July 9, 1940. J. HILLSON 2,206,955

TABLE TENNIS NET-SUPPORTING DEVICE

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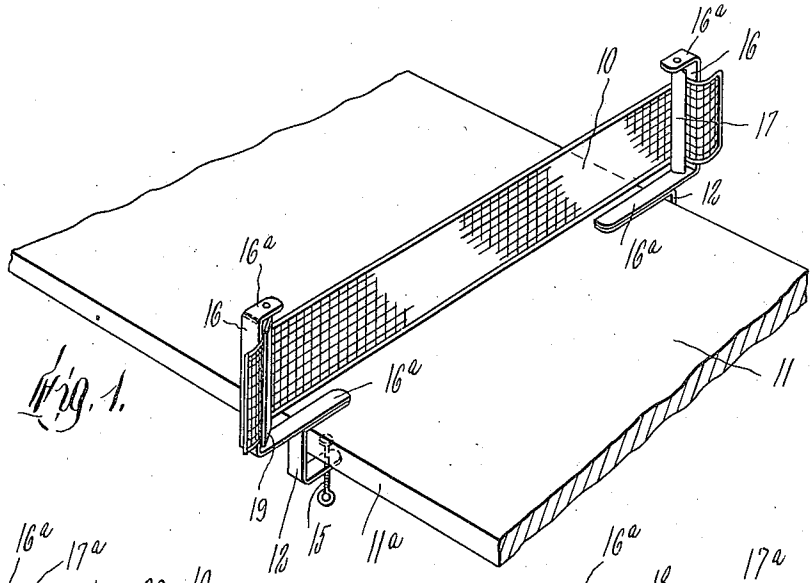



Fig. 1.

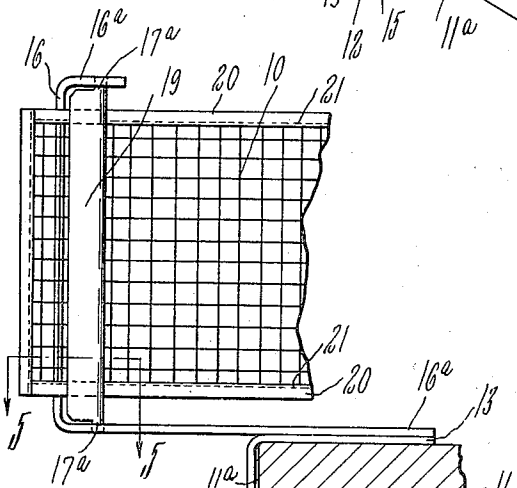



Fig. 2.

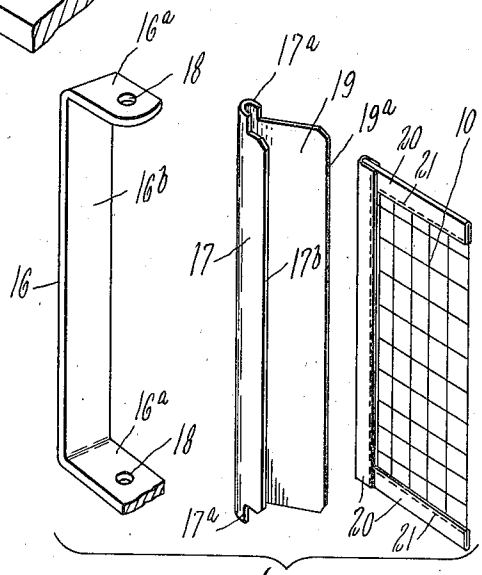



Fig. 3.

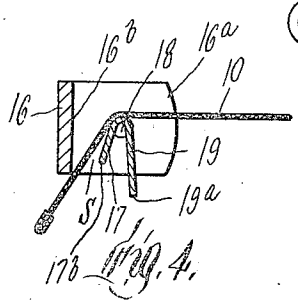



Fig. 4.

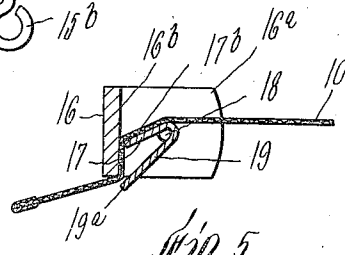



Fig. 5.

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## TABLE-TENNIS NET-SUPPORTING DEVICE

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2 Claims. (Cl. 273—30)

This invention relates to a table-tennis net support and more especially to a device equipped also with means for securement to the usual table on which the game is to be played.

The device of the present invention is characterized by its compactness, simplicity and economy of manufacture, and the ease and effectiveness with which it can be installed on a table to support a net in the desired taut condition. Such device is a unitary structure into which is built suitable table-fastening means and a net-supporting superstructure comprising a stationary, substantially vertical, flat bar having a height greater than the width of the net to be supported, arms extending transversely from the ends of such bar, a substantially vertical, flat bar swingably secured to such arms so that a vertical edge thereof can be brought into and out of substantial contact with the inner face of the stationary bar, whereby, when such bars are out of substantial contact, the end portion of a net may be inserted therebetween, whereupon the swingable bar may be swung until its vertical edge clamps the net tightly against the inner face of the stationary bar. It is preferable that a manually actuable member for swinging the swingable bar constitute an angular extension of such bar and be of a width such as to strike against the stationary bar when the vertical edge of the swingable bar makes substantial contact with the inner face of the swingable bar, thereby avoiding undue clamping pressure against the net such as might injure the net or the net-engaging edge and/or render difficult manual disengagement of such edge, as might be desired, should slack develop in the net or should occasion arise for the removal of the net or its transfer to another table.

With the foregoing and other features and objects in view, the present invention will now be described in further detail with particular reference to the accompanying drawing wherein;

Fig. 1 depicts in perspective a pair of devices installed in net-supporting positions on opposite sides of a table and each embodying the present invention.

Fig. 2 is a somewhat enlarged front elevation of one of the devices, only an end portion of the net being shown and the table being shown in section.

Fig. 3 depicts in perspective as disassembled elements the stationary bar, the swingable bar, and the end portion of a net to be clamped between the two bars.

Fig. 4 is a transverse section through the assembled bars on the line 5—5 of Fig. 2, the swingable bar being swung out of engagement with the stationary bar so as to permit the end portion of the net to be inserted therebetween.

Fig. 5 is a view similar to Fig. 4, but with the swingable bar swung into net-clamping position.

As illustrated in Fig. 1, it is generally desirable to use a pair of the net-supporting devices hereof in order to maintain the usual table-tennis net 10 in the desired taut condition above the playing table 11 shown largely broken away. Each device, which may be constructed entirely of steel or its equivalent and is shown installed at a side edge portion of the table, comprises suitable means for temporary or releasable securement to such table portion. Thus, such means may, as shown in Figs. 1 and 2, assume the form of a U-shaped frame 12, one leg 13 of which is adapted to rest on top of the table and the other leg 14 of which has threaded therethrough a screw element 15 for fastening to the table. The inner or upper end portion 15*a* of the screw element may be of enlarged cup shape or carry rotatably thereon a cup-shaped washer so as to engage firmly the under surface of the table, as best appears in Fig. 2, whereas the outer or lower end portion of the screw element may be of enlarged eye-shape 15*b* to permit easy grip and turning by the fingers. Before the frame 12 is fastened to the table, its base portion or bend may be brought against or made to abut the table side edge 11*a*.

The net-supporting superstructure of the device hereof comprises a substantially vertical, flat bar 16 having a height somewhat greater than the width or height of the net to be supported. Projecting transversely from the ends of the bar 16 are arms 16*a*, the lower one of which is secured, as by spot-welding, to the upper leg 13 of the frame 12. It is preferable, as shown, that the lower arm 16*a* be of sufficient length to reinforce the leg 13 throughout while at the same time substantially offsetting the vertical bar 16 outwardly from the base or bend of the U-shaped frame 12.

Swingably secured to the transversely extending arms 16*a* of the vertical bar 16 is a substantially vertical, flat bar 17, the end portions 17*a* of which may have a semi-tubular form for pivotal reception within suitable apertures 18 created through the arms 16*a*. It is desirable that the bar 17 be manually actuable by a member 19 constituting an angular extension of such bar. The swingable bar 17 is of such width and its pivots 17*a* are so located that, in the course of

being swung, its vertical edge 17*b* is brought into and out of substantial contact with the inner surface 16*a* of the stationary bar 16. The member 19 is preferably of such width greater than the bar 17 as to strike against and project beyond the edge of the bar 16 when the vertical edge 17*a* of the bar 17 has been brought into substantial contact with the inner face 16*b* of the stationary bar 16. The bar 17 and its angular extension 19 may be formed by a suitable swaging or bending operation from a single blank of appropriately precut steel. It is unnecessary that, as shown, the extension 19 be coextensive in length with the bar 17, but such coextensiveness makes possible the use of comparatively thin stock while avoiding distortion of the extension under such manual force as may be applied thereto.

When the swingable bar 17 has been actuated by the manually actuable member 19 so that its vertical edge 17*a* is out of contact with the inner face 16*b* of the stationary bar 16, as appears in Fig. 4, it is easy to insert or pass the end portion of the net 10 through the space or gap S between the bars. The member 19 may then be actuated to close the space S, that is, until its vertical edge portion 19*a* strikes against and is stopped by an edge of the stationary bar 16, at which time the clamping edge 17*a* has already served to clamp the net tightly against the bar 16. The vertical edge portion 19*a*, projecting as it does beyond the edge of the stationary bar 16 (as appears in Fig. 5), can be readily engaged by the thumb when it is desired to swing or push the swingable bar 17 so as to unclamp its vertical edge 17*b* from the net. After one end portion of a net has been clamped or fastened in position to a device hereof on one side of a table, the other end portion may be pulled taut and clamped in taut condition to another device hereof fastened to the opposite side of a table. However, it is possible to use the device hereof on one side of the table for tightening the net and supporting it at one end, whereas another type of device for merely supporting the net may be used on the other side of the table.

While not limited thereto, the device hereof operates best upon a net whose top and bottom marginal portions are of greatest thickness and are readily compressible with little, if any, likelihood of being cut. It is for this reason that such marginal portions, as well as the end marginal portions of the net 10, are shown as being lapped over on both sides by strip fabric or piping 20 whose two folds are united by a single line of stitches 21 near their inner edges. The desired firm clamping of the net is hence realized at its upper and lower seams 20 with practically no danger of cutting or weakening the comparatively hard threads or cords constituting the net proper.

In addition to presenting the advantages indicated, the net-supporting device hereof is always ready to be installed on a table, for all of its parts are permanently assembled and there is no need for the use of wrenches, screw drivers, or other tools in effecting the desired installation.

It is to be understood that the inventive principles hereof might be embodied in net-supporting devices other than the typical one specifically described and illustrated herein and that the appended claims should be construed as broadly as the prior art permits.

I claim:

1. In a unitary table-tennis net-supporting device equipped with means for securement to a table, a net-supporting superstructure comprising a stationary, substantially vertical, flat bar having a height greater than the width of the net to be supported, arms extending transversely from the ends of said bar, and a substantially vertical, flat bar whose end portions are pivotally received in said arms and which is thereby swingably secured to said arms so that a vertical edge thereof can be brought into and out of substantial contact with the inner face of said stationary bar, whereby, when such bars are out of substantial contact, the end portion of a net may be inserted therebetween, whereupon said swingable bar may be swung until said vertical edge thereof has clamped the net tightly against the inner face of said stationary bar.

2. In a unitary table-tennis net-supporting device equipped with means for securement to a table, a net-supporting superstructure comprising a stationary, substantially vertical, flat bar having a height greater than the width of the net to be supported, arms extending transversely from the ends of said bar, a substantially vertical, flat bar whose end portions are pivotally received in said arms and which is thereby swingably secured to said arms so that a vertical edge thereof can be brought into and out of substantial contact with the inner face of said stationary bar, and a manually actuable member by which said swingable bar may be caused to swing, said member constituting an angular extension of said swingable bar and being of a width to strike against said stationary bar when said vertical edge of said swingable bar has been brought into substantial contact with the inner face of said stationary bar, whereby, when such bars are out of substantial contact, the end portion of a net may be inserted therebetween, whereupon said swingable bar may be swung by actuation of said member until said member strikes against said stationary bar and said vertical edge of said swingable bar hence clamps the net tightly against the inner face of said stationary bar.

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