CHILDREN'S SCISSORS

Fred E. Ahlbin, Fairfield, Conn., assignor to John Ahlbin and Sons, Incorporated, Bridgeport, Conn., a corporation of Connecticut

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This invention relates to scissors and shears, and more particularly to children's scissors, and has for an object to provide scissors which will have handles or finger grips which are so located that when the scissors are used in an upright or a substantially vertical plane for cutting operations in a substantially horizontal sheet of material, the handles or finger grips, and therefore the hand and fingers of the operator, will be located below this sheet of material and therefore will in no way interfere with proper observation or complete visibility of the work, and particularly the location of the cutting operation.

Another object is to provide an improved construction for the scissors whereby a simple and effective form of metal blade may be used and mounted in handles or finger grips of molded plastic materials.

Another object is to provide a construction for scissors in which the handles and blades may be so shaped as to have the general outline and appearance of different animate objects, such, for example, as a bird, to increase their desirability or attractiveness for children.

With the foregoing and other objects in view, I have devised the construction illustrated in the accompanying drawing forming a part of this specification. It is, however, to be understood the invention is not limited to the specific details of construction and arrangement shown, but may embody various changes and modifications within the scope of the invention.

In this drawing:
Fig. 1 is a view showing a side view of one of these scissors and also showing it in use in cutting operations on a horizontal sheet of material, such, for example, as a sheet of paper or cloth or the like;
Fig. 2 is a longitudinal section through the blades and the pivoted portions of the handle on an enlarged scale;
Fig. 3 is a transverse section substantially on line 3—3 of Fig. 4;
Fig. 4 is a longitudinal section substantially on line 4—4 of Fig. 2;
Fig. 5 is a perspective view of the inner side of the head portions of one of the handles with the metal shearing blade removed and
Fig. 6 is a perspective view of one of the metal shearing blades.

The improved scissors, as shown, comprise a pair of pivoted overlapping members each comprising a metal shearing blade and a handle portion of molded plastic material. The two shearing blades 10 and 11 in the form shown are of the same construction and shape, although they could be of different shapes if desired, and they are formed of sheet metal of the desired gauge or thickness with cooperating shearing edges 12, and they are transversely concavo-convex with the concave side the inner side for proper clearance, and also to give a transversely rounded effect to the outer surfaces of the blades, and give them an appearance of greater thickness when lying side by side. Each of the blades includes an inner head portion 13 rounded at its inner end edge 14 with side edges 15 inclined to each other so as to converge somewhat from the opposite ends of the curved portion 14 into the projecting or shearing portion of the blade, so that the blades are also tapering or the sides converge toward its free end 16, which is preferably rounded for greater safety and less danger of injuring a child, for example, and also to give a certain appearance as will later be described. Each blade is also provided with a pair of rectangular openings 17 and 18 in the wider portion, and if desired the opening 17 may extend through the curved free edge 14. It is further provided with an opening 19 for the pivot pin 20 pivotally connecting the two blades.

As previously indicated, these two metal blades are each mounted in a handle or finger grip portion 21 and 22 respectively, and these handles or grip portions are preferably molded of suitable plastic materials, although other materials may be used if desired. These moldable plastic materials, however, may be molded of different shapes and colors and may be of light weight and strong, and because of their adaptability for different colors may be readily used to give different effects and appearance to the scissors. These handles each have a curved head portion 23 and 24 respectively, which are arranged in overlapping position and pivoted together by the pivot pin or rivet 20. The shearing blade 10 and 11 are mounted in these circular head portions, and for this purpose each of these portions is provided on its inner side with a recess facing laterally so that the two are facing each other in overlapped relation when these heads are pivoted together. Each recess is provided with a curved inner edge 26 corresponding to the curved edge 14 of the blade and side edges 27 leading from the opposite ends of this curved edge to the opposite peripheral edge 28 of the head, so that the recess opens through this peripheral edge, and these side edges 27 are inclined or converging to correspond with the side edges 15 of the blade. The head is also provided with lugs 29 and 30 in this recess, which seat in the openings 17 and 18 respectively of the blade when the inner larger end of the blade is seated in this recess. In this position the tapered portion of the blade projects from the head at the open side of the recess through the peripheral edge 28. This head is also provided with an opening 31 through this head for the pivot 20, and may also be provided with a counterbore 32 in its outward surface in which are seated washers 33 on the reduced necks 34 of the pivot and over which the opposite ends are headed or rolled over. The recesses are preferably the same depth as the thickness of the portion of the blades seated therein, so that their outer surfaces are flush. When the blade is seated in this recess the side edges of the recess and the lugs 29 and 30 seated in the openings in the blade will securely hold the blade against movement relative to the handle and will insure proper operation of the blade by operation of the finger grips.

As shown in Fig. 1 the handles or finger grips 21 and 22 are so located with respect to their respective blades 10 and 11 that they are at an angle to these blades less than an angle of 180 degrees, such that when the scissors are used in an upright or substantially vertical plane as indicated in Fig. 1, for shearing operations on a sheet of material 35 in a substantially horizontal plane as shown, these handles and their finger grips and therefore the hand and fingers of the operator, indicated in broken lines 36, are located below this sheet of material, and therefore there is an unobstructed and clear view of the top of this sheet of material being operated upon, and there is a clear view of the point of cutting 37. In other words, the handles and the hand of the operator are moved to a location below the sheet being operated on, so that they in no way obstruct the clear view of the point of cutting or the operation being performed on the sheet.
The handles and grips may be of different shapes but in the form shown they are given a novel outline and form to simulate generally the appearance of the body of an animated object, in this case a bird such, for example, as a penguin, which appearance is further carried out by the circular head portions 23, giving a general effect of the head of the penguin with the pivot 20 forming the eyes and the projected tapered cutting blades 10 and 11 giving the effect of the bill. These two handles or grip portions at the same time are so shaped as to improve the grip of the fingers to assist in properly and comfortably holding and operating the scissors in the upright position shown in Fig. 1. That is, the two handle portions 21 and 22 are located in substantially the same plane, and the forward handle 22 is longer than the rear handle 21. The handle 22 is widened at its lower end 38 and provided with a finger grip opening 39 of somewhat triangular shape with rounded corners, and at its forward edge it is concavely curved, as indicated at 40, to provide a seat for one of the fingers 41. This wider end portion is connected with the head portions 24 by a relatively narrow bar portion 42 which is curved so that it has a convex forward edge 43 and a concave rear edge 44, the convex forward edge 43 also providing a rest or grips for other fingers of the hand.

The rear handle 21 is somewhat wider and shorter than the forward handle 22 and is provided with an elongated or oblong thumb grip opening 45, with the forward edge 46 of the handle convexly curved similar and substantially corresponding to the concavely curved rear edge 44 of the forward handle so as to, in a general way, seat in this concave side of the forward handle when the two handles are together, to further give the general appearance of the body portion of the animate object, such, for example, as a bird. The angular relation of the handles to the tapered projecting blades 10 and 11 forming the beak of this object further enhances this effect.

From the above it will be understood this is a simple and effective construction whereby the cost of the scissors may be reduced, the only metal parts being the shearing blades and the pivotal connection, and the handles or finger grips may be formed of molded plastic materials, which, although having the required strength, is of light weight and may be readily molded in any number of different forms and colors desired for different appearances and effects. Also with this construction the blades may be readily and quickly assembled in the handles, and are so secured that there is no danger of their becoming loose or failing to be operated by operation of the handles. Also a material and important feature is that by the angular arrangement of the handles with the longitudinal center line or cutting edges of the blades the scissors can be readily used with the handle grips and therefore the hand of the operator below the sheet of material being operated upon, to thus in no way obstruct a clear view of the work and the point of shearing for the work operation.

Having thus set forth the nature of my invention, I claim:

In scissors of the character described, pivoted overlapping similarly shaped elongated tapered shearing blades having rounded smaller free ends, and handles secured to the blades, one to each blade, including finger grips located on the opposite side of the pivot from their respective blades each located below and at an angle to the longitudinal center line of its respective blade sufficiently less than one hundred eighty degrees that when the scissors are in an upright position with the blades substantially horizontal the handles and their finger grips are located below the horizontal line through the shearing point of the blades in substantially the same plane one forwardly of the other, the forward handle being longer than the rear handle and widened at its lower end provided with a finger grip opening, the forward edge of this handle opposite said opening being concavely curved to form a seat for another finger, this widened end portion being connected to its blade by a curved bar portion having a convexly curved forward edge and concavely curved rear edge, and the rear handle provided with a thumb grip opening and having a forward edge convexly curved similar to the rear edge of the forward handle.

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