(No Model.)

R. P. BOWDOIN.

SCISSORS.

No. 542,183. Patented July 2, 1895.

Fig. 1

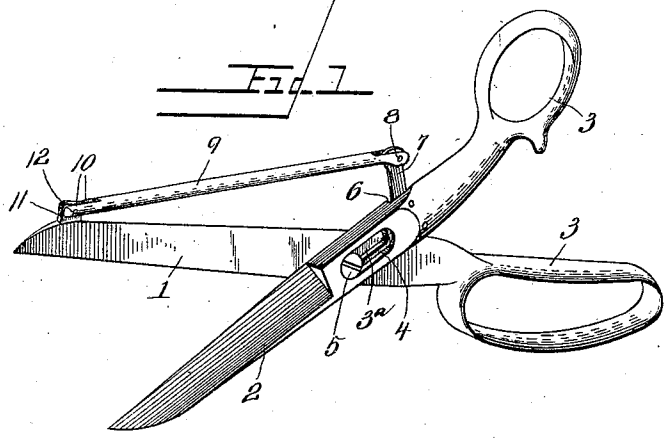


Fig. 2

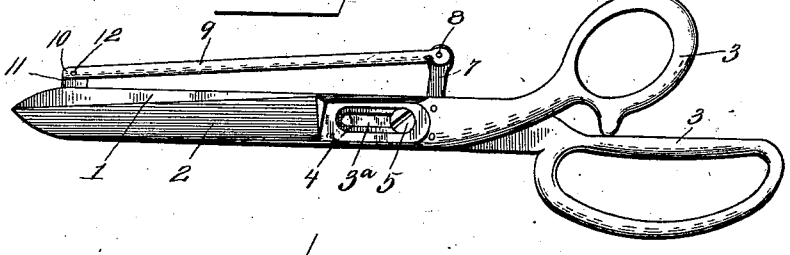


Fig. 3

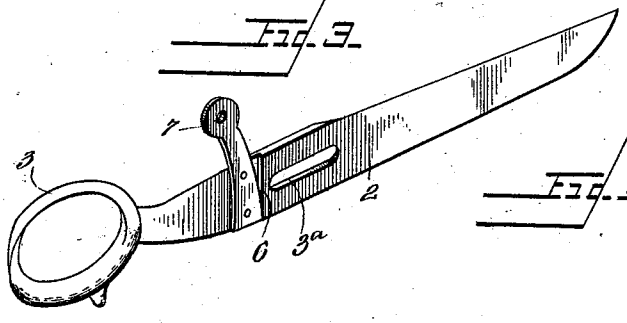
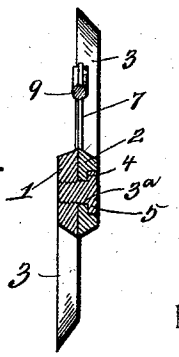


Fig. 4



Witnesses

Thos. W. Riley

J. R. Dawson.

Inventor

Rufus P. Bowdoin,

By his Attorneys.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

RUFUS PUTNAM BOWDOIN, OF WILMINGTON, NORTH CAROLINA.

SCISSORS.

SPECIFICATION forming part of Letters Patent No. 542,183, dated July 2, 1895.

Application filed November 3, 1894. Serial No. 527,787. (No model.)

To all whom it may concern:

Be it known that I, RUFUS PUTNAM BOWDOIN, a citizen of the United States, residing at Wilmington, in the county of New Hanover and State of North Carolina, have invented a new and useful Scissors, of which the following is a specification.

This invention relates to an improvement in that class of scissors wherein means are provided for imparting to the blades a draw, to the end that they will be capable of cutting the material with which they are used upon the application of less power, and also to the end that they may be made capable of applying increased leverage; and the invention consists in the combination of a longitudinally-slotted blade pivoted to a companion-blade through the medium of said slot, whereby the slotted blade is made capable of a combined longitudinal and swinging movement, and in pivotally connecting to each blade a rod which serves to guide and regulate the blades in their movements. By such an arrangement the slotted blade moves with a movement partaking equally of the longitudinal movement and the swinging movement, which results in a draw in the cut. The connecting rod, which is pivotally connected to the blades at its respective ends, is an important element of the invention, its function being to make the movements of the slotted blade regular and uniform, for without it the slotted blade would play idly upon the pivoting-spindle and would not perform that regular reciprocal and swinging movement which is essential to the effective operation of the invention.

In the drawings, Figure 1 represents a perspective view of a pair of scissors constructed after the manner of my invention, they being shown open; Fig. 2, a side elevation of the device, it being shown in a closed position; Fig. 3, a detail perspective of the slotted blade of the scissors, the view being shown as taken from the inner side thereof; Fig. 4, a section taken through the screw or spindle for holding the blades together.

The reference-numeral 1 indicates one blade of the scissors, and 2 the remaining blade. Each blade is provided with the hand-grasps 3, as usual, and the blade 2 is formed, near its shank, with a longitudinally-elongated slot 3^a, which has its inner sides formed with rabbet-grooves 4, capable of receiving the head of the screw 5, which screw is passed through the blade 1 and made rigid thereon. By this construction it will be seen that the blade 2 is capable of a limited longitudinal movement on the blade 1 in addition to its swinging movement, which is found in all scissors. Formed in the blade 2 and at the inner side thereof, just rearward of the slot 3, is an indentation 6, in which the arm 7 is located and rigidly secured by riveting it to the blade 2. This arm lies flush with the inner side of the blade 2, so that the blades of the scissors may snugly engage each other. The arm 7 projects upwardly from the blade 2 and perpendicular from the same and has its upper end enlarged and perforated, so that the pin 8 may pass through it.

The pin 8 is provided to effect the pivotal connection of the rod 9 with the arm 7, which is effected by bifurcating the rod and causing the arms of the bifurcation to embrace the upper end of the arm 7. The front end of the rod 9 is bifurcated to form the arms 10, which embrace the projection 11, formed integral with the blade 1 and at the upper front portion thereof.

12 indicates a pin, which passes through the arms 10 and projection 11 and by which the pivotal connection of the parts is effected.

The use of my improvement does not differ from the use of any other pair of scissors; but it will be observed that the operation thereof is radically different. Owing to the slot 3^a and rod 9, the blade 2 is made to move on the blade 1, or vice versa, with a combined longitudinal and swinging movement, which gives rise to the draw in the cut and which at the same time adds leverage to the appliance and makes it easier to operate. The function of the rod 9 is performed by the said rod swinging in the arc of a circle on the projection 11, which guides the blade 2 and causes the same to have its longitudinal movement. Without this rod the blade 2 would play idly and disjointedly, so that the slot 3^a would be utterly incapable of performing any useful function. Indeed, in such a case the slot would be a hinderance, as will be well understood. In the foregoing description it has been assumed that the blade 2 is moved on

the blade 1, as this is the usual method of operating a pair of scissors. It will be obvious, however, that the description fits the reverse just as well, and therefore no further explanation of this point is necessary.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having described the invention, I claim—

In a pair of scissors, the combination of two blades one of which is provided with a longitudinally elongated slot, a pin passing through said slot and into the remaining blade whereby said blades are connected so as to be capable of sliding one upon the other, an arm secured to the inner side of the slotted blade in rear of the slot, and a rod arranged outside of the plane of the blades and having one end pivotally connected to said arm and its remaining end extended toward the point of the remaining blade and pivotally connected thereto, substantially as described.

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

RUFUS PUTNAM BOWDOIN.

Witnesses:
JAMES I. METTS,
JOHN HAAR, Jr.