

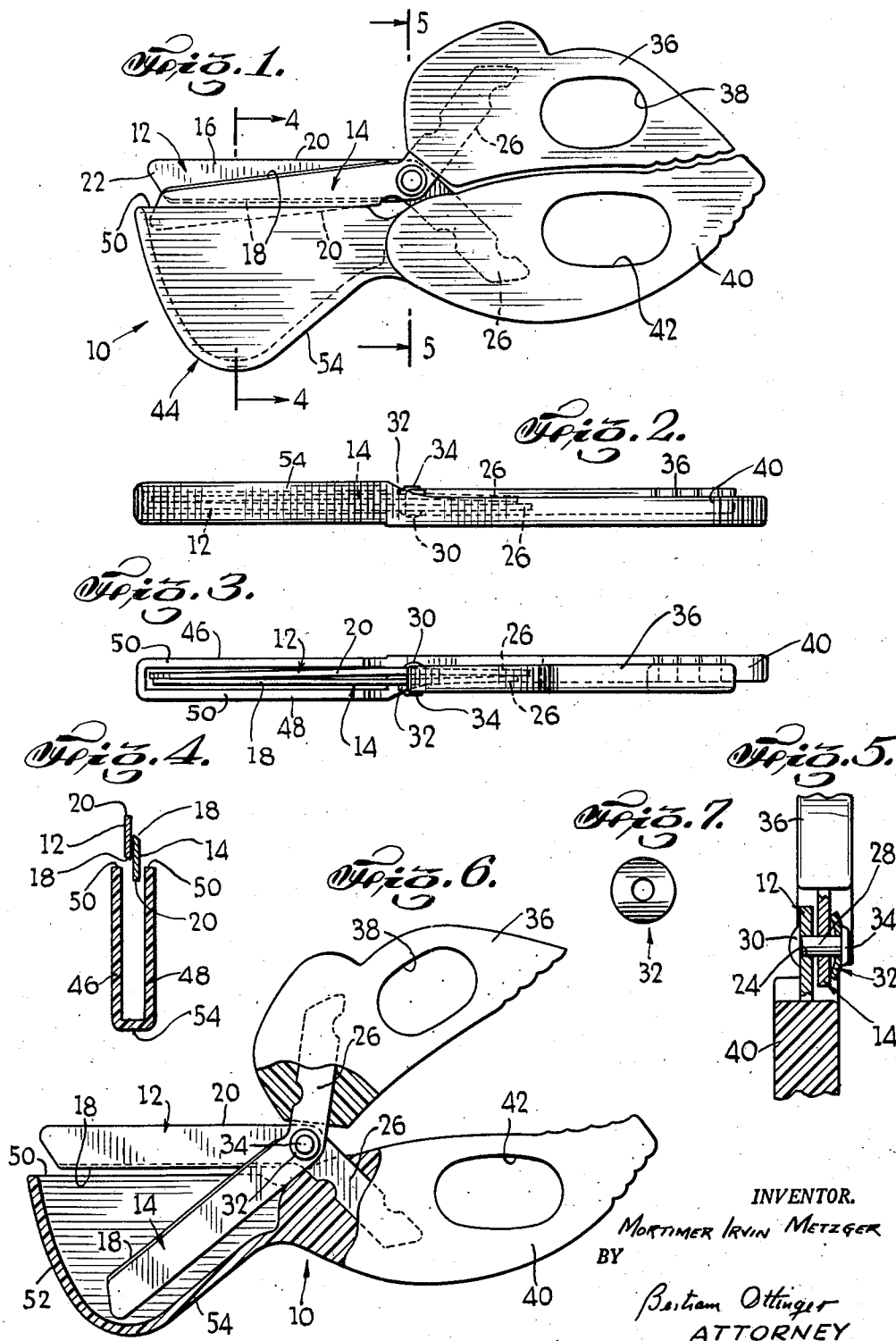
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SCISSORS

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SCISSORS

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3 Claims. (Cl. 30-233)

1 This invention relates to scissors, and more particularly, is concerned with play scissors, i. e. scissors which are specially designed to be used by children.

It is an object of my invention to provide play scissors having keen cutting edges, but which are so constructed that a child cannot cut or even nip himself.

It is another object of my invention to provide play scissors which can be used to effectively cut paper by a child entirely unacquainted with the proper manipulation of scissors.

It is a further object of my invention to provide play scissors which are so designed that one of the blades may be pointed without danger of a child hurting himself or others.

It is an additional object of my invention to provide play scissors which are easy and inexpensive to manufacture, attractive in appearance and rugged and efficient in use.

Other objects of my invention will in part be obvious and in part hereinafter pointed out.

My invention accordingly consists in the features of construction, arrangements of parts and combinations of elements which will be exemplified in the scissors hereinafter described, and the scope of which will be indicated in the appended claims.

In the drawings, in which is shown one of the various possible embodiments of my invention,

Fig. 1 is a front view of a pair of closed play scissors constructed in accordance with my invention;

Figs. 2 and 3 are bottom and top views, respectively, thereof;

Fig. 4 is a sectional view taken substantially along the line 4-4 of Fig. 1 and is illustrative of the transverse cross-sectional configuration of the guard for the moving blade;

Fig. 5 is an enlarged sectional view taken substantially along the line 5-5 of Fig. 1 and is illustrative of the simple pivotally disposed means for biasing the blades together resiliently at the moving cutting point;

Fig. 6 is a view similar to Fig. 1 but with the blades open to their maximum extent and with the guard for the moving blade broken away to better illustrate its construction; and

Fig. 7 is a front view of a washer which serves as the means for biasing the blades together resiliently.

Referring now in detail to the drawings, 10 denotes a pair of child's play scissors embodying my invention. Said scissors comprises a pair of identical light gauge, carbon steel, nickel-plated

2 blades 12, 14 each of which includes an elongated main or operative portion 16 having a sharpened cutting edge 18 and a dull back edge 20. Although straight as viewed from the front (see Figs. 1 and 6), the cutting edge bows outwardly from the tip 22 thereof back to the point of pivotal attachment of the blades (see Figs. 2 and 3) in the same fashion as in a conventional pair of high grade scissors. Each blade has an aperture 24 provided therein at the point of pivotal attachment. In back of this point each blade includes a tang 26 which extends at an angle to the longitudinal axis of the main portion 16, the tang being disposed at such an angle that it extends outwardly from the cutting edge 20 rather than from the blunt back edge 20 of the blade.

The two blades are joined by a pivot which optionally is in the form of a simple rivet 28 whose shank is rotatably received in the blade apertures 24. One end of the rivet has a head 30 with which the rivet initially is provided. This head engages the outer flat side of one of the blades, e. g. the blade 12. The shank of the rivet also is rotatably received in the central apertures of a curved (Belleville) washer 32 located on the outer flat side of the other blade 14. Said washer is so positioned that its concave side faces the blade 14. The other end of the rivet is headed, as at 34, after the blades and washer have been assembled as described. The heading operation is carried out with the aid of a suitable jig and forming tool such as are well known and which are manipulated in such fashion that when the scissors are in the open position indicated in Fig. 6 the washer 32 is lightly pressed against the blade 14 by the rivet head 34. This pressure will be somewhat increased as the scissors are closed (Fig. 1) and the purpose thereof will be pointed out hereinafter.

The angularly disposed tang 26 of the blade 14 is imbedded in a thumb handle 36 which preferably is made by molding from a suitable plastic material (either thermo-plastic or thermo-setting), for example, cellulose acetate, cellulose acetate butyrate, vinyl chloride, ethyl cellulose, and acrylic resin, a styrene resin, an aldehyde condensation resin or a urea resin. Conventional molding procedure is followed in fabricating the handle, depending upon the plastic employed, e. g. injection molding, compression molding, transfer molding or flash molding, with the tang disposed in the mold cavity prior to molding. Alternatively, the handle can be molded in two halves which later are cemented together with the tang set in grooves formed in the handle halves. The

handle is formed with an aperture 38 of proper size and shape to accommodate a child's thumb.

The angularly disposed tang 26 of the other blade 12 is imbedded in a finger handle 40 which desirably is formed in the same manner and of the same material as the thumb handle 36. The finger handle is provided with an aperture 42 of proper size and shape to accommodate a child's index and middle fingers.

One or the other of the handles 36, 40, as shown the finger handle 40, has a guard 44 integrally molded in one piece therewith. This guard consists of a pair of side walls 46, 48 which, for simplicity, may, as indicated, be flat and parallel to one another. The upper edges 50 of these walls are located a short distance below and, desirably, are parallel to the cutting edge 18 of the blade 12 whose tang 26 is imbedded in the handle 40 with which the guard 44 is integral. Thus, the other blade 14 swings through or between the walls 46, 48 of the guard.

A curved wall 52 may be provided to cover the front end of the space between the side walls 46, 48 and another wall 54 may be provided to cover the bottom of said space. Opening of the blades is limited by abutment of the blade 14 against the wall 54 and closing of the blades by abutment of the handles 36, 40 against one another.

It now will be clear that the only thing which can be cut with these scissors is a thin object like a sheet of paper or piece of cloth capable of being inserted into the space between the edges 50 of the guard side walls and the cutting edge 18 of the blade 12. Inasmuch as this space is much too small for a child's finger, the child cannot be cut despite the sharpness of the blades. Moreover, since both sides of the blade 14 are protected by the guard, the child cannot even nip himself as he easily could if only one side of said blade were guarded.

It will be observed that the tip of the blade 14 is permanently covered and that the tip of the blade 12 is very close to the guard 44. This arrangement serves to protect the user and other persons from being deeply jabbed with the tip of either blade and permits the tips to be pointed, if desired, without fear of causing severe injury.

Attention is directed to the fact that, despite the attachment of the plastic handles to the blades immediately in back of the pivot point, the scissors can make a cut longer than the blades with ease. This is due to the use of the angularly offset tangs which extend from the back edges of the blades and leave clear the space in back of the pivot point whereby to allow paper, etc., to be slid freely over said point after it is cut.

Another feature of the invention is the use of the curved washer 32 to provide a simple and inexpensive means at the pivot point which resiliently biases the blades together. In handling a pair of scissors, and particularly a pair of scissors having their blades bowed (as shown herein) in order to make a better cut, it is necessary for a user to press the handles toward one another in a direction parallel to the axis of relative rotation of the blades. This pressure is supplied automatically by adults and older children, due to ingrained habit. However, young children for whom these play scissors are specially designed have not had the benefit of experience and so do not supply the requisite type of pressure. Accordingly, they have considerable difficulty in cutting with conventional scissors; paper tends to slip between the blades rather than to be cut thereby. This difficulty better can be appreci-

ated by an adult if he tries to cut using a standard pair of scissors with his index finger in one of the handles and his middle finger in the other. Under such conditions the fingers no longer will automatically supply the proper axial pressure and the adult will have the same trouble as a young child in cutting a piece of paper.

However, the washer 32 remedies this difficulty by mechanically furnishing a pressure which biases the blades together axially of the axis of relative rotation of the blades so that, with the washer present, any child who only can open and close the blades can cut a sheet of paper easily.

To enhance the attractive appearance of the scissors, the handles and guard may be shaped so that the scissors simulates a pelican, with the guard resembling the bird's pouch, the blades the beak, the thumb handle the head and wings, and the finger handle the body.

It thus will be seen that there is provided a pair of scissors which accomplishes the several objects of my invention and is well adapted to be employed successfully on a commercial scale.

As various possible embodiments might be made of the above invention, and as various changes might be made in the embodiment above described, it is to be understood that all matters herein set forth, or shown in the accompanying drawings, is to be interpreted as illustrative and not in a limiting sense.

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

1. A pair of child's play scissors comprising two blades each of which includes an elongated operative portion having a cutting edge and a back edge, and a tang in back of the operative portion, means pivotally interconnecting said blades between the tangs and operative portions, and a different handle secured to each tang, one of said handles having a member immovably affixed thereto in non-overlapping relationship with respect to blade attached to that handle and to its cutting edge, said member constituting a guard for the other blade and including an edge disposed a short distance away from the cutting edge of the blade attached to that handle.

2. A pair of child's play scissors comprising two blades each of which includes an elongated operative portion having a cutting edge and a back edge, and a tang in back of the operative portion, means pivotally interconnecting said blades between the tangs and operative portions, and a different handle secured to each tang, one of said handles having a member immovably affixed thereto in non-overlapping relationship with respect to blade attached to that handle and to its cutting edge, said member constituting a guard for the other blade and including an edge disposed a short distance away from the cutting edge of the blade attached to that handle, said member comprising a pair of spaced walls between which the operative portion of the guarded blade swings.

3. A pair of child's play scissors comprising two blades each of which includes an elongated operative portion having a cutting edge and a back edge, and a tang in back of the operative portion, means pivotally interconnecting said blades between the tangs and operative portions, and a different handle secured to each tang, one of said handles having a member immovably affixed thereto in non-overlapping relationship with respect to the blade attached to that handle and to its cutting edge, said member constituting

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a guard for the other blade, said member comprising a pair of spaced walls between which the operative portion of the guarded blade swings, the upper edges of said walls being disposed a short distance away from and parallel to the cutting edge of the blade to which the member is secured.

4. A pair of child's play scissors comprising two blades each of which includes an elongated operative portion having a cutting edge and a back edge, and a tang in back of the operative portion, means pivotally interconnecting said blades between the tangs and operative portions, and a different handle secured to each tang, one of said handles having a member immovably affixed thereto in non-overlapping relationship with respect to the blade attached to that handle and to its cutting edge, said member constituting a guard for the other blade, said member comprising a pair of spaced walls between which the operative portion of the guarded blade swings, the upper edges of said walls being disposed a short distance away from and parallel to the cutting edge of the blade to which the member is secured and means bridging the lower edges of said spaced walls to prevent the guarded blade from leaving the member.

5. A pair of child's play scissors comprising two blades each of which includes an elongated operative portion having a cutting edge and a back edge, means pivotally interconnecting said blades, and a member immovably affixed to one of said blades in non-overlapping relationship with respect to that blade and its cutting edge, said member constituting a guard for the other blade and including an edge disposed a short distance away from the cutting edge of the blade to which it is attached.

6. A pair of child's play scissors comprising two blades each of which includes an elongated operative portion having a cutting edge and a back edge, means pivotally interconnecting said blades, and a member immovably affixed to one of said blades in non-overlapping relationship with respect to that blade and its cutting edge, said member constituting a guard for the other blade, said member comprising a pair of spaced walls between which the operative portion of the

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other blade swings, the upper edges of said walls being disposed a short distance away from the cutting edge of said one blade.

7. A pair of child's play scissors comprising two blades each of which includes an elongated operative portion having a cutting edge and a back edge, means pivotally interconnecting said blades, and a member immovably affixed to one of said blades in non-overlapping relationship with respect to that blade and its cutting edge, said member constituting a guard for the other blade, said member comprising a pair of spaced walls between which the operative portion of the other blade swings and means bridging the lower edges of said pair of walls to prevent the guarded blade from leaving the guard.

8. A pair of child's play scissors comprising two blades each of which includes an elongated operative portion having a cutting edge and a back edge, means pivotally interconnecting said blades, and a member immovably affixed to one of said blades in non-overlapping relationship with respect to that blade and its cutting edge, said member constituting a guard for the other blade, said member comprising a pair of spaced walls between which the operative portion of the other blade swings, a wall bridging the lower edges of said pair of walls, and another wall bridging the front edges of said pair of walls.

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