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UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

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Link to Claims Section

March 8, 1966

Chop-stick hinge

INVENTOR: LEMAR DUNCAN NESBIT; JOSEPH RINES; RINES ROBERT H

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SUMMARY:

The present invention relates to hinges for chop sticks and the like The manipulation of chop sticks, particularly for the novice or infirm people, requires considerable skill in view of the fact that the sticks are entirely separate and must be coordinated in movement and alinement by adjacent fingers of one hand. The sticks are pivoted by the fingers to cause the lower ends thereof to come together in varying degrees to clamp food of different sizes and shapes therebetween, and then to be separated to enable the subsequent picking up of additional morsels.

An object of the present invention is to provide a new and improved hinge for facilitating such manipulation while insuring alinement Other objects will be more evident from the appended claims, the invention being described in connection with the accompanying drawing FIG. 1 of which is a perspective view of a preferred embodiment of the invention in the uncompressed position; and FIG. 2 is a similar view illustrating the compressed position of operation.

A pair of chop sticks is shown at 1, 3 having the customary respective thicker upper sections 1, 3, tapering or transitionally converting into thinner generally round lower sections 1", 3". The region of finger-pivoting is in the vicinity of about 30-40 percent of the length of the sticks from the lower ends, hereinafter generically termed "about one-third the length," where balance and maximum efficiency for pivoting the lower ends is attain-

In accordance with the invention, sleeves 2 and fitted over the lower ends of the sticks and are slid upward to the about one-third-length region T, with a resilient rounded substantiality C-shaped neck strip 6 interconnecting the inner adjacent upper ends of the sleeves.

The vertex of the neck 6 is positioned upward beyond the region T between the lower portions of the upper sections 1, 3". When the sticks 1, 3 are held between the fingers, FIG. 2, facile resilient hinged or pivotal manipulation can be readily effected, with the further advantage of palm concealment of the presence of the hinge structure 2-4-6, which is of interest to the novice.

In actual practice, it has been found that the resilient neck 6, as of steel, Phosphor bronze or other suitable metal or plastic spring material, should have its arms diverging at the region of attachment to the sleeves 2, 4, with a preferred acute angle 6Z of from about to degrees, more or less, to insure that the hand can conveniently grasp the sticks and that the upper ends of the sticks 1 and 3 preferably substantially touch in the unmpressed condition, as shown in FIG. 1, with the low- 60 2,997,328 er ends separated. This enables straight-line closing and opening action, insuring that the lower free ends mate, FIG. 2, when the fingers pivot the sticks together. The open-position chop stick angle should be of the order ost facile hand grasping and opera- 65 ,, TTCXTO/-.XT -7T> T T, tion, with the actual pivot point P lying within the neck 6, but above the region T, in the vicinity of the said approximate one-third length.

Q 1nca readily fabricated by rolling the legs of an H-shaped 4, with longitudinal slits 2, 4 enabling resilient fitting over stick sections 1", 3" of Alternativelyj the resiiient ne& g could gt wit]jin plastic or other sleeves 2, 4 to hold the same on the sticks. In all cases, however> i4 has been found that suPPrt by the sleeve fr m one another, as by a sleeve of about at least such length. A pair of connected spaced wire rings serving as a sleeve could also be used.

Not only may a novice readily employ chop sticks effectively from the very beginning, but practice with the system of FIGS- 1 and 2 win result in training the user m the proper movements that will enable ultimate future use of the sticks without the hinged device, if de-

Slred- Palslde or hand-deformed individuals, however, would find tile invention continually valuable.

H hand-concealment is not desired, the hinge 2-4-6 could be inserted and applied over the upper portions J > y Wlth the neck 6 depending below the sleeves 2, 4, though this is not so convenient as the construction of FIGS- 1 and 2- The pivot point P, however, would still be about one-third the length up from the bottom or lower ends of the sticks as in FIGS. 1 and 2. Further modifications will also occur to those skilled in the art and a11 such are considered to fall within the spirit and scope of the invention as defined in the appended claim.

ENGLISH-CLAIMS:
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What is claimed is:

A chop-stick assembly having, in combination with a pair of chop sticks provided with lower reduced-crosssection portions, a hinge device to enable the chop sticks to be pivoted in a plane including the sticks and the hinge device; the hinge Device comprising a pair of sleeves fitted over the said p0rtioris and interconnected by a resilient C-shaped neck extending upward beyond the sleeves between the sdckS; sleeves bdng positioned to place the are 40 Pivo Pt of the sticks substantially between and Percen of length of the sticks from the lower ends thef f wltV Plvot Pmt below the said neck, and the resilient tension of the said neck being sufficient to cause the lower ends of the sticks to remain in an Pen position when the neck is not compressed, with the as of the C-shaped neck diverging at their connection to the sleeves, and the sleeves providing support for the sticks over at least about one-half inch, said lower portions and said sleeves being of round cross-section with said sleeves fitted on said lower portions, said sticks having upper portions of rectangular cross-section the upper extremities of which engage each other when said neck is not compressed.

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