(No Model.)

N. A. WHEELER.

SCISSORS.

No. 456,870. Patented July 28, 1891.

Fig. 1.

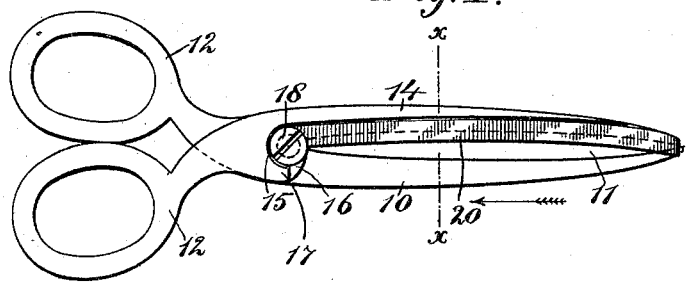

Fig. 2.

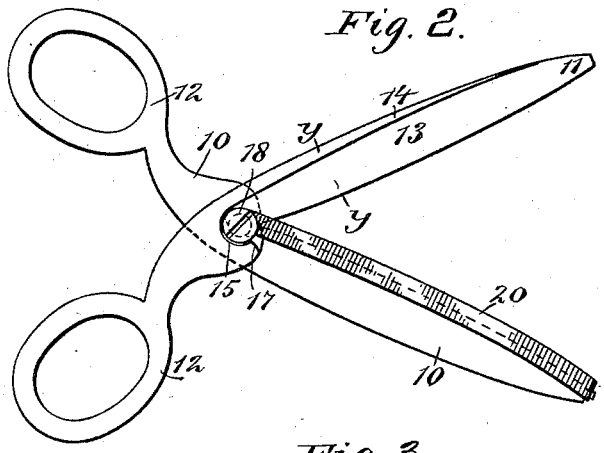

Fig. 3.

Fig. 4.

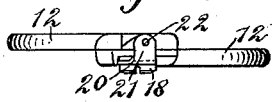

Fig. 5.

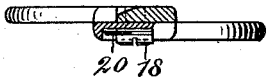

Fig. 6.

Fig. 7.

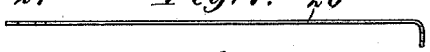

Fig. 8.

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SCISSORS.

SPECIFICATION forming part of Letters Patent No. 456,870, dated July 28, 1891.

Application filed April 24, 1891. Serial No. 390,282. (No model.)

To all whom it may concern:

Be it known that I, NATHAN A. WHEELER, of Alpowa, in the county of Garfield and State of Washington, have invented new and useful Improvements in Scissors, of which the following is a full, clear, and exact description.

My invention relates to improvements in scissors and shears, and the object of my invention is to produce articles of the character described, which are adapted to do the work of any ordinary scissors and shears, and which are also especially adapted for opening letters, and are constructed in such a manner that letters may be rapidly opened by them without the least danger of mutilating the contents.

To this end my invention consists in 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 plan view of the scissors with the blades closed. Fig. 2 is a plan view with the blades open. Fig. 3 is an edge view, partly in section, on the line *y y* in Fig. 2. Fig. 4 is an end view of the scissors with the blades closed. Fig. 5 is a cross-section on the line *x x* in Fig. 1. Fig. 6 is a detail plan view of the guide used in opening envelopes. Fig. 7 is an edge view of the same, and Fig. 8 is a detail view of the screw which unites the blades and forms their pivot.

The scissors are provided with cutting-blades 10 and 11, which cross each other and terminate in handles 12 of the usual form. The blades are curved on their back sides, so that when closed together, as in Fig. 1, they will be of an elliptical form, being widest through the center, and this form adds to their beauty and to their strength. The blade 11 is made for the most part somewhat thinner than the blade 10, so as to allow it to close beneath the guide, which is carried by the latter blade, and a recess 13 is thus formed on its face, which recess is flanked on the back of the blade by a rib 14, which extends nearly the entire length of the blade 11 and terminates at a point near the point of the blade. The blade 11 is also provided near its pivot-point with a semicircular recess 15, the bottom 16 of which is nearly flush with the top or recessed surface 13 of the blade 11, and this recess terminates on the inner side in a shoulder 17, which is adapted to engage the letter-guide and throw it from the pivot-pin in a manner hereinafter described. The blades are pivoted together by a screw 18, the head of which fits in the recess 15 of the blade 11, and the screw is provided with an annular flange or rib 19, which is located just below the head of the screw, and the rib thus forms a washer, which bears upon the upper blade, and it also forms an annular recess between the washer and the screw-head, which recess is adapted to receive the head of the letter-guide.

The letter-guide 20 is made thin and flat, and is curved to conform with the curvature of the back side of the blade 11 and of the inner side of the rib or flange 14, so that when the blades are closed together it will fit said flange, and the guide is secured to the blade 10, so that its inner edge will be a little in advance of the edge of the blade, as illustrated in Fig. 2, the cutting-edge of the blade being indicated by dotted lines in said figure. The guide 20 is held far enough from the blade 10, so that the recessed portion of the blade 11 may slide between the guide and the blade 10. The guide 20 is doubled over at right angles near its outer end, as shown at 21, and this bent portion is perforated to receive a stud 22 on the extreme point of the blade 10, which stud may be formed integrally with the blade or may be formed separately and secured thereto.

The inner end of the guide 20 terminates in a head 23, which head is rounded to fit the recess 15 in the blade 11, and the head is slotted on one side, as shown at 24, so that it may fit closely upon the screw 18, and the thickness of the head is such that it will fit nicely between the screw-head and the washer 19.

To secure the guide in place the bent end is first placed upon the pin or stud 22 and the slotted head is then placed upon the screw 18. When the scissors are opened no farther than usual, the guide will not be displaced; but if the scissors are thrown wide open the shoulder 17 of the blade 11 will strike against

the outer edge of the guide, and thus push the slotted head off from the pivot-screw, so that the shoulder forms a convenient means for detaching the guide.

When the guide is not in place, the scissors are used in the ordinary way; but when they are to be used for opening letters the guide is placed in position in the manner described.

To operate the scissors for opening envelopes they are held in one hand in the usual manner, and the envelope which is to be opened is held in the other hand and the end or side to be opened is placed against the under side of the guide 20, the envelope being held at right angles to the blade 10, so that its surface will be presented to the cutting-edge of the blades. The scissor-blades are then closed together, thus cutting a narrow strip from the envelope, and the letter in the envelope may then be removed in the usual way. The distance between the guide 20 and the blade is such that the envelope is sure to be opened; but it is not wide enough to permit the letter in the envelope to be cut.

It will be noticed that by pivoting the blades together in the manner described their cutting-edges are extended nearly to the point at which they are pivoted, so that much of the cutting will be done at this point, and as the leverage is greatly in favor of the operator the scissors may be very easily operated.

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

1. The combination, with a pair of scissors, of a guide secured to the point of one of the blades and to the pivot-screw, so as to embrace the opposite blade, substantially as described.

2. The combination, with a pair of scissors having one of its blades recessed on one side, of a guide shaped to fit the recess, the said guide having one end secured to the point of the blade opposite the recessed blade and having its opposite end secured to the pivot-screw, substantially as described.

3. The combination, with a pair of scissors one of the blades of which has a recess on one side extending to and around the pivot-screw, of a guide shaped to fit the recess, said guide having one end bent and secured to the end of the opposite blade and its inner end slotted to fit the pivot-screw, substantially as described.

4. The combination, with a pair of scissors one of the blades of which is recessed upon one side, said recess extending to and around the pivot-screw, of a pivot-screw having a washer formed integrally therewith and a guide shaped to fit the recessed blade, said guide having its outer end bent and secured to the point of the blade opposite the recessed blade and having its inner end slotted and arranged to enter the recess between the screw washer and head, substantially as described.

5. The combination, with a pair of scissors one of the blades of which has a recess extending along one side and to and around the pivot-screw, said recess terminating in a shoulder, of a guide shaped to fit the recess, said guide having its outer end secured to the blade opposite the recessed blade and having its inner end slotted to fit the pivot-screw, substantially as described.

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