No. 770,347. PATENTED SEPT. 20, 1904.

J. H. BROWN.

SHEARS.

APPLICATION FILED JUNE 25, 1904.

NO MODEL.

Fig. 1.

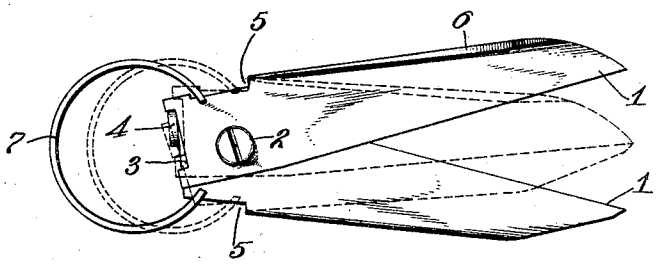



Fig. 2.

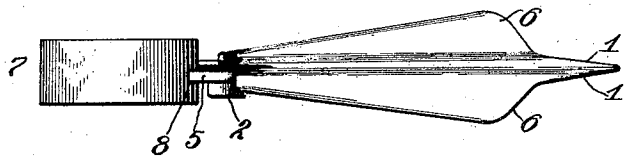



Fig. 3.

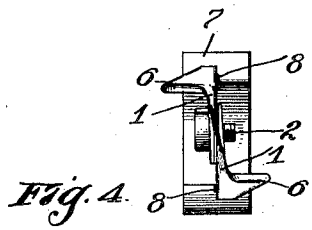
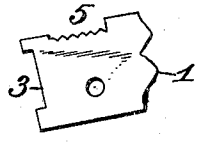



Fig. 4.




Witnesses
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No. 770,347. Patented September 20, 1904.

# UNITED STATES PATENT OFFICE.

JUSTUS H. BROWN, OF KANSAS CITY, MISSOURI.

## SHEARS.

SPECIFICATION forming part of Letters Patent No. 770,347, dated September 20, 1904.

Application filed June 25, 1904. Serial No. 214,127. (No model.)

*To all whom it may concern:*

Be it known that I, JUSTUS H. BROWN, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Shears, of which the following is a specification.

My invention relates to shears, with particular reference to that type opened by the action of a spring; and my object is to produce a device of this character whereby the spring may be utilized not only to open the blades, but also to hold them closed, and thus protect their cutting edges when not in use.

A further object is to produce a device of this character in which the pressure of the spring can be made variable, and thus accommodate the shears to do heavy or light work, as may be desired.

A still further object is to equip the blades at their outer sides and edges with flanges for supporting the shears, in conjunction with the spring, in a most convenient position to be quickly and easily gripped by the operator and to cause the blades to be pressed together, and thus perform their cutting function more reliably.

A still further object is to produce a device of this character embodying means to limit the opening and closing movements of the blades.

With these objects in view the invention consists in certain novel and peculiar features of construction and organization, as hereinafter described and claimed, and in order that it may be fully understood reference is to be had to the accompanying drawings, in which—

Figure 1 represents a side elevation of shears embodying my invention. Fig. 2 is a top view of the same. Fig. 3 is a front view of the shears closed. Fig. 4 is a side view of a part of one of the blades and showing the same of modified construction.

In the said drawings, 1 designates the blades, pivoted together in the usual or any preferred manner, as at 2, near the rear ends, and in the rear end of one of the blades is formed a notch 3, a laterally-projecting lug 4 of the other blade fitting loosely in said notch, so that by alternate contact with opposite ends thereof the opening and closing movements of the shears shall be determined. In the non-cutting edges of the blades are formed longitudinal notches 5, said notches being of such length that they extend both forward and rearward of pivot 2, and forward of said notches and extending almost to the points of the blades are flanges 6, projecting outwardly from the outer sides and edges thereof to provide convenient handles or gripping-surfaces for the operator.

7 designates a substantially circular spring which, by preference, is of flat metal and provided in its opposite ends with notches 8 in vertical planes corresponding to the blades, said notches engaging or interlocking with the notches 5 of the blades. The shears by means of spring 7 and the undermost flange can be supported in an upright or operative position with relation to the goods to be cut upon a table or other substantially horizontal support, and can therefore be gripped more readily by the operator, and thus facilitate her work, it being understood that in the use of the shears the spring rests in the hollow of the hand with the thumb pressing down upon the topmost and the first two fingers underlying the other flange. By holding the shears in this manner and alternately pressing upon the flanges and relaxing such pressure to permit the spring to reopen the blades the cutting operation can be performed more quickly than with the ordinary type of shears, especially where the shears are being used for clipping or snipping purposes, and in this connection it will be noticed that the pressure on the flanges tends to press the blades laterally together, and consequently overcomes the natural tendency of the blades to move apart and pinch instead of properly cutting heavy cloth or snipping heavy or strong thread or cord. For heavy work the spring is disposed, by preference, as shown in full lines, Fig. 1, in which position it has the greatest leverage on the blades. For light work the spring may be adjusted forward the desired distance in notches 5, so as to offer less resistance to the pressure imposed by the operator on the blades, and when the shears are to be stored away the

spring can be slipped to the front ends of the notches and by imposing pressure forward of pivot 2 hold the blades closed, the pin-and-slot connection constituted by the notch 3 and lug 4 limiting such closing movement, as will be readily understood.

For some purposes it may be found desirable to roughen or nick the base of each notch 5, as shown in Fig. 4, and thus guard against accidental slippage of the spring.

Shears of the character described will be found especially desirable in tailor-shops and may also be used for various other purposes not necessary to enumerate herein, and while I have illustrated and described the preferred embodiment of the invention it is to be understood that it is susceptible of modification in minor particulars without departing from its essential spirit and scope or sacrificing any of its advantages.

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

1. In shears, the combination of a pair of blades pivoted together, of a spring of substantially circular form and provided with notches in its ends engaging and longitudinally adjustable on the outer edges of the blades.

2. In shears, the combination of a pair of blades pivoted together and provided forward of their pivotal point and at their outer edges with outwardly-projecting flanges, and a flat spring of substantially circular form, and having its ends engaging and longitudinally adjustable on the outer edges of the blades, the body portion of the spring being disposed rearwardly of the blades and acting in conjunction with the undermost flange, to support the shears in an upright position upon a suitable support, such as a table.

3. In shears, the combination of a pair of blades pivoted together and provided in their outer edges and extending forwardly and rearwardly of their pivotal points, with notches, and a spring of substantially circular form provided with notches in its ends engaging and longitudinally adjustable in the blade-notches.

4. In shears, the combination of blades pivoted together, a substantially circular spring having its ends engaging and longitudinally adjustable on the outer edges of the blades, and means for limiting the opening-and-closing movement of the blades.

5. In shears, the combination of blades pivoted together and provided in their outer edges with notches extending both forward and rearward of their pivotal point and having their bases roughened, and a spring having its ends engaging and longitudinally adjustable on the bases of said notches.

In testimony whereof I affix my signature in the presence of two witnesses.

JUSTUS H. BROWN.

Witnesses:
F. R. GLORE,
G. Y. THORPE.