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TABLE NET BRACKET

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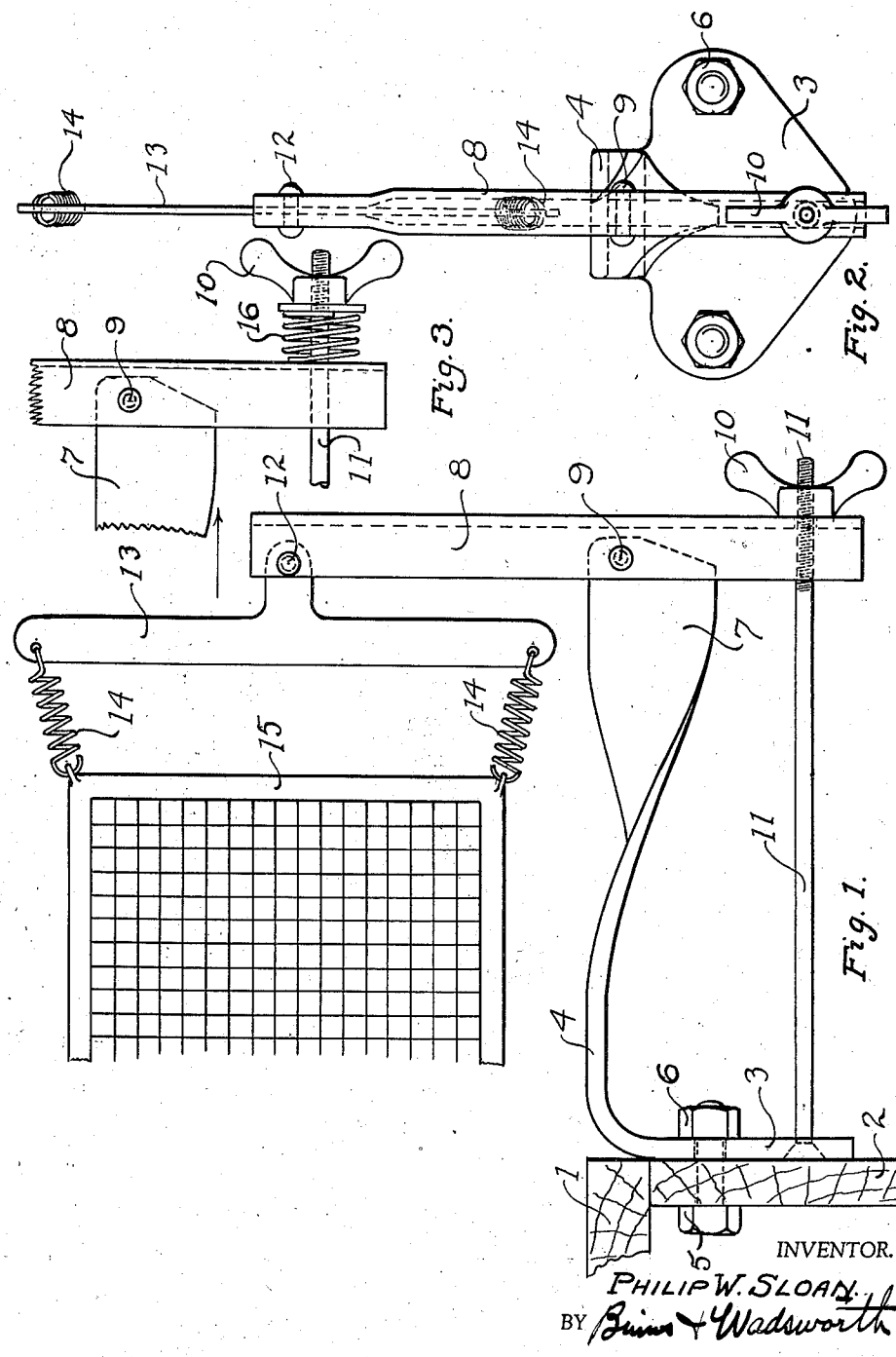

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TABLE-NET BRACKET

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9 Claims. (Cl. 273—30)

This invention relates to net-suspending brackets applicable to "indoor tennis" and "ping-pong" tables and has for its principal objects provision of adjusting means for varying the net-tension at will, provision of means for insuring equalization of tension throughout the net, provision of means for preventing accidental tearing of net by suspending it resiliently, and provision of means for maintaining "squareness" of net and keeping uniform the height of upper and lower edges of net above the table, to each side of which a net-supporting bracket is attached.

Another object of the invention is to provide simple means for stiffening the table, the bracket being attached, by screw, bolt, or other suitable means, to each of the two table sections, which are thus more rigidly brought together.

Of the accompanying drawing showing the construction and application of my table-net bracket,

Figure 1 is a side elevation indicating how one of the two brackets required to support the net is applied to one side of the table;

Fig. 2 is an end elevation indicating how two screws or bolts passing through an opening on each side of and equidistant from the median vertical plane of the bracket draw the brackets against the table and thus tend to stiffen it where the two sections come together; and

Fig. 3 is a fragmentary side elevation indicating how resiliency of support to prevent accidental tearing of net may be obtained by means of the compression spring 16 as well as by the springs 14 connecting the net to equalizing bar ends.

Referring to Fig. 1, a fragment of the top member of a two-section table is indicated by the numeral 1, the top member being attached to a side member 2 to which the depending portion 3 of the horizontally-projecting stationary metal member 4 of the net-supporting bracket is fastened by bolts 5 passing therethrough, one on each side of the vertical mid plane of the bracket, which is held rigidly to both table sections by nuts 6. Bracket number 4 is twisted to make its outer end 7 stand vertically, in order that it may lie between the sides of the U-shaped upstanding member 8 swingably attached thereto by a headed pivot pin 9, the fulcrum below which channel member 8 extends and upon which it swings whenever the net tension is adjusted by turning the wing or thumb nut 10 on the threaded end of the adjustment rod 11, which passes loosely through member 8 near its lower end and is nonmovably seated in the depending portion 3 of the horizontally-disposed bracket member 4, as shown.

The lower corner of the outer end of the stationary element 4 is cut away, as indicated, to eliminate interference that otherwise would restrict movement of the swingable upstanding channel member 8 in the tension-increasing direction indicated by the arrow placed above it.

Near its upper end part 8 is drilled to receive a pivot-pin 12 passing through and supporting the swingable tension-equalizing bar 13 carrying at its ends springs 14 to which the upper and lower corners of the net 15 are attached, as shown, the springs being equidistant from the point of pivotal support of equalizing bar and angularly positioned to insure a spreading pull that keeps face of net flat and free from wrinkles or pockets, the tension throughout the net being kept uniform by movement of the equalizing bars, which swing simultaneously in absorbing any stress tending to disturb the height and parallelism of upper and lower edges of the net, against which a contacting ball reacts with a force depending largely on the net tension, which may be changed easily and quickly to suit the wishes of the players by turning the adjusting thumb nut of one bracket or of both.

When the wing nut 10 is turned in a loosening or tension-decreasing (anti-clockwise) direction, movement of the upright member 8 is correspondingly reversed because of the tension on the springs applied at the four corners of the net or because of the reaction of compression springs applied in the manner indicated by Fig. 3, which shows a method of securing resiliency of net support slightly different from that shown by Figs. 1 and 2, which illustrate the application of tension springs at net corners. If desired the four tension springs 14 may be replaced by compression springs 16 on tension rods 11 between the upright members 8 and the wing nuts 10.

Having described my invention with a degree of clarity sufficient to enable persons skilled in the art to which it relates to understand and make application of it,

I claim:—

1. A table-net supporting structure comprising a horizontally-disposed stationary fulcrum member having a depending inner end attachable to table and platform sides, a vertically-disposed swingable tension-transmitting member pivotally attached to the outer end of said stationary fulcrum member, a tension rod anchored at one end in said depending portion of the horizontally-disposed stationary fulcrum member, said rod being threaded at the other end and passing loosely through an aperture in said vertically-disposed tension-transmitting member close to the lower end thereof, a thumb nut on said tension rod and contacting said swingable tension-transmitting member to move its lower end inwardly and its upper end outwardly when turned in clockwise direction to increase tension on net, a second vertically-disposed swingable member pivotally attached to the first mentioned swingable member and serving as an equalizing bar

through which net tension stress is uniformly distributed, and coiled springs connecting the upper and lower ends of said equalizing bar to the correspondingly-positioned corners of the net, at each end thereof, thus providing a resilient type of support tending to prevent accidental tearing of net.

2. A table-net support comprising a stationary member attachable to a table, a vertically-disposed member pivotally attached to said stationary member near its outer end, a tension rod suitably anchored at one end, the other and threaded end passing loosely through an aperture in said vertically-disposed member, near its lower end, a wing nut on said tension rod and in contact with said member for moving its lower end inwardly and its upper end outwardly to increase tension on net when nut is turned in clockwise direction, a second vertically-disposed member pivotally attached to the first-mentioned vertical member and serving as an equalizing bar for distributing net tension uniformly, and coiled tension springs connecting the upper and lower ends of said equalizing bar to corners at end of net to provide resiliency of support and thereby prevent accidental tearing of net.

3. A tension-adjusting and equalizing support for table nets comprising a stationary member attachable by any suitable means to adjoining sections of a table to stiffen same, an oscillatable upright member pivotally attached to said stationary member, means for actuating said oscillatable member to vary net tension comprising a wing nut bearing on said member to a point below its pivotal attachment to said stationary member, said wing nut being carried by a threaded and suitably anchored tension rod passing loosely through an opening near the lower end of said upright member, an equalizing bar of a length greater than net width pivotally attached at mid section to upper end of said oscillatable upright member, means connecting corners of net to upper and lower ends of said equalizing bar, and on said tension rod a compression spring interposed between said wing nut and said upright member to insure resiliency of net support under variable tension.

4. A device providing resilient and variable-tension support for "indoor-tennis" and "ping-pong" table nets and comprising a stationary fulcrum member attachable to table, an upright member attached to said stationary member in oscillatable relation thereto, adjusting means associated with said members whereby tension on net may be varied at will by turning of wing nut in contact with lower end of said upright member, an equalizing bar pivotally attached at mid section to said upright member near its upper end, and angularly disposed tension springs connecting the upper and lower corners of net to corresponding ends of said equalizing bar.

5. A tension-equalizing table-net support comprising a stationary fulcrum member, an oscillatable tension-transmitting upright member attached thereto at pivotal fulcrum point thereof, an equalizing bar pivotally attached to said upright member near its upper end, means for attaching upper and lower corners of net to corresponding ends of said equalizing bar, a threaded tension-adjusting rod supported by said stationary member and passing loosely through lower end of said oscillatable upright member, a tension-adjusting wing nut on said tension rod, and on the latter, between said wing nut and said oscillatable upright member, a spring providing resiliency of support for net.

6. A resilient table-net supporting and tension-adjusting structure comprising a stationary support and table stiffening member attachable to adjoining sections of table by suitable means, an oscillatable upright fulcrum member pivotally attached at fulcrum point to said stationary member, means for oscillating said upright member to vary tension on net, said means consisting of a suitably anchored threaded tension rod passing through said upright member and carrying a wing nut bearing on the lower end thereof, turning of said wing nut serving to vary net-tension, a stress-equalizing bar wider than the net and pivotally attached at its mid section to said upright member near the upper end thereof and serving to preserve parallelism of edges of net with top of table and maintain uniform height thereabove, and coiled tension springs attached to upper and lower ends of said equalizing bar and serving as a shock-absorbing means of connecting ends of net thereto to prevent accidental tearing of net.

7. A net-supporting bracket attachable to a table by suitable holding means and carrying an upstanding pivotally-attached element to which a tension equalizing bar of greater width than the net supported is swingably attached midway between its ends, tension springs serving as a means of connection between net and ends of said tension-equalizing bar, and means whereby the tension on said springs and stress on the net may be increased or decreased gradually at will without greatly changing either endwise positioning or level of net, said springs providing sufficient resiliency of support to prevent accidental tearing of net.

8. A table-net support comprising a horizontally-disposed stationary member constituting a bracket attachable to a table by suitable holding means, a vertically-disposed member extending below the point of its pivotal attachment to said bracket, a second vertically-disposed tension-equalizing member pivotally attached at point midway between its ends to the similarly-disposed member first mentioned, tension springs connecting corners of net at ends thereof to said tension-equalizing member to provide protective resiliency of support for net, and means for moving both of said vertically-disposed members simultaneously to vary tension on net, said means comprising a suitably-anchored tension rod passing loosely through first-mentioned vertically-disposed member, and, on threaded end of said tension rod, a wing nut contacting said member to move lower end thereof inward towards table and upper and outward when wing nut is turned in clockwise direction to increase net tension, turning of wing nut in opposite anti-clockwise direction decreasing net tension.

9. In a device of the class described, a bracket for attachment to a table, a substantially vertical member pivoted to said bracket, a net, a vertically extending net support rockably mounted on said member, and means for adjustably swinging said member on its pivot to move said support towards and from said table.

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