

SPECIFICATION

Improvements in and relating to cutlery

This invention relates to cutlery and in particular cutlery for use by children or more generally people who are not used to using western-style cutlery.

A young child often finds it difficult to hold a knife or fork correctly. Furthermore, even if a young child is able to hold a knife or fork correctly, he seldom has sufficient muscle control to maintain the correct hold while applying pressure on the implement. The same may be true for an adult who is not used to western-style cutlery, e.g. someone who normally uses chopsticks. As a result such people find it difficult to use a knife and fork correctly and effectively. Existing children's cutlery is simply a scaled down version of full size cutlery; therefore it is an object of the invention to provide cutlery which is designed to enable the user to hold and use it correctly.

According to the invention there is provided a piece of cutlery comprising a handle, an operative portion such as a knife blade or fork prongs, and in the region where the handle and operative portion join, a recess in the upper surface of the handle centred on the longitudinal centre line, as viewed from above, of the piece of cutlery, that recess being of a size to accommodate and locate the tip of the index finger of the user's hand, and being of sufficient depth below at least the front and sides of the rim of the recess to prevent accidental displacement of the tip of the finger during normal usage of the piece of cutlery.

When such a piece of cutlery is used the child or other person can readily perceive the correct way to hold the piece of cutlery and he places his index finger in the recess. The walls around the recess prevent the index finger from slipping out of the recess when pressure is applied by the user through his index finger. The user is thus able to use the piece of cutlery so as to be able to exert good cutting or piercing pressure on the operative portion with the index finger and as a further advantage his resulting use will accord with generally accepted standards of politeness in the use of cutlery.

The shape and positioning of the recess in relation to the rest of the piece of cutlery are such that the user is in effect forced to use the recess for the tip of the index finger if this is placed on the top of the piece of cutlery since there is nowhere else where the tip of the finger can rest comfortably.

The recess may be formed by a simple indentation in the top surface of the handle and/or operative portion provided that indentation is deep enough to locate the index finger but preferably it is formed at least in part by providing a wall upstanding from the general line of the handle, the wall defining at least in part the recess within itself. The wall can extend completely or substantially completely around the recess or more preferably extends around the front and sides of the recess, e.g. the wall is of horse-shoe

shape, leaving the rear of the recess open so that the index finger be positioned comfortably along the top of the handle with the end entering the recess. Preferably, the wall is higher at the front than at the back of the recess and tapers or slope down in height from the front of the recess along the sides thereof.

The maximum depth of the recess from the highest part of the rim to the lowest part of the recess is chosen according to the use of the piece of cutlery. Thus, for use by a child, the recess need not be as deep, e.g. 4 to 10mm, as when the piece of cutlery is intended for use by an adult, e.g. 5 to 12mm. In general, therefore, this maximum depth ranges from 2 to 12mm and preferably is from 6 to 9mm, so that it is at least about one half the thickness of the index finger and is preferably as deep as the index finger is thick. In this way, the recess provides effective location of the finger tip so that it will not become displaced during normal usage.

The recess will normally be of generally oval shape when viewed from above so as to accommodate the tip of a child's index finger comfortably, the major axis of the oval being aligned with the longitudinal axis of the piece of cutlery as seen from above. The dimensions of this oval-shaped recess will be chosen to suit the size of the intended user's finger tip. Thus, for a child's usage the length along the major axis could range from 6 to 12mm and the length along the minor axis from 5 to 10mm, whilst for adult usage the length along the major axis could range from 10 to 20mm and along the minor axis from 10 to 18mm.

Often the recess may be wider, as seen from above, than for the adjacent portion of the handle. In such cases the handle preferably has an enlarged or bulbous portion adjacent the join between the handle and operative portion, the recess being provided in that enlarged portion.

In order to exert good cutting pressure on, for example, a knife blade, the tip of the index finger is desirably placed on about the longitudinal centre line, as viewed from above, of the knife or other item of cutlery, in a position on or close to the join between the handle and the knife blade or other operative portion. Accordingly, in a knife or other piece of cutlery according to the invention the centre of the recess is positioned on the longitudinal axis as viewed from above of the piece of cutlery and is preferably positioned over the join or between the handle and the operative portion. If the centre of the recess is not directly over this join, it is preferably displaced therefrom by an amount no greater than about one tenth of the length of the handle.

The invention can be applied to all types of cutlery but is particularly applicable to knives and forks since with those items, it is important to be able to apply good pressure on the knife blade or fork prongs. In addition, the cutlery of the invention can be made in ways similar to conventional cutlery from materials such as metals, e.g. stainless steel or stain and corrosion

resistant alloy, plastics materials or combinations thereof.

It is additionally desirable that the handle of a piece of cutlery according to the invention be shaped so that it can be held comfortably by the child. In addition, it is desirable that the shape of the handle be such that the user is encouraged to place the index finger tip in the recess. The handle preferably has a transverse cross-section which is smoothly rounded and without sharp or abrupt corners and a longitudinal cross-section which is of an elongated S-shape when viewed from the left-hand side, so as to fit snugly in the palm of a child's hand, the rear portion of the S-shaped being arranged to fit in the palm of the hand and the recess being provided at the end of the front portion of the S-shape, and the S-shape being such that with the rear portion in the palm of the hand the tip of the index finger then comfortably engages in the recess. In general the angle between the front and intermediate portions of the S-shape may range from about 100 to 140° and the angle between the intermediate and rear portions of the S-shape may range from about 150 to 160°.

An example of a child's knife according to the invention will now be described with reference to the accompanying drawings, in which:

Figure 1 is a perspective view of the knife;

Figure 2 is a side view of the knife; and

Figure 3 is a plan view of the knife.

The knife 10 shown in the drawing includes a handle 12 and a knife blade 14. On the top surface of the blade near the join between the handle and blade is an upstanding horse-shoe shaped wall 16 which at least in part defines a recess 18. The recess is substantially oval in shape as viewed from above and the major axis of the oval is approximately coincident with the longitudinal centre line of the handle as viewed from above. The dimensions of the recess in this example where a maximum length of approximately 15mm and a maximum width of approximately 13mm. The width of the recess is greater than the width of the front portion of the handle 12 and so as viewed from above, that front end of the handle is of an enlarged or bulbous shape.

The wall 16 is relatively high at the front and tapers down along the side walls to zero height at the rear of the side walls. The recess is therefore relatively deep at the front, in this example, the maximum depth of the recess from the highest part of the wall is about 9mm or, in other words, about three quarters of the thickness of an adult index finger and thicker than a child's finger. Therefore, as shown in broken lines in the drawing, the recess 18 is designed to accommodate the tip of a child's index finger 20.

This both provides a guide for holding the knife 10 for the most effective and polite usage and prevents accidental displacement of the tip of the finger during normal usage.

The handle 12 has a longitudinal shape which is rather like an elongate S when viewed from the left-hand side. It includes a front portion 12a adjacent the blade 14 which is curved downwardly relative the blade, an intermediate portion 12b which is curved upwardly slightly relative the blade and a rear portion 12c which is again curved downwardly relative the blade. These portions, 12a, 12b and 12c merge into one another by smooth curves. This shape comfortably fits the palm of a child's hand whilst the tip of his index finger 20 is in the recess 18, the thumb extends along the side of the handle and the other fingers grip around the handle.

CLAIMS

1. A piece of cutlery comprising a handle, an operative portion and, in the region where the handle and operative portion join, a recess in the upper surface of the handle centred on the longitudinal centre line, as viewed from above, of the piece of cutlery, that recess being of a size to accommodate and locate the tip of the index finger of the user's hand, and being of sufficient depth below at least the front and sides of the rim of the recess to prevent accidental displacement of the tip of the finger during normal usage of the piece of cutlery.

2. A piece of cutlery as claimed in Claim 1 in which the recess is at least in part defined by a wall or walls upstanding from the general line of the handle or handle and the operative portion.

3. A piece of cutlery as claimed in Claim 2 in which the recess is defined in part by a wall which extends around the front and sides of the recess and is higher at the front and tapers down in a rearward direction along the side walls.

4. A piece of cutlery as claimed in any preceding claim in which the maximum overall depth of the recess is from 2 to 12mm.

5. A piece of cutlery as claimed in any preceding claim in which the handle has an enlarged or bulbous portion, as viewed from above, at its end adjoining the operative portion and the recess is provided on that enlarged or bulbous portion.

6. A piece of cutlery as claimed in any preceding claim in which the handle has a longitudinal cross-section which is of an enlarged S-shape when viewed from the left-hand side.

7. A piece of cutlery substantially as herein described with reference to the accompanying drawings.



resistant alloy, plastics materials or combinations thereof.

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The wall 16 is relatively high at the front and tapers down along the side walls to zero height at the rear of the side walls. The recess is therefore relatively deep at the front, in this example, the maximum depth of the recess from the highest part of the wall is about 9mm or, in other words, about three quarters of the thickness of an adult index finger and thicker than a child's finger. Therefore, as shown in broken lines in the drawing, the recess 18 is designed to accommodate the tip of a child's index finger 20.

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2. A piece of cutlery as claimed in Claim 1 in which the recess is at least in part defined by a wall or walls upstanding from the general line of the handle or handle and the operative portion.
3. A piece of cutlery as claimed in Claim 2 in which the recess is defined in part by a wall which extends around the front and sides of the recess and is higher at the front and tapers down in a rearward direction along the side walls.
4. A piece of cutlery as claimed in any preceding claim in which the maximum overall depth of the recess is from 2 to 12mm.
5. A piece of cutlery as claimed in any preceding claim in which the handle has an enlarged or bulbous portion, as viewed from above, at its end adjoining the operative portion and the recess is provided on that enlarged or bulbous portion.
6. A piece of cutlery as claimed in any preceding claim in which the handle has a longitudinal cross-section which is of an enlarged S-shape when viewed from the left-hand side.
7. A piece of cutlery substantially as herein described with reference to the accompanying drawings.