The present invention relates to the class of eating utensils known as "chopsticks" which are widely used in the Orient.

The conventional chopsticks consist of a pair of separate, long slender sticks, usually of bamboo, which are held in the hand with one finger separating the sticks and serving as a spacer or separator, as well as a fulcrum. The other fingers of the hand are used to bring the lower ends of the two sticks together in such a manner as to clamp morsels of food between them. The average Oriental becomes skilled in the use of chopsticks at an early age, and has no difficulty in using them. However, for the unskilled person, which includes most Occidentals, the manipulation of chopsticks is extremely difficult.

The primary object of the present invention is to provide a new and improved form of chopsticks which can be manipulated with relative ease by even the most unskilled user.

Another object of the invention is to provide a pair of chopsticks which are spring-connected near their upper ends, and which are so contrived that their lower ends tend always to come together, instead of passing to one side of another, as is usually the case when chopsticks are manipulated by an unskilled user.

Still a further object of the invention is to provide a pair of chopsticks of the class described, which are simple to use, attractive in appearance, and inexpensive to manufacture.

The foregoing objects are achieved by use of a bowed lead spring of special configuration, which connects the two chopsticks together near their upper ends and tends to hold them apart at their lower ends. Thus, the user is freed of the task of holding the chopsticks apart, and also of providing fulcrums for the chopsticks. Another important function of said leaf spring is guiding the two chopsticks so that their relative movement with respect to one another is confined to a common plane, and therefore the free ends close against one another without requiring guidance on the part of the user.

Prior spring-connected chopsticks have attempted to solve the guidance problem by using stabilizing devices, which have not been entirely satisfactory. One such stabilizing device joins the free ends of the spring together, so that the spring forms a closed loop. This arrangement requires a considerably longer spring, and several forming operations in addition to the blanking step. Moreover, the ends of the spring must be joined together in a separate operation, and these joined-together ends are difficult to keep clean. Probably the most objectionable feature of the above-described prior chopsticks however, is the limited spread of the bottom ends of the chopsticks when they are fully opened, owing to the restrictive effect of joining the free ends of the spring together. These objections are completely overcome by the present invention.

The foregoing and other objects and advantages of the present invention will become apparent to those skilled in the art upon consideration of the following detailed description of the preferred embodiment of the same, referencing being had to the accompanying drawings, wherein:

FIGURE 1 is a side elevational view of a pair of spring-connected chopsticks embodying the principles of the invention;

FIGURE 2 is an enlarged sectional view, taken at 2-2 in FIGURE 1;

FIGURE 3 is an enlarged side elevational view of the connecting spring member, alone;

FIGURE 4 is a fragmentary sectional view, taken at 4-4 in FIGURE 1;

FIGURE 5 is a fragmentary elevational view, taken at 5-8 of FIGURE 1, and showing the tip end of one of the chopsticks;

FIGURE 6 is an elevational view of the flat blank, from which the spring member is formed; and

FIGURE 7 is a perspective view of the fully formed spring member.

In the drawings, the spring-connected chopsticks of the present invention are designated in their entirety by the reference numeral 10, and comprise a pair of long, slender sticks 11 and 12, which are connected together near their upper ends by a spring member 13.

The sticks 11 and 12 are approximately square in cross-section, with rounded edges, and taper gently from top end to bottom. The sticks 11, 12 are preferably molded of plastic, although they might be made of bamboo or other material. At their bottom ends, the sticks are bent back at a slight incline on their facing surfaces, to form tip end gripping faces 13, which are knurled, or otherwise roughened at 14 (FIGURE 5) to provide a better grip on any particle of food.

A short distance down from their top ends, the sticks 11 and 12 are formed with a shallow recess 15 around three sides, and seated in these recesses are square, box-like sleeves 16, which are formed at opposite ends of the spring member 13. The spring member 13 is preferably made of stainless steel sheet, that is first blanked out, as shown at 20 in FIGURE 6, and then folded and formed to the configuration shown in FIGURE 7.

The blank 20 is generally H-shaped, with parallel sided ends 21 and a transverse cross-piece 22 having outwardly bowed edges 23 and 24, so that the width of the cross-piece 22 is substantially greater at the midpoint than at the ends. The ratio of the width at the midpoint to the width at the ends of the cross-piece 22 is preferably of the order of 8 to 5, or more, and the width at the ends is approximately the same as the width of the sticks 11, 12. This ratio, while not absolutely critical, has been found to give the best results, from the standpoint of spring tension, resistance to twisting, and pleasing appearance.

When the blank 20 is formed into the completed spring member 13, the cross-piece 22 is bent into a smoothly arched center portion 25, the ends of which fair into the square sleeves to form the inner surface 30 thereof. The sleeves 16 are formed slightly smaller than the peripheral distance around the stick at the bottom of the recess 15, so that the sleeves exert a firm grip on the sticks. The sticks 11 and 12 are pushed down into their respective sleeves 16 until the sleeves seat in the recesses 15; the said sleeves being sprung open slightly by the tapered sticks just before they drop into the recesses. To remove the sticks from the spring member for cleaning, it is necessary only to twist the stick slightly, so as to spread the sleeve 16 enough to allow the shallow lip at the bottom edge of the recess 15 to pass through, and at the same time push upwardly on the stick.

In use, the chopsticks of the present invention are grasped in the hand, with one of the sticks held lightly between the thumb and middle finger, and the forefinger extending down along the other stick. The arch 25 of the spring is disposed above the natural arch of the hand between the thumb and forefinger, and is generally parallel thereto. As thus held, the weight of the sticks is perfectly distributed for good balance, and the levering action of the sticks is natural and easy. When the forefinger is moved
toward the thumb, the lower ends of the sticks are brought together, so that the gripping surfaces 13 are clamped against one another, in parallel relationship. The serrations 14 are shallow, and are surrounded by a smooth border to keep them from rubbing against the user's lips. With this feature, a single grain of rice may easily be picked up. Olives or other small rounded items with smooth outer surfaces can be gripped gently, but firmly, between the lower ends of the chopsticks, and will not slip out. Slippery foods, such as bamboo shoots, bean sprouts, beans and peas, egg noodles, mushrooms, water chestnuts, etc., which are prevalent in Oriental dishes, are also handled with ease.

The arch of the spring member 13, together with the increasing width of the cross member 22 at the midpoint thereof, provides a firm spring action tending to spread the bottom ends of the sticks apart, and also exerts a strong resistance to twisting, thereby resisting twisting, or crossing of the chopsticks. This resistance to twisting, or crossing of the chopsticks, is an important feature of the invention, and the chief difficulty encountered by most inexperienced users of chopsticks, is the tendency of the sticks to cross one another. The particular configuration of the connecting leaf spring eliminates this difficulty altogether, and enables an inexperienced user to handle the present chopsticks with a skill and dexterity that would ordinarily take years of practice to acquire.

While I have shown and described in considerable detail what I believe to be the preferred form of my invention, it will be understood by those skilled in the art that various changes may be made in the shape and arrangement of the several parts without departing from the broad scope of the invention as defined in the following claim.

I claim:

An eating implement comprising, in combination, a pair of chopsticks, and a connecting spring member joining said chopsticks together near their upper ends and yieldingly holding said chopsticks with their lower ends spread apart, said spring member being in the form of an arched leaf spring having a pair of sleeves at opposite ends thereof, said sleeves being disposed to receive and firmly grip said chopsticks, the ends of said leaf spring being of substantially the same width as said sleeves, said arched leaf spring having its side edges bowed outwardly between said sleeves so that the midportion thereof is at least one and one-half times the width of the ends, said widened center portion of said arched leaf spring providing a firm spring connection between said chopsticks having a stabilizing effect on said chopsticks tending to resist twisting and crossing of the chopsticks, and at the same time providing a wide angle of spread between the chopsticks.

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