of the spring-tension key coöperates with the beveled face of the contiguous blade for adjusting the relative pressure of the blades. Fig. 3 is an enlarged detail perspective view of the spring-tension key. Fig. 4 is a similar view of the pivot.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

Referring to the accompanying drawings, 1 and 2 designate the two blade members of a pair of shears of the ordinary construction, the same being united by means of a common pivot 3. For the purpose of carrying out the

present invention this pivot 3 is formed with an oppositely-disposed pair of notches 4, adjacent to one end thereof, and the opposite end of said pivot is headed, as shown, such head being adapted to be received into a countersunk perforation in the blade 2 in the usual manner. The notched end of said pivot projects through the perforation in the blade 1 in such manner as to bring the oppositely-disposed notches of said pivot adjacent to the outer face of said blade, adapting them to receive and be engaged by a spring-tension key 5.

The spring-tension key, which is best illustrated in Fig. 3, is made from a single piece of spring metal and is provided at the forward edge of its main body portion with an inwardly-extending triangular or cam-shaped lip 6, which, when the tension-key is in position, rests against the beveled face of the blade 1, as clearly shown in the drawings. This spring-tension key is further provided with a pair of rearwardly-extending fingers 7 and 8, which are spaced a sufficient distance apart to stride the shank portion of the pivot 3 in such manner as to rest within the notches 4 in opposite sides thereof. One of said rearwardly-extending arms 7 is made shorter than the other and is extended but a slight distance in rear of the pivot, where it is deflected downwardly so as to rest upon the face of the blade 1. The other arm or finger 8 is made of greater length than the finger 7 in order to impart the necessary spring thereto and is deflected inwardly or hooked at its rear extremity to enter and engage with any one of a series of sockets or depressions 9, formed directly in the adjacent face of the blade 1, as shown.

From the foregoing description it will be seen that by disengaging the hooked extremity of the finger 8 of the spring-tension key from the sockets or depressions 9, and moving the same outwardly, said tension-key may be moved longitudinally in such manner as to disengage it from the notches in the pivot, whereupon the pivot may be removed from the blades and the latter separated for the purpose of cleaning and sharpening the same. By reversing this operation the blades may again be connected, the hooked extremity of the finger 8 being moved into



engagement with the first one of the series of sockets or depressions in the face of the blade. The tension of the spring-key may be further increased by moving the hooked extremity 5 of its long finger into engagement with the second socket or depression, during which movement the inclined or cam-shaped lip 6 of said key will ride upwardly upon the beveled face of the blade 1, thereby serving to lift 10 said key and cause the same to operate with greater force upon the blade and pivot. In this manner the pressure of the blades with relation to each other may be increased or diminished at pleasure for adapting the shears 15 to the particular kind of work required. The shears or scissors hereinabove described will be found particularly useful in surgical work, as the blades and other parts thereof may be separated with ease and rapidity and be 20 cleansed by the proper antiseptic.

It is possible also to apply the herein-described improvement to any ordinary shears or scissors already in use, it being necessary only to ream out the pivot-holes of the blades 25 for the reception of the pivot described and to form the sockets or depressions 9 in the face of one of the blades for engaging the hooked extremity of the finger 8 in a manner that will be readily understood.

30 Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. The herein-described fastener and spring-tension device, comprising a spring-key having a loose pivotal connection at a point intermediate its ends with the pivot of the shear-blades and formed with a triangular or cam-shaped lip disposed substantially at right angles to the body of the key and rest-

ing as to its inclined edge against and adapted 40 to be moved transversely of the wide beveled face of one of the blades of the shears or scissors, and provided with finger portions in engagement with one end of the pivot of said shears or scissors, and means for swinging 45 said tension-key and holding the same at any desired adjustment for the purpose of regulating the relative pressure between the blades, substantially as set forth.

2. The herein-described fastener and spring-tension device, comprising a spring-key having a loose pivotal connection at a point intermediate its ends with the pivot of the shear-blades and formed with a triangular or cam-shaped lip disposed substantially at right 55 angles to the body of the key and resting as to its inclined edge against and adapted to be moved transversely of the wide beveled face of one of the blades of the shears or scissors, said key being formed with rearwardly-extending fingers engaging oppositely-disposed 60 notches in the pivot of the shears or scissors, one of said fingers being deflected or hooked at its extremity to engage with any one of a transversely-extending series of sockets or 65 depressions formed in the face of the blade against which said key rests by means of which the tension which the spring-key exerts on the blades may be regulated, substantially as and for the purpose specified. 70

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JACOB FULTON SHULTZ.

Witnesses:

D. B. BAKER,  
G. T. DAGGETT.