C. L. BATES.

COMBINED RACKET COVERING AND PRESS.

APPLICATION FILED OCT. 27, 1913.

1,197,332.

Patented Sept. 5, 1916.

2 SHEETS—SHEET 1.

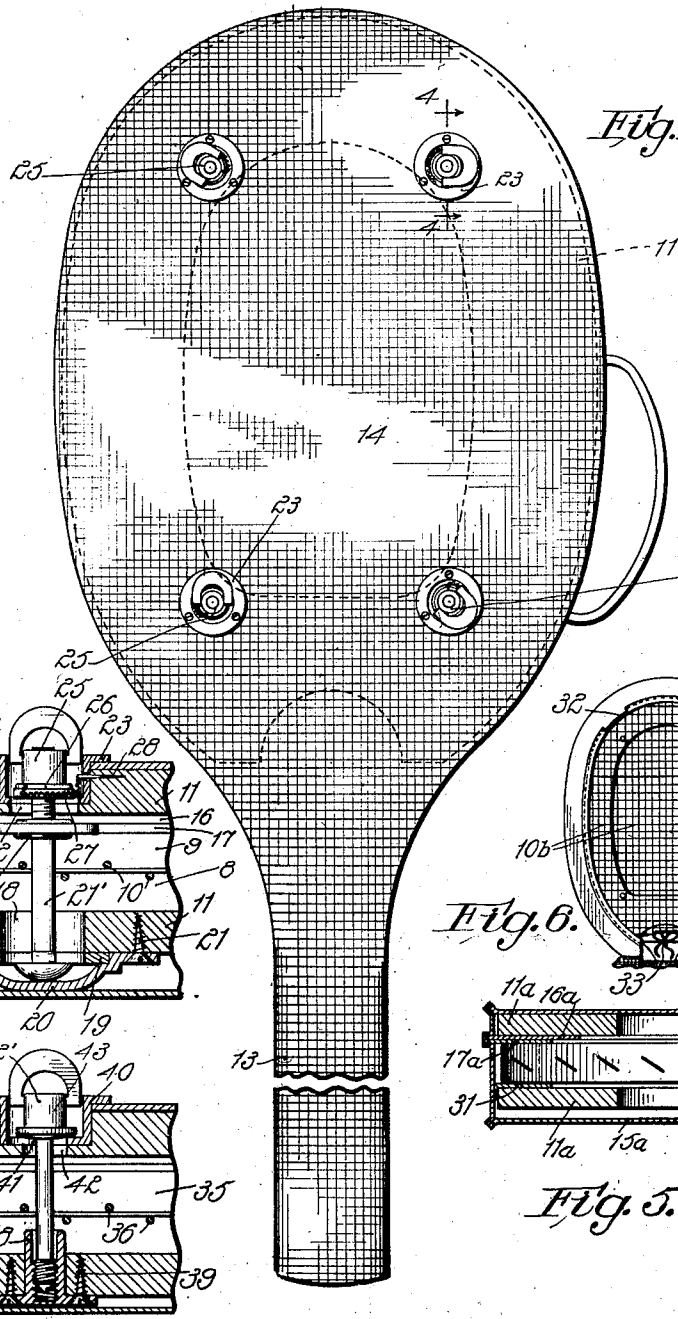


Fig. 1.

Fig. 4.

Fig. 7.

Fig. 6.

Fig. 5.

Witnesses:

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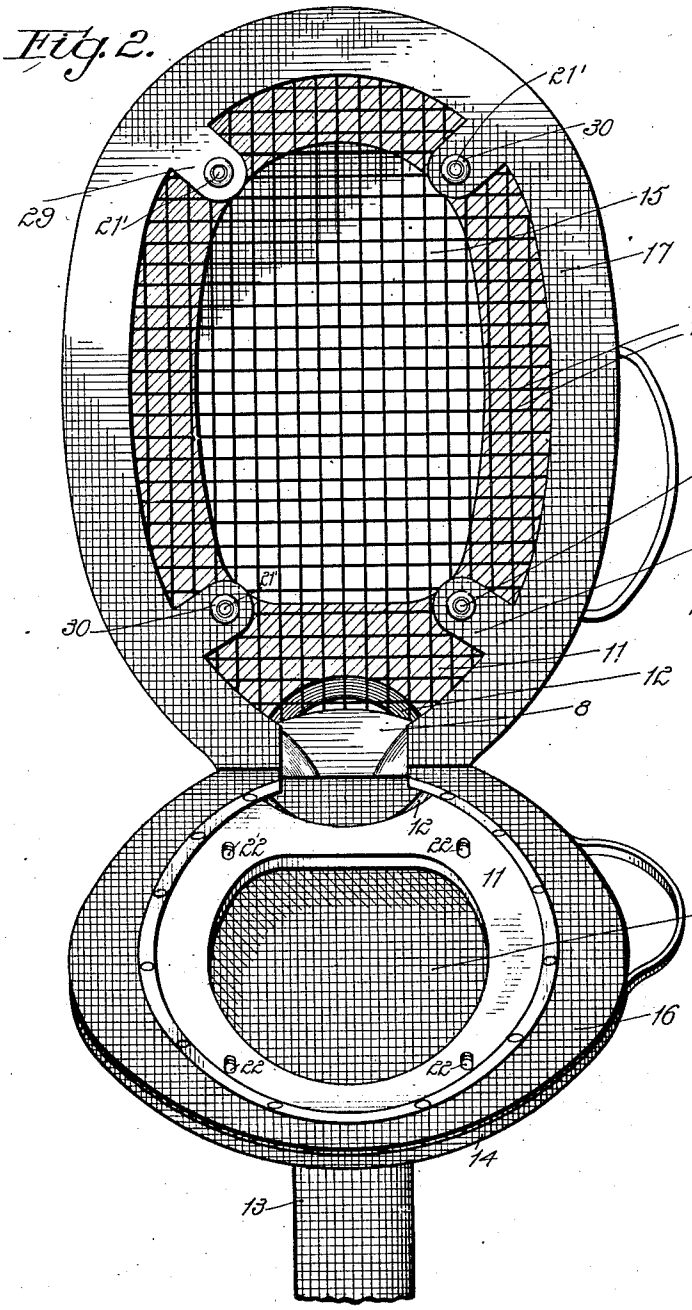
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2 SHEETS—SHEET 2.

Fig. 2.



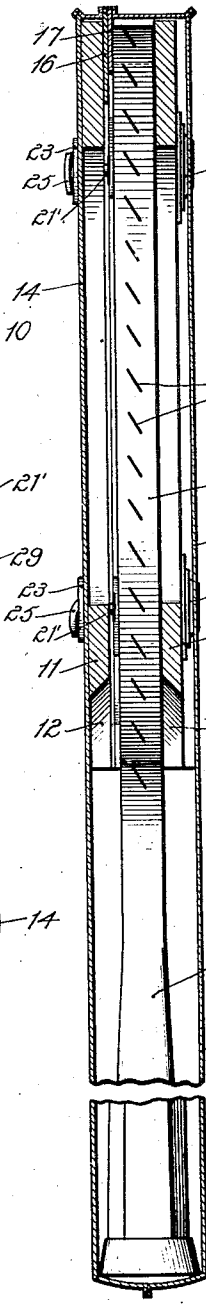


Fig. 3.

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UNITED STATES PATENT OFFICE.

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COMBINED RACKET COVERING AND PRESS.

1,197,332. Specification of Letters Patent. Patented Sept. 5, 1916.

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To all whom it may concern:

Be it known that I, CHARLES L. BATES, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Combined Racket Coverings and Presses, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to an improved press and cover for tennis rackets, and its object is to provide a device comprising a clamping arrangement whereby a tennis racket frame may be prevented from warping and a moisture-proof covering to prevent the guts strung upon the racket from being affected by atmospheric changes. I find that if the press alone is used, the guts are subjected to atmospheric changes and are apt to become loose or broken, due to these atmospheric changes. If, on the other hand, a moisture-proof cover alone were used, the guts are not likely to break, but the frame is likely to be warped out of plane.

It is the object of my invention, therefore, to provide a thoroughly satisfactory and efficient press and cover combined in a single device.

My invention will be more readily understood by referring to the accompanying drawings, in which—

Figure 1 is an elevational view of the device of my invention; Fig. 2 is a similar view illustrating the same in unclamped position; Fig. 3 is a longitudinal sectional view of the device of my invention; Fig. 4 is a fragmentary sectional view taken on the line 4—4 of Fig. 1; Fig. 5 is a fragmentary sectional view of a slightly modified arrangement taken through the clamping frames and covering on a line substantially normal to the axis of the tennis racket handle; Fig. 6 illustrates a slightly modified arrangement for retaining one of the clamping frames within its individual cover; and Fig. 7 is a view similar to Fig. 4 illustrating a slightly modified arrangement.

Similar characters of reference refer to similar parts throughout the several views.

Referring first to Figs. 1 to 4, inclusive, I have illustrated a tennis racket of the usual type comprising a frame 8, handle 9, and guts 10 strung upon said frame. The combined press and cover of my invention comprises a pair of clamping frames 11 designed to lie one on each side of the racket gut frame. While I prefer to make these clamping frames of wood, they may of course be made of any suitable material without departing from the spirit of my invention. These clamping frames 11 are substantially similar in conformation to the frame 8 of the racket. As is clearly shown in Figs. 1 and 2, each of the clamping frames 11 has a portion thereof cut away at 12, to provide an opening through which the handle of the racket may be inserted when the two parts of the press are opened, as shown in Fig. 2. I also provide a covering of canvas, khaki, or other moisture-proof material, said covering comprising a receptacle 13 for the handle of a tennis racket, and portions 14 and 15 forming pockets for the clamping frames 11. As is clearly shown in Fig. 3, the portion 14 of the covering comprises a strip of material 16 arranged to lie between the adjacent clamping frames 11 and the racket gut frame. The portion 15 of the covering also comprises a strip of material 17 arranged to lie between the strip 16 and the gut frame of the racket so that when a stress is exerted upon the clamping frames tending to draw them together by means of suitable devices to be hereinafter described, a tight moisture-proof joint is formed between the racket gut frame and the clamping frame which bears against the strip 16.

As is most clearly illustrated in Fig. 4, there is formed in one of the clamping frames 11 a plurality of openings 18, each of which registers with a corresponding opening in a plate 19 held in position by a cap 20 in turn retained in position by the screws 21. Adjustably mounted in each of the plates 19 and retained in position by the adjacent cap 20 is a bolt 21′ which projects inwardly through the slot 18 and is arranged to project through an elongated slot 22 in the opposite clamping frame 11, which elongated slot 22 registers with a corresponding slot in the bottom of a cup 23, which cup comprises a flange 24 which clamps the portion 14 of the covering to its inclosed clamping frame 11. Threaded upon each of the bolts 21′ is a wing nut 25. The lower portion of the nut is, of course, of greater diameter than the width of the slot 22. Disposed around each of the wing nuts 25 is a loose ring 26 to which is attached one end of a chain 27

having its other end leading to a pin 28 projecting through the cup 23 in which the wing nut is disposed and embedded in the clamping frame 11 which supports the cup, thereby preventing the loss of the nuts when unscrewed. Attention is directed to the fact that the bolts 21′ are arranged to extend between the guts strung upon the racket frame and that, owing to the manner in which the bolts are mounted in the lower one of the clamping frames 11, it is possible readily to adjust the press to any size racket or to differences in the position of the guts with which various rackets may be strung. Owing to the slots 22 in the upper one of the clamping frames, it is possible to find the openings for the several bolts much easier than would be the case if merely circular holes were provided in the upper clamping frame 11.

The strip 17 of the portion 15 of the covering is provided with a plurality of inwardly-projecting tongues or tabs 29, each of which is provided with an eyelet 30 arranged to fit over one of the bolts 21′. The tabs 29 are provided to retain the strip 17 in proper position when the frames 11 are clamped upon the frame of a racket.

When a racket is to be inserted in the moisture-proof covering and between the clamping frames 11 the device is in the position illustrated in Fig. 2 of the drawings, and the racket handle is inserted in the receptacle 13. The frame of the racket is then positioned against the adjacent clamping frame 11 with the bolts carried by said clamping frame projecting through the guts strung upon the racket frame. The strip 17 of the cover portion 15 is then pulled over the edge of the racket to assume the position shown in Fig. 2, the eyelets of the tabs 29 being slipped over the ends of the bolts as shown. The other clamping frame 11 is then moved so as to rest against the racket frame and the bolts 21 are permitted to slip into the slots 22 in this last-mentioned clamping frame. All that remains to be done is to screw the nuts 25 on the bolts 21′, whereupon the clamping frames are drawn toward each other, thus clamping the racket frame between said clamping frames and forming a tight joint between the racket frame and the clamping frame disposed in the portion 14 of the moisture-proof covering. The strip 16 of the portion 14 of the covering is secured to the adjacent clamping member 11 by means of suitable tape and tacks or other suitable means, as shown. Suitable handles are preferably attached to the portions 14 and 15 of the moisture-proof covering in order that the combined covering and press and a racket disposed therein may be easily carried.

In Fig. 5 of the drawings I have applied the same reference numbers to the parts as are applied to the corresponding parts in Figs. 1 to 4, inclusive, and in addition have associated the letter "a" with each of the reference numerals. The only essential difference between the arrangement illustrated in Fig. 5 and the arrangement illustrated in Figs. 1 to 4, inclusive, is the fact that the portion 15^a comprises a strip 31 arranged to lie between the racket frame and the lower one of the clamping frames 11^a in addition to the strip 17^a which lies between the racket frame and the other one of the clamping frames 11^a.

Fig. 6 shows a modified arrangement for drawing the strip 17 over the upper side of the racket frame when the racket is inserted within the press. In the arrangement of Fig. 6, I dispense with the tabs 29 and the eyelets 30 and substitute a strip of fabric 16^b sewed to the edge of the strip 17^b to form a pocket through which the drawstring 32 may be threaded. After the handle of the racket has been thrust into the portion 13 of the cover, the strip 17^b may be pulled over the edge of the frame, whereupon the draw-string 32 is tightened and knotted as at 33 to hold the strip 17^b firmly in position over the upper side of the racket frame, as shown in Fig. 6.

In Fig. 7 I have illustrated a modified arrangement for clamping the frames 11 upon the gut frame of the racket. In this view the racket frame is illustrated at 35 and the guts at 36. The clamping frames disposed on opposite sides of the racket frame are shown at 37, 37 and with the clamping members 37 is associated a moisture-proof covering similar to the covering illustrated in the preceding figures. Associated with the one of the clamping frames 37 which, for convenience, I shall refer to as the lower clamping frame, is a plurality of internally threaded members 38, each retained in position by screws 39 extending through a flange with which said member is provided. The upper clamping frame 37 is provided with a plurality of cups 40 and in each of these cups is an opening 41 arranged to register with an opening 42 in the upper clamping frame 37 by which the cup is supported. Projecting down through the opening in the lower end of each of the cups 40 is a bolt 42′ provided with threads at its lower end arranged to engage the internal threads of one of the members 38 supported by the lower clamping frame 37. The bolts 42′ are provided with enlarged portions 43 within the cups and suitable wings are provided for operating the bolts. The bolts are inserted through the enlarged portions of the openings 41 in the cups 40 before the cups are secured in final position. After the cups have been secured in final position, the threads at the lower ends of the bolts prevent the bolts from being

withdrawn through the openings in the lower portions of the cups because the enlarged portions of the openings in the cups are closed by the upper clamping frame 37 supporting the cups 40.

While I have described my invention as intended for use in clamping and protecting tennis rackets, it should be borne in mind that my device may be used in connection with rackets of all kinds, whether they be tennis rackets or not.

While I have illustrated my invention in the particular embodiments herein shown and described, I wish to claim broadly any equivalent constructions that may suggest themselves to those skilled in the art.

What I claim as new and desire to secure by Letters Patent of the United States is:

1. In a device of the class described, a receptacle for a racket handle, a pair of clamping frame covers attached to said receptacle, a pair of clamping frames one disposed in each of said clamping frame covers, each of said clamping frames having substantially the conformation of the gut frame of a racket, devices for drawing said clamping frames together to clamp the gut frame of a racket therebetween and means carried by one of the covers arranged to project inwardly between the racket and one of the clamping frames to form a tight joint when the clamping frames are drawn together.

2. In a device of the class described, a pair of connected clamping frame covers, a pair of clamping frames one disposed in each of said clamping frame covers, each of said clamping frames having substantially the conformation of the gut frame of a racket, devices for drawing said clamping frames together to clamp the gut frame of a racket therebetween and means carried by one of the covers arranged to project inwardly between the racket and one of the clamping frames to form a tight joint when the clamping frames are drawn together.

3. In combination, a pair of moisture-tight clamping frame covers, a clamping frame disposed in each of said covers, each of said clamping frames having substantially the conformation of the gut frame of a racket, and devices for drawing said clamping frames together to clamp the frame of a racket therebetween, each of said covers comprising a portion arranged to project into the space between its associated clamping frame and the racket to form a tight joint when the clamping frames are drawn together.

4. In combination, a pair of clamping frame covers, a clamping frame disposed in each of said covers, each of said clamping frames having substantially the conformation of a racket gut frame but wider than the racket frame, a plurality of bolts supported by one of said clamping frames arranged to project between the guts of a racket and through apertures in the other clamping frame near the inner edge thereof, and nuts threaded upon said bolts adapted to draw said clamping frames toward each other to clamp the gut frame of a racket therebetween.

5. In combination, a pair of clamping frame covers, a clamping frame disposed in each of said covers, each of said clamping frames having substantially the conformation of a racket gut frame but wider than the racket frame, a plurality of bolts supported by one of said clamping frames arranged to project between the guts of a racket and through apertures in the other clamping frame near the inner edge thereof, and nuts threaded upon said bolts adapted to draw said clamping frames toward each other to clamp the gut frame of a racket therebetween, each of said clamping frame covers arranged to project into the space between its associated clamping frame and the racket frame to form a tight joint when the clamping frames are drawn toward each other.

6. In a device of the class described, a receptacle for a racket handle, a pair of clamping frame covers carried with said handle receptacle, a clamping frame disposed in each of said clamping frame covers, and devices for drawing said clamping frames toward each other to clamp the gut frame of a racket disposed therebetween, each of said clamping frame covers comprising a portion arranged to project into the space between its associated clamping frame and the tennis racket to form a moisture-proof joint when said clamping frames are drawn toward each other.

7. In combination, a pair of connected clamping frame covers, a clamping frame disposed in each of said clamping frame covers, a plurality of bolts connected with one of said clamping frames adapted to pass between the guts of a racket frame and through apertures in the other clamping frame, nuts threaded upon said bolts whereby the clamping frames and covers may be drawn toward each other to clamp a racket gut frame therebetween, one of said clamping frame covers comprising a portion adapted to project into the space between its associated clamping frame and the racket frame, a plurality of tongues carried by said last-mentioned portion of one of the clamping frame covers, and an aperture in each of said tongues through which one of said bolts is adapted to pass.

8. In combination, a covering comprising a receptacle for the handle of a racket and a pair of clamping frame pockets, a clamping frame disposed in each of said pockets,

a plurality of bolts carried by one of said frames arranged to pass between the guts strung on a racket frame, nuts arranged to engage said bolts to draw the clamping frames toward each other to clamp the racket gut frame disposed between said clamping frames, said bolts being adjustable with respect to their supporting clamping frame.

9. A device of the class described comprising a pair of clamping frames, a pair of connected covers for said clamping frames, each of said clamping frames having substantially the conformation of a racket gut frame, bolts carried by one frame arranged to pass between the guts of a racket frame disposed between said clamping frames, and a plurality of nuts adapted to engage said bolts to draw said clamping frames toward each other to clamp a racket frame therebetween, said bolts being adjustable with respect to their supporting clamping frame.

10. In combination, a cover comprising a receptacle for a racket handle and a pair of clamping frame pockets, a clamping frame disposed in each of said pockets, each of said clamping frames having substantially the conformation of a racket gut frame, a plurality of bolts carried by one of said clamping frames arranged to pass between the guts of a racket frame disposed between said clamping frames and through elongated openings in the other clamping frame, together with nuts threaded upon said bolts arranged to draw the clamping frames together to clamp a racket frame therebetween, each of said clamping frame pockets comprising a portion adapted to project into the space between its associated clamping frame and the racket to form a tight joint when the clamping frames are drawn toward each other.

11. A device of the class described comprising a moisture-proof covering, a clamping device within the covering arranged to press evenly upon opposite faces of an inclosed racket frame to prevent warping of the same and means carried by the covering arranged to project inwardly between the racket and the clamping device to form a tight joint when the clamping frames are drawn together.

12. A combined racket case and press comprising a pair of clamping frames arranged to lie on opposite sides of a racket gut frame, means for drawing the clamping frames one toward the other to clamp the racket gut frame therebetween, and covers for said clamping frames provided with means arranged to project in between the clamping frames and the gut frame.

13. In a device of the class described the combination with a pair of clamping frames arranged to lie on opposite sides of a racket gut frame, mechanism for drawing the clamping frames one toward the other to clamp the racket gut frame therebetween, and a pair of connected covers, one for each of said clamping frames, each cover provided with a marginal portion arranged to project in between its associated clamping frame and the racket gut frame.

In witness whereof, I hereunto subscribe my name this 24th day of October, A. D., 1913.

CHARLES L. BATES.

Witnesses:
A. G. McCaleb,
Albin C. Ahlberg.