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J. R. SCHERER

2,073,182

TENNIS NET

Filed Aug. 26, 1935

FIG. 1.

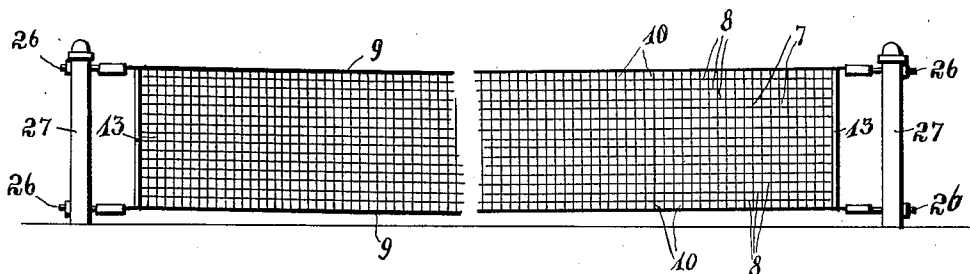


FIG. 2.

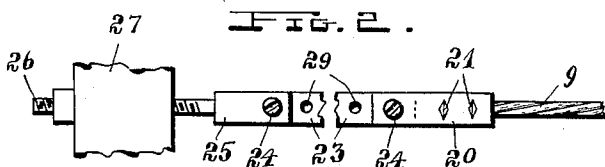


FIG. 3.

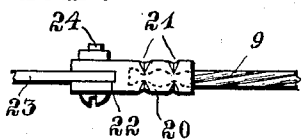


FIG. 4.

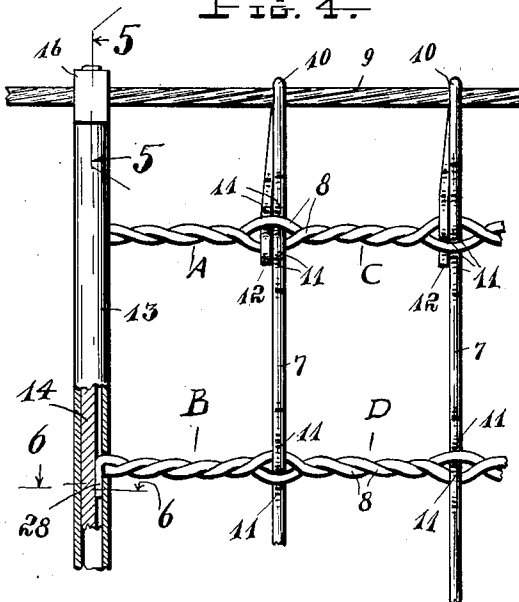


FIG. 5.

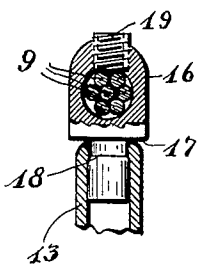
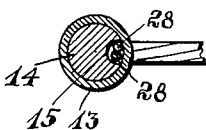


FIG. 6.



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UNITED STATES PATENT OFFICE

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TENNIS NET

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5 Claims. (Cl. 273-29)

This invention relates to a tennis net made of metal in a peculiar manner.

One of the objects of this invention is to provide a resilient, flexible, durable, simple, economic, safe, attractive, and noiseless net with as clear a visibility as possible.

Another object is to provide a net that is easily installed, dismounted and reset, and lending itself readily for compact storing.

Another object is to provide a net that will not injure a tennis ball to any consequential extent.

Other objects will appear from the following description and appended claims as well as from the accompanying drawing, in which—

Fig. 1 is a fragmentary front elevation of an assembled tennis net embodying the features of my invention.

Fig. 2 is a fragmentary detail front elevation of the top edge connection.

Fig. 3 is a fragmentary top view of a member of the top edge connection.

Fig. 4 is a fragmentary front elevation of a portion of the net and upright end member.

Fig. 5 is a vertical section through the upright end member on line 5-5 of Fig. 4.

Fig. 6 is a horizontal section through the end member on line 6-6 of Fig. 4.

To overcome the principal objections to metal tennis nets, which reside largely in the fact that different members of the net are not sufficiently interlocked resulting in offending noise, the net of the present invention is produced in a very specific and particular manner.

In the net proper, of which a portion is illustrated in detail in Fig. 4, the verticals 7 are made of tempered steel spring wire, hot galvanized and of sufficient rigidity to withstand the impact of driven balls and other forces to which such a net is subjected in ordinary usage; while the horizontal member 8 are of annealed steel wires, hot galvanized and selected for high tensile strength, and evenly twisted alternately left and right between the verticals. From the illustration in Fig. 4 it is obvious that portion or section A is clearly twisted contrary to the twisting of the nearest or adjoining sections B or C; as is also section C twisted contrary to A or D; and also section D is twisted contrary to sections B or C.

This arrangement assures satisfactory results along the lines indicated above and as principally required and desired.

The tension of the spring-steel verticals 7 readily yields to any eventual slightest untwisting motion or action of any of such sections when

the net as a whole is momentarily dented by any impact, but just as readily tends to return such section into proper condition, thereby maintaining the whole net in perfect tight and noiseless condition.

The alternating twisting furthermore tends to eliminate any one-sided warping of the whole net, and the functioning of the spring-steel verticals helps to maintain the net as a whole in perfect alignment.

Along the upper and lower edges of the whole net suitably strong cables 9 are arranged so that the upper and lower ends 10 of the verticals 7 can be secured, the verticals 7 being bent over as illustrated in Fig. 4, and the terminations 12 are crimped in between the twisted horizontals 6 as indicated at 11, the directions of the crimpings being varied according to the alternations of the twistings of the horizontals, to thereby form a rigidly interconnected and intermeshed network.

Upright end members 13 serve to secure and stretch the horizontals 6, the members 13 being hollow to receive a wedge 14 by which the ends of the horizontals are bent and secured in the members 13, as indicated at 23, the wedge 14 being provided with a longitudinal groove 15 that allows a driving of the wedge 14 into the hollow members 13 so as to force the ends 28 of the horizontals into bent positions, securely locked in the end members 13.

The wedge or core 14 may be of any suitable material, such as metal or hardwood.

At the top and bottom end, each of the end-members 13 is closed by a closing member or knob 16, illustrated in detail in Fig. 5, each knob being off-set or shouldered as at 17, against which the ends of the end-members 13 abut, and grooved as at 18, by which the hollow end members are secured to the knobs as illustrated.

A set screw 19 is provided to anchor the knob 16 and thereby the end-members 13 in proper positions on the cables 9, the whole net being preferably prestretched before delivery or installation and the set screw secured in place after such prestretching, to eliminate stretching after a net is installed.

For tightening the cables 9, a lug 20 is provided on each end of the cables, the lug being hollowed to fit snugly on the cable-end, and, after the cable-end is inserted into the hollow of the lug, impressions are made as at 21, distorting the inserted cable, as indicated in dotted lines, making a reliable connection.

The opposite end of the lug 20 is slotted to re-

ceive a connecting link 23, link and lug being apertured for the bolt 24.

Another lug 25 is also designed to similarly engage the opposite end of the link 23, besides being designed to hold one end of the adjusting bolt 26, the adjusting bolt serving to adjustably hold the whole net to the standard, of which there is one on each end of the complete structure, two cables being connected to each of the standards.

When so mounted, a net may be adjusted for any desired or required sag or droop, from the extreme to a comparatively level line.

For longitudinal adjustments, the link 23 is provided with perforations 29, so that it merely requires a shortening or cutting off of the ends of the links to allow an inserting of the bolts 24 in the next holes.

Having thus described my invention, I claim:—

1. In a tennis net, horizontal and end edge members, upright members stretched between upper and lower horizontal edge members and uniformly spaced between end edge members, horizontal members stretched between end edge members and uniformly spaced between the upper and lower edge members, the end members being hollow and having apertures to receive the ends of the horizontal members, and means inserted into the edge members and designed for bending and locking the ends in the end edge members.

2. A tennis net consisting of intermeshed and crossing groups of soft twisted wire and tempered spring steel wire for maintaining the group of twisted wire in properly wound condition, the spring steel wire group being bent at points of intermeshing with the twisted wire group for maintaining an evenly meshed spaced relation, and the soft wire being twisted alternately left and right with loop-portions between the twisted por-

tions designed and formed to firmly engage the bent-portions of the spring steel wire so as to maintain a parallelogrammatically spaced network with resiliency due to the spring wire.

3. In a tennis net, longitudinally stretched upper and lower edge members, end members secured to and braced between said edge members, wires stretched between and with their opposite ends bent over the edge members, other wires secured to and stretched between the end members and twisted alternately left and right between the first-named wires and the end members and having portions engaging over the first-named wires, the said ends of the first-named wires extending into said portions of the twisted wires next to said edge members so as to form sufficiently large loops about said upper and lower edge member providing for desirable lateral yielding and sliding of the whole network of said wires on the edge members.

4. In a tennis net, a network of wires having connecting and supporting terminals at the opposite ends of the network, hollow uprights having apertures in one side spaced to correspond to the spacing of wires in the network to receive said terminals, and a locking member for each of said uprights and designed to fit into the hollow thereof and having means whereby said terminals can be bent and locked within the uprights.

5. In a tennis net, a network of wires having connecting and supporting terminals at the opposite ends, hollow uprights having apertures arranged to receive said terminals, and locking members grooved longitudinally and fitting into the hollow of the uprights for bending and locking the terminals therein.

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