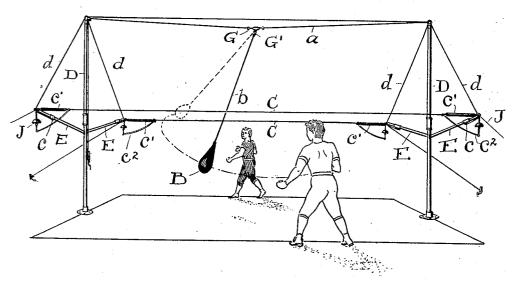
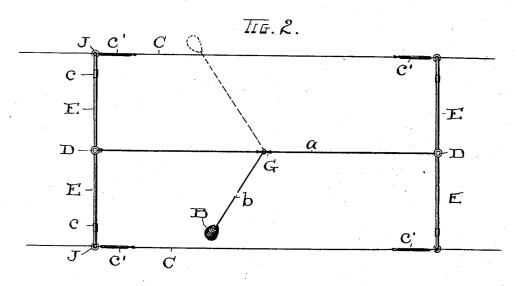
F. E. SPINK. BALL GAME APPARATUS. APPLICATION FILED JAN. 7, 1904.

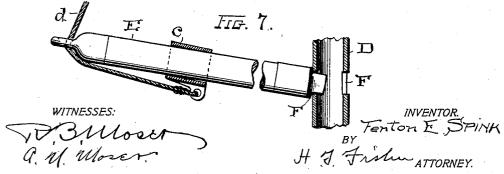
NO MODEL.

2 SHEETS-SHEET 1.





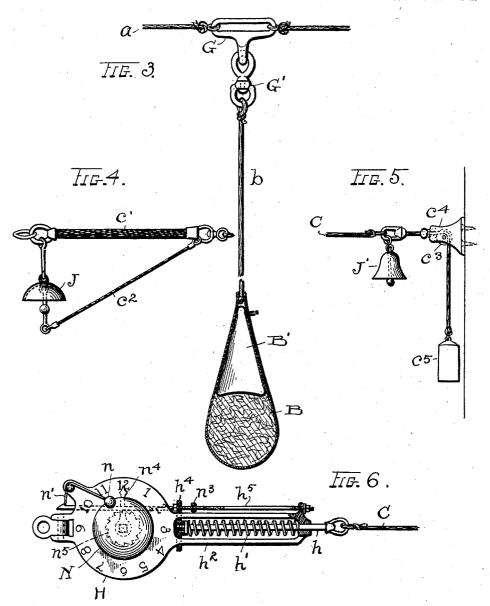




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NO MODEL.

2 SHEETS-SHEET 2.



WITNESSES:

Vo 3 Moss

a. n. Moer

ATTORNEY.

UNITED STATES PATENT OFFICE.

FENTON E. SPINK, OF CLEVELAND, OHIO.

BALL-GAME APPARATUS.

SPECIFICATION forming part of Letters Patent No. 773,167, dated October 25, 1904.

Application filed January 7, 1904. Serial No. 188,028. (No model.)

To all whom it may concern:

Be it known that I, Fenton E. Spink, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of 5 Ohio, have invented certain neward useful Improvements in Ball-Game Apparatus; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it ap-10 pertains to make and use the same.

My invention relates to ball games; and the invention consists in a game in which there is a suspended ball and a tally member or guard line or rope stretched along each side of the 15 field, adapted to be engaged by the ball under a movement from the hand by one of the players, thereby scoring a point in the game against the side whose line has been thus en-The length of the suspensory cord gaged. for the ball and the corresponding size of the field will depend largely on the space one may have for erecting the game, and the game may be played in the home, in gymnasiums, or out of doors, and while it is designed, chiefly, for 25 two players there may be two or more on each side. Ordinarily for out-of-door games the field is, say, about fifteen by thirty in area by fifteen feet high.

In the accompanying drawings, Figure 1 is 30 a perspective view of the game with two players on the field, and Fig. 2 is a plan view of the game. Figs. 3 to 6, inclusive, are enlarged details and modifications of parts of the game. Thus Fig. 3 is a side view of the link-and-35 swivel connection and suspensory cord for the ball with the ball in section at its lower end. Fig. 4 shows one of the elastic tension sections which form a part of each long guardline constituting the sides of the game. Fig. 40 5 is a modification in which a counterweight

substitutes the elastic section in Fig. 4. Fig. 6 is a further modification having a recordingdial and a spiral spring and plunger connected with the side line, as hereinafter fully de-45 scribed. Fig. 7 is an enlarged detail of one of

the guard-line-supporting arms and its adjusting connections.

As thus shown, the game comprises a playball B, with which all the playing is done. 50 The said ball may have any reasonable size

and weight, dependent on the place of its use and the persons who are to play with it. Ordinarily in out-of-door or gymnasium work for adults the ball may be from six to ten inches in diameter and twenty to twenty-six 55 inches in length and from two to six or more pounds in weight. There is no special limit for either size or weight, and for children it should be proportionately smaller and lighter than for adults, and it is intended to be pushed 60 or swung rather than to be struck with the fist, as in the case of a punch-bag. It is too heavy and may be too hard to be struck with either an open or a closed hand. Therefore the ball is not struck a blow, but is given a 65 swinging movement by pushing it with a quick action toward the opposite guard-line C, and this is done so as to be sure and strike the line either by the ball itself or by the cord b, by which it is suspended. On the opposite side 70 the player is intent on not permitting his line C to be struck or moved by the ball, because every actual appreciable touch of the ball or cord delivered thereon counts a point against him, and this extends to accidental striking of 75 his line by himself. Within the upper or coneshaped half of the ball I prefer to use an inflatable bladder B', of rubber or the like, and in the lower half a stuffing or filling of cotton or similar material. Of course the person 80 serving the ball will always endeavor to send it to a portion of the line farthest from the opposite player and where he will find it the most difficult to intercept or reach before the line is hit, and this requires the utmost vigi- 85 lance and diligence in the player and affords opportunity for either moderate or violent exercise, according to the spirit in which the playing is conducted.

The means or framework for erecting the 90 game may be considerably varied; but the simple construction shown employs two sectional end poles D, set, say, twenty-five feet apart for open-court work, upon which are side arms E of a length equal to half the 95 width of the field, or about eight to thirteen feet long each. These arms are shown here as socketed in slot F in lower pole D and free therein to permit removal and adjustability of said arms, which adjustment is had at their 100

outer ends to raise or lower the same by means of guy-rope d and ring or clamp e on arms E. The poles D are strong and stiff and secured in an upright position in any practical way, 5 according to where they are erected, and for either indoor or outdoor purposes they may have guy-ropes or other suitable stays in one or more directions.

As here shown, the cord or rope b, carrying 10 the ball, is suspended midway between poles C from a rope or cable a, connecting the top ends of said poles, and the said cable preferably has a link G, in which is loosely connected a swiveled snap-hook G', to the revolv-

15 ing portion of which the cord b is attached. The guard or tally lines C are stretched between the ends of opposite arms E at an elevation above the heads of players, and ball B may swing at about two feet, more or less, 20 from the ground or floor. In playing the ball may be given any direction or movement that will carry it beneath or over the opposite line, and it may strike the line on the outgoing or the return passage or not at all, 25 as the case may be. At any rate it is each player's first business to see that his own line is not struck by the ball or cord at any-time and that his opponent's line is struck as frequently as possible. Now owing chiefly to 30 the weight of the ball and the taut or tightlystretched conditions of the guard-lines it is necessary to have a yielding or flexible portion or section in the line which will so far surrender when the line is struck that the 35 tension of the line will not be excessively tried and that the ball will not be forced into such sharp reaction thereby as to cause it to whirl and wind around the line. Instead of this it is much better to have the line yield or 40 surrender in the direction of the travel of the ball under elastic resistance in the line, and thereby avoid its wrapping around the line.

Then, again, if the ball be thrown over the line so as to be caught thereby the player can 45 reach up and grasp the line and pull it down to free the ball rather than lift the ball bodily to get it across, as a rigid line would require. Hence these lines are each provided with one or more flexible or yielding portions or sec-50 tions c', while the said line otherwise may be

simply a piece of rope or heavy twine or the like or a special manufacture for this purpose. In Fig. 2 I show a flexible portion c'at each end, which may be of rubber, a wire-55 spring coil, or any equivalent, and in Fig. 4

I show a presumably rubber section e' with a limiting-cord c2 and a bell J in this connection, so that if the guard or tally line be noticeably moved the bell will be rung and in-60 dicate that a point has been scored.

A modification of the spring c' is shown in Fig. 5, where a counterweight c^5 is shown as attached to one end of line C, running over sheave c^3 in a bracket c^4 , presumably attached

65 to a suitable upright.

In Fig. 6 line C is connected with a plungerrod h, encircled by a spiral spring h', held in a skeleton frame h^2 , forming an extension of the circular dial frame or support H. The said spring h' is the equivalent of spring e' 70 above, and a keeper h^{4} on the end of plunger-rod h slides on frame h^{2} and actuates a longitudinally-slidable rod h^5 , which is adapted to tilt the bell-clapper n, pivoted by its stem n'on dial H. At its outer extremity the said 75 stem is engaged by the notched end of said sliding rod h^5 . An adjustable nut n^3 on rod h^5 fixes the limit of idle movement of plunger h before actuating rod h^5 . A pointer or finger n^4 on said dial is actuated through a ratchet- 80 wheel n^5 on the rear of the dial, which is engaged by a tooth on rod h^5 . Thus both the bell N is rung and the points are recorded at the same time as tension comes on a guard or tally line, and plunger h is actuated. In 85 this instance a record of the points scored is automatically kept, and a clockwork recording mechanism may be used. In the other cases the ringing of a bell denotes a point made.

Arms E are preferably made adjustable to permit lowering or raising of the guard or tally lines to accommodate different heights in players or varying planes in the surface or The structure as a whole is also pref- 95

erably of a knockdown character.

With the use of a bladder B' within the upper end of ball B, I find that the danger from the use of a heavy ball is practically eliminated. Furthermore, greater skill is required 100 by the players in delivering the ball and in checking it from striking the tally or guard Thus if the ball is delivered or caught at its lower or filled end a perfect control of the same is had, but if it becaught or struck 105 at its upper end a surrender or yield in the ball itself, due to the inflated bladder-backing, and which can be made more or less according to the degree of inflation, lessens the force of the blow.

Limiting-cord c^2 guards against an undue pull or strain upon flexible connections c' and limits the stretch of line C when pulled or

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forced out of a straight line.

What I claim is-1. In a game apparatus a ball, a suspensory support for the ball, a yielding guardline at one side of said support stretched at an elevation permitting players to stand and move about beneath the same and adapted to be 120 struck by the ball as it is played across the field, substantially as described.

2. A ball-game apparatus consisting of a pair of guard-lines stretched at an elevation permitting players to stand beneath the same, 125 and a ball and suspensory support centrally between said lines, whereby the ball is adapted to swing and strike either line, substantially as described.

3. The game apparatus comprising a set of 130

guard-lines and supports between which said lines are stretched, said lines each having a yielding end connection, and a swinging ball between said lines, substantially as described.

4. In a ball-game apparatus having a defined playing-field, a pair of guard-lines constituting the sides of the field and stretched at an elevation above the heads of the players, said lines each having a yielding connection, and a ball suspended centrally between said lines and at a level beneath the lines, and means connected with each line to indicate when the ball strikes the line, substantially as described.

5. In a game apparatus a ball, a suspensory support for the ball, a tally-line at one side of said support adapted to be struck by the ball, and a yielding supporting connection for said tally-line adapted to relieve the strain upon said line when struck by the ball, substantially

20 as described.

6. A game apparatus comprising a ball and a suspensory support therefor, a flexible guardline adapted to be engaged by said ball and to yield when thus engaged, and a bell connected with said guard-line to audibly signal the engagement between ball and line, substantially as described.

7. A game apparatus comprising a ball and a suspensory support therefor, and a flexible
30 guard-line adapted to be yieldingly engaged by said ball, in combination with tally means operatively connected with said line, substan-

tially as described.

8. The combination of a ball and a suspen-35 sory support therefor, with a guard-line adapted to be engaged by said ball, flexible connections for said line, and a check to limit the pull upon said connections, substantially as described.

9. The combination of a suspended ball free to swing, with guard-lines adapted to be engaged by said ball, and means to adjust and fix said guard-lines at different elevations above the heads of the players, substantially

45 as described.

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10. The combination of a ball and a suspensory support therefor, with a set of tally members adapted to be engaged by said ball, supports for said tally members, and means to adjust said tally members separately in respect to the play of the ball, substantially as described.

11. In a game apparatus, a swinging ball and tally-lines at each side thereof adapted to be engaged thereby, and a support for said 55 ball and lines comprising a set of standards provided with adjustable arms for said tally-lines, and a central connection between the standards for said swinging ball, substantially as described.

12. In a game apparatus, a swinging ball and tally-lines at each side thereof adapted to be engaged thereby, and a support for said ball and lines comprising a set of standards, arms adjustably mounted on said standards 65 and guy-ropes and clamps to raise or lower said arms, and a cross connection between said standards to support said ball, substantially as described.

13. In a game apparatus, a free-swinging 70 ball and tally-lines adapted to be engaged thereby, a support for said lines comprising standards with side arms mounted thereon, means to adjust said arms to a higher or lower plane at their outer ends, a flexible connection 75 between said arms and tally-lines, and a tally-signaling device operatively connected with

each line, substantially as described.

14. In a game apparatus, a cone-shaped ball enlarged in diameter at its lower portion with 80 a tapering upper portion, a filling of cushioning material in said lower portion and an inflatable bladder in said upper portion, substan-

tially as described.

15. In a game apparatus played with a 85 swinging ball, a ball elongated from end to end comprising a solid filling within its lower half end and an inflatable upper half end and a cord connection at its upper end, substantially as described.

16. The combination of a playing area having a free unobstructed playing-surface with a ball suspended to swing above said area and a horizontal tally member supported at one side of said ball at an elevation permitting 95 players to move freely in upright position beneath the same and adapted to be struck by the ball.

In testimony whereof I sign this specification in the presence of two witnesses.

FENTON E. SPINK.

Witnesses:

R. B. Moser, C. A. Sell.