No. 670,610

Patented Mar. 26, 1901.

F. P. GORIN.

SCORING DEVICE.

(Application filed Nov. 7, 1900.)

(No Model.)

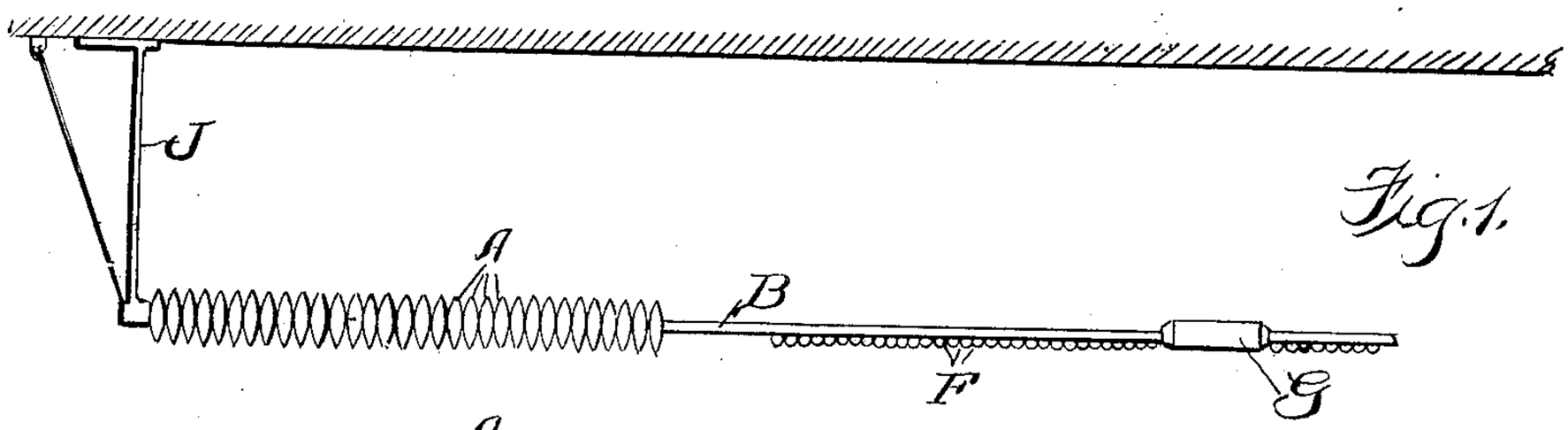

Fig. 1.

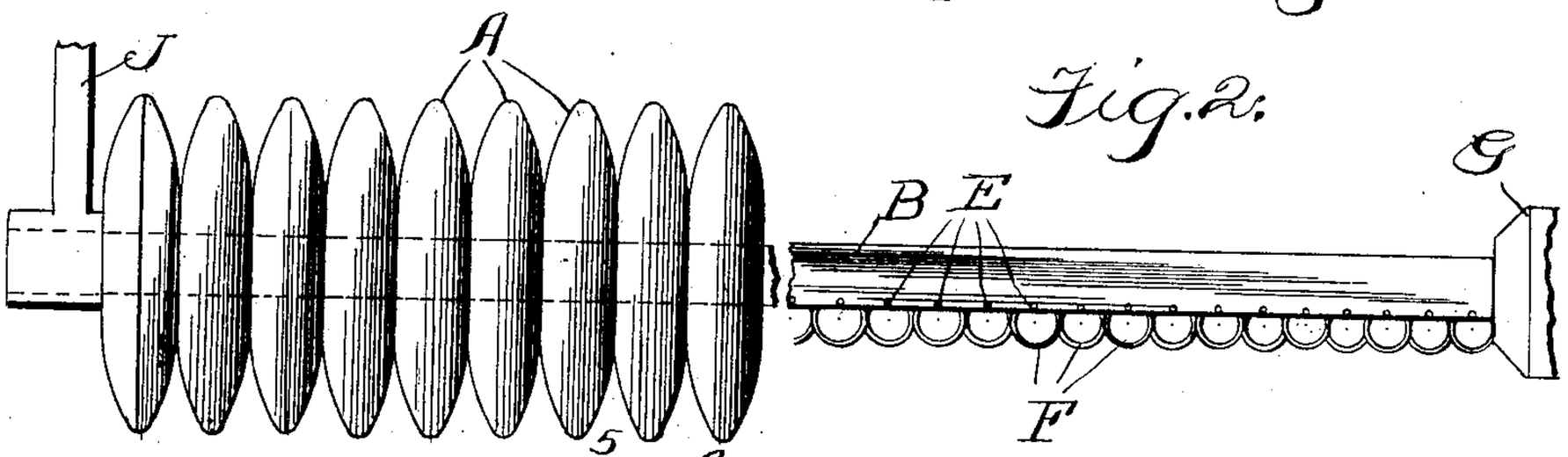

Fig. 2.

Fig. 9.

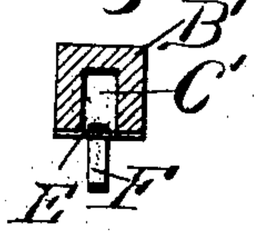

Fig. 3.

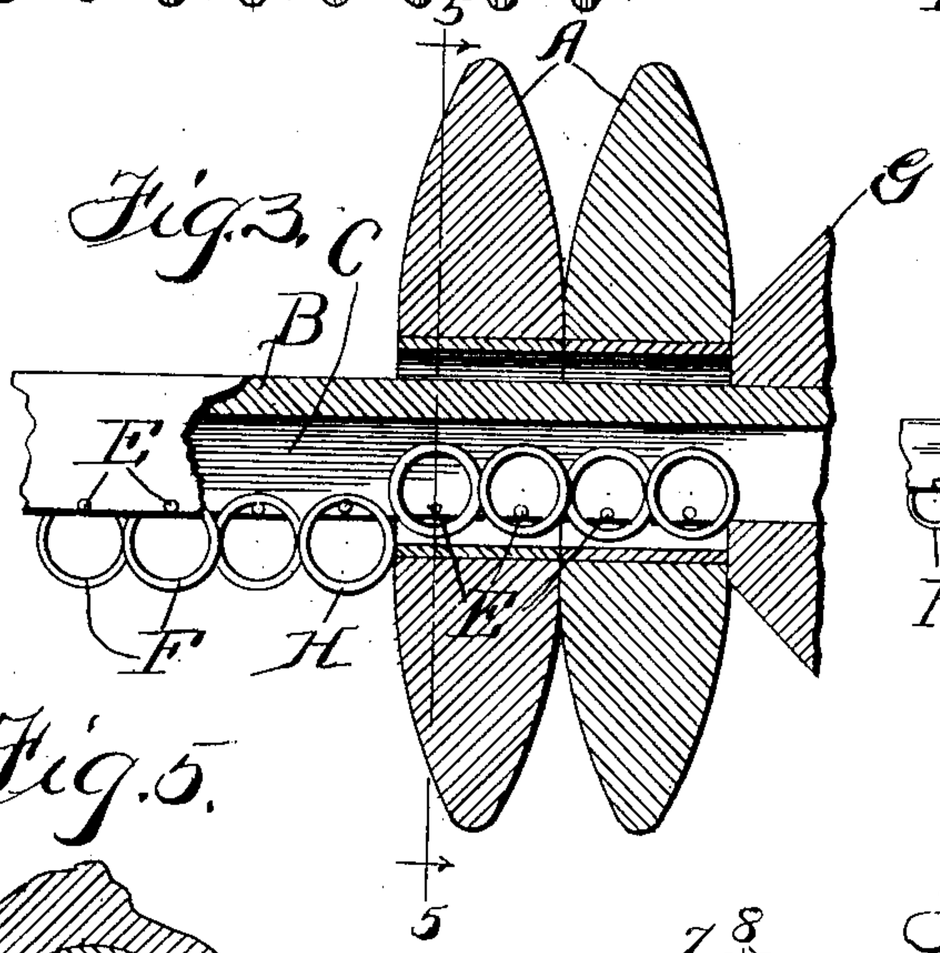

Fig. 4.

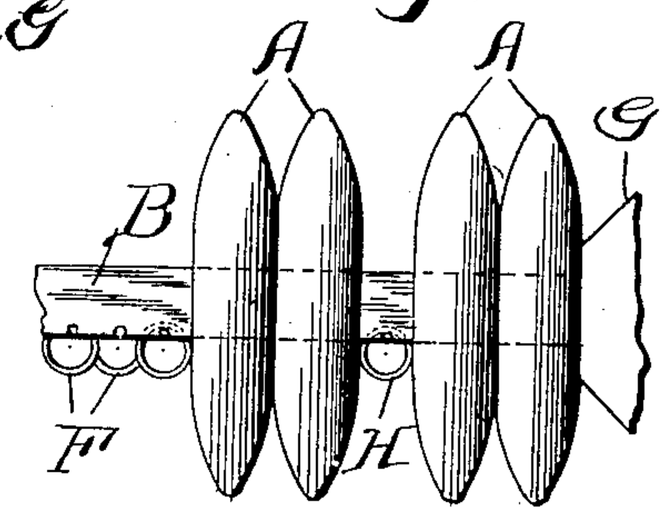

Fig. 5.

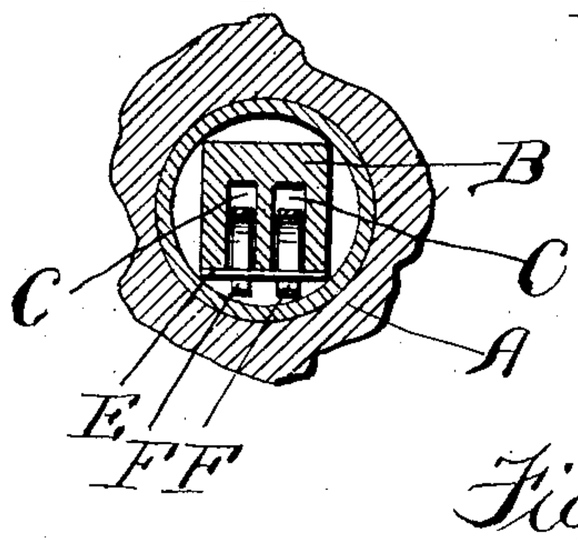

Fig. 6.

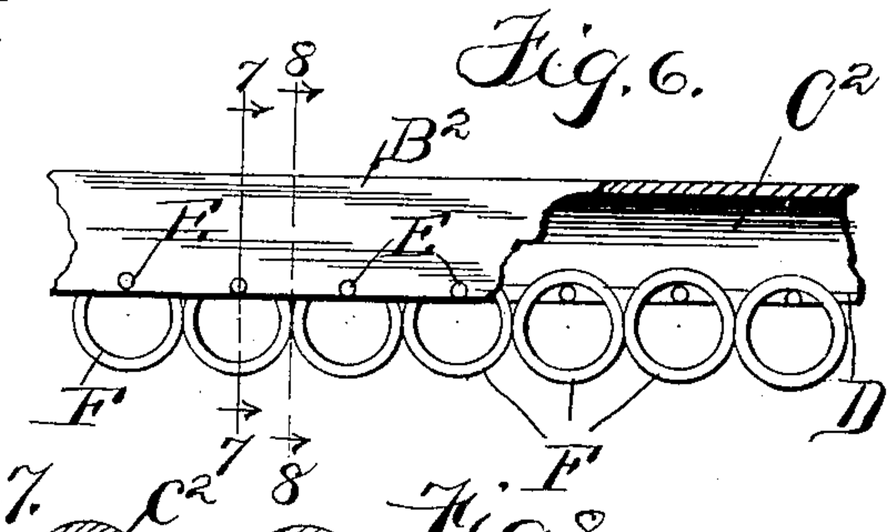

Fig. 7.

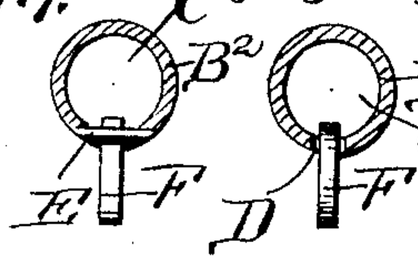

Fig. 8.

Witnesses:
S. B. Weir
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Inventor
Fred P. Gorin
By Brown & Darby Attys

UNITED STATES PATENT OFFICE.

FRED P. GORIN, OF CHICAGO, ILLINOIS.

SCORING DEVICE.

SPECIFICATION forming part of Letters Patent No. 670,610, dated March 26, 1901.

Application filed November 7, 1900. Serial No. 35,702. (No model.)

To all whom it may concern:

Be it known that I, FRED P. GORIN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Counting or Scoring Device for Keeping Billiard Scores or other Purposes, of which the following is a specification.

This invention relates to a counting or scoring device for keeping billiard scores or for other purposes.

The object of the invention is to provide a construction which is simple and efficient wherein billiard scores may be kept, indicating and distinguishing the number of points made by a player at each play.

Other objects of the invention will appear more fully hereinafter.

The invention consists, substantially, in the construction, combination, location, and arrangement, all as will be more fully hereinafter set forth, as shown in the accompanying drawings, and finally pointed out in the appended claims.

It is the common practice in billiard-scoring devices to mount buttons or similar indicating means upon a wire stretched in convenient position. At the beginning of a game all the buttons carried by the wire are moved to one end of the wire, and when a player makes a point or a number of points at any play or turn buttons corresponding in number to the points made at that play or turn are separated from the remaining buttons and moved to the opposite end of the wire or else are moved to a place intermediate the ends of the wire, so as to enable the player's opponent to see that an improper score has not been made. When the same player makes another score at his next turn in the play, the buttons indicating the previous score are then moved to the extreme end of the wire and a number of buttons corresponding to the points made at his succeeding play are similarly separated and moved to a point intermediate the ends of the wire, and so on throughout the game.

It is the purpose of the present invention to provide means whereby the buttons or other indicating devices employed, or those separated by a player in order to score up or indicate the points made by him during a play, may be retained separated from each other or from the scores or points made during all the other plays of the players, so as to show at the end of the game the number of points made at each play, thereby avoiding the usual practice of marking off or separating entirely a part way of the distance the number of buttons corresponding to the points made after each play until the next play is made, when the previously-separated buttons are moved to extreme position and new scores or buttons are moved to central position, as above indicated. Many specifically different constructions and arrangements for accomplishing this object may be devised and be embraced within the spirit and scope of my invention, and in the accompanying drawings I have shown different ways for accomplishing the desired object and which arrangements are illustrative of practical embodiments of the principles of my invention.

Referring to the accompanying drawings and to the various views and reference-signs appearing thereon, Figure 1 is a broken view in elevation of a scoring device embodying the principles of my invention. Fig. 2 is a similar view upon an enlarged scale. Fig. 3 is an enlarged broken detail view in central longitudinal section. Fig. 4 is a broken detail view showing the manner of separating the buttons or groups of buttons indicating the number of points made at different plays. Fig. 5 is a broken detail view in transverse section on the line 5 5, Fig. 3. Fig. 6 is a view similar to Fig. 3, showing a modified arrangement embraced within the scope of my invention. Fig. 7 is a transverse sectional view on the line 7 7, Fig. 6. Fig. 8 is a view similar to Fig. 7 on the line 8 8, Fig. 6. Fig. 9 is a view similar to Figs. 7 and 8, showing a slightly-modified form embraced within the scope of my invention.

Reference-sign A designates the buttons or other scoring devices employed for marking the points made by a player. These buttons may be of the usual or any ordinary, well-known, or convenient construction, material, or shape and may be carried by or strung upon or otherwise supported upon a wire, rod, tube, or other supporting device. In the particular form shown, to which, however, the invention is not confined, the buttons A are

shown strung upon a support B. This support may be of any suitable form or shape in transverse section. For instance, it may be rectangular in shape, as shown in Figs. 1, 2, 3, 4, and 5 and at B′ in Fig. 9, or said support may be cylindrical in transverse section, as shown at B^2, Figs. 6, 7, and 8, and may be either solid, as shown most clearly in Figs. 5 and 9, or hollow or tubular, as shown in Figs. 6, 7, and 8. In case of the solid bars or supports B B′ one or more longitudinal grooves are milled or otherwise formed in one side of said support. In Fig. 5 I have shown the support provided with two longitudinal grooves C and in Fig. 9 I have shown the support B′, provided with one longitudinal groove C′, and in Figs. 6, 7, and 8 I have shown the support in the form of a tube, thereby forming an interior chamber C^2. In any case it will be observed that an internal chamber is formed within the support, whether by grooving the same or by forming the same hollow or tubular. In the case of a tubular support a longitudinal slit or opening is formed therein, as clearly indicated at D, Figs. 6 and 8. Mounted in the support and extending transversely across the chamber formed by the groove or grooves C C′ or interior C^2, as the case may be, and preferably at the mouth or opening of said chamber, are a series of studs, pins, or other suitable projections E. Said studs, pins, or projections are spaced a fixed and equal distance apart, which distance bears a definite relation to the extreme width of a button or other marking device A. Upon each pin, stud, or projection is loosely suspended a ring F, adapted to swing or move in the plane or the direction of length of the groove, slot, or opening in the support B B′ B^2, the internal diameter of each ring being somewhat less than the depth of the chamber in the support—that is, somewhat less than the depth of the groove or grooves C C′ or of the internal diameter of tubes B^2 B^3. The external diameter of each ring is also designed to bear a definite relation to the extreme width of the button or other indicating device A. Thus if the button is one-half inch in extreme width the external diameter of each ring F may be one-fourth of an inch, and each pin E may be spaced one-fourth of an inch distant from the next adjacent pin.

From the foregoing description it will be seen that when a button or other indicating device A is moved along the support, the rings F being loosely suspended upon the studs, pins, or projections E and in the plane of the opening into the chambers C C′ C^2, said rings will be caused to roll or swing into such chamber, thereby offering very little or no resistance to the movement of the button. In Fig. 3 is shown the rings so swung or moved into the chamber by a button or other indicating device A. Thus when a button is moved along the support the rings F will be successively swung or moved to permit the movement of the button or other indicating device along the support, it being readily understood that when the button or other indicating device passes by the successive rings said rings will again by gravity drop down into suspended position, as shown to the right in Figs. 1 and 2 and in Figs. 4, 6, 7, 8, and 9, and where the distance apart of the studs, pins, or projections E and the external diameter of the rings F bear the proportion to the extreme width or thickness of the buttons or other indicating devices A above specified two of the rings will be accommodated within the bore or the transverse width of the buttons or other indicating devices A, as clearly shown in Fig. 3. It is obvious that the relative proportions of the distance apart of the pins, studs, or projections E and of the external diameters of the rings F may be varied with reference to the extreme width of the buttons or other indicating devices A, so that one or any desired number of rings may correspond to the extreme thickness or width of the buttons or other indicating devices A.

When a score or count is to be effected, buttons or other indicating devices A, corresponding in number to the number of points or counts to be scored, are separated from the remaining buttons and moved along the support to the end of such support, where further progress may be arrested by means of any suitable stop (indicated at G,) against which the extreme button will abut. In Figs. 3 and 4 two buttons are shown moved into this position, and from the foregoing description it will be understood that in each of these buttons are contained two of the separating-rings F—that is to say, the two extreme rings will be swung or moved into the chamber of the support and confined therein by the first button, and the two next succeeding rings will be swung or moved into the chamber by the next adjacent button, leaving the next succeeding ring (which I have specially indicated by reference-sign H, Figs. 3 and 4) suspended from its supporting-pin, stud, or projection in close proximity to the second button. Now suppose it is desired to score or count two points, for instance, then the next two buttons are detached from the remaining counters and are moved along the support in the same manner; but instead of said buttons or counters being permitted to be moved into contact with the preceding two buttons or counters the ring H will be jammed between the two groups of buttons or counters and prevented from being swung or rocked into the chamber of the support, thereby separating the second group of counters or buttons from the preceding group. This separation will occur whether one, two, or three or any number of buttons are moved into counting or scoring position, and hence at the end of a game of billiards, for instance, the individual runs or scores made by a player at each play will be separated from the runs or scores made at every other play, and, as above indicated, this same rule will

be carried out whether one button or counter or two or any desired number are moved, provided that when several buttons or counters are moved they are moved *en masse* or together. It is obvious that the greater the diameters of the separating-rings and the greater the distancea part of the supports, pins, or studs E relative to the thickness of the buttons the wider will be the separation of the counters when moved into counting or indicating position, and vice versa. If desired and as shown in Figs. 3, 4, and 5, by providing two or more grooves or chambers C in the support B the separating-rings may be of smaller diameter and the pins or projections E may be spaced closer together. After all the buttons or counters have been thus moved to scoring or counting position they may be readily returned to initial position by sliding the same along the support, the folding or swinging of the rings into the chambers of the support permitting such movement, and in case an error in the count or score is made such error may be readily corrected by shoving or moving back to initial position the buttons or scorers in which the error occurred and again advancing the correct number of buttons or scorers.

While I have described my invention as applied to keeping the score in a game of billiards, it is obvious that the device is equally well adapted for use in scoring or counting for any other purpose where it is desired to separate the count into groups and to indicate the separate groups thus counted or scored. It is also obvious that different denominations may be thus scored or counted by duplicating the construction above described—that is, by employing two or more supports B B′ B^2, each constructed as above described, the buttons or counters on one support being employed for units and those on another support being employed for tens, and so on. The support B B′ B^2 may be sustained or carried in any suitable manner—as, for instance, in brackets or hangers J, in the usual or any well-known and well-understood manner.

From the foregoing description it will be observed that I provide an exceedingly simple and efficient counting or scoring device wherein any number of counts or scores may be made successively, each group being separated from the others, and while I have shown various constructions embodying the principles of my invention I desire it to be understood that my invention is not to be limited or confined to the exact details shown and described, as many changes therein and variations therefrom would readily occur to persons skilled in the art and still fall within the spirit and scope of my invention, the broad and generic feature of which is the provision of means whereby scores or counts of one or any number may be indicated successively or at different times and each score or count being separated from the preceding scores or counts.

Having now set forth the object and nature of my invention and various arrangements and constructions embodying the principles thereof, what I desire to claim as my own invention is—

1. In a counting or scoring device for keeping billiard scores or other purpose, a series of counters or scorers adapted to be moved into scoring or counting position in groups, each group containing one or more of such counters or scorers, and means for separating said groups from each other when in their scoring or counting positions, as and for the purpose set forth.

2. In a scoring or counting device, a series of counters or scorers adapted to be moved singly or in groups into scoring or counting position, and means for separating each succeeding single or group of scorers or counters, when in their scoring or counting positions, from the preceding scorers or counters, or groups, as and for the purpose set forth.

3. In a scoring or counting device, a series of counters or scorers adapted to be moved singly or in groups into scoring or counting position, and means for automatically separating each succeeding single or group of scorers or counters, when in their scoring or counting positions, from the preceding scorers or counters or groups, as and for the purpose set forth.

4. In a counting or scoring device, a support, buttons or other scoring or counting devices carried thereby, and stops loosely suspended from said support, said stops bearing a definite relation to the width of said buttons or scoring devices, as and for the purpose set forth.

5. In a counting or scoring device, a support, counters or buttons mounted thereon, and rings loosely suspended by said support, as and for the purpose set forth.

6. In a counting or scoring device, a support, buttons or counters mounted thereon for movement therealong, and loosely-mounted stop devices arranged to yield to permit the passage of said buttons or counters along said support, said stop devices bearing a definite relation relative to the counters or buttons, as and for the purpose set forth.

7. In a counting or scoring device, a support, counters or buttons mounted thereon for movement lengthwise thereof, stops loosely suspended from said support and spaced a distance apart in definite relation to the size of said buttons or counters, as and for the purpose set forth.

8. In a scoring or counting device, a support, buttons or counters mounted thereon for movement lengthwise thereof, rings loosely suspended from said support, the external diameters of said rings bearing a definite relation to the size of said buttons or counters, as and for the purpose set forth.

9. In a scoring or counting device, a support, buttons or counters mounted thereon for movement lengthwise thereof, rings loosely suspended from said support, the external diameters of said rings and their distance apart bearing a definite relation to the size of said buttons or counters, as and for the purpose set forth.

10. In a scoring or counting device, a support having a chamber, stops loosely suspended and arranged to be swung or moved into such chamber, in combination with counters or buttons mounted on said support for movement therealong, as and for the purpose set forth.

11. In a scoring or counting device, a support having a chamber formed lengthwise thereof, stops loosely suspended from said support to move or to be swung into said chamber, in combination with buttons or counters mounted on said support for movement therealong, as and for the purpose set forth.

12. In a counting or scoring device, a support, studs, pins or projections carried thereby, stops loosely suspended upon said studs, pins or projections, and buttons or counters mounted upon for movement along said support, as and for the purpose set forth.

13. In a counting or scoring device, a support having a chamber extending lengthwise thereof, studs, pins or projections arranged to extend transversely of said chamber, and stops loosely suspended upon said studs, pins or projections, in combination with buttons or counters mounted on said support for movement therealong, as and for the purpose set forth.

14. In a counting or scoring device, a support having a chamber extending lengthwise thereof, studs, pins or projections arranged to extend transversely of said chamber, and rings loosely suspended upon said studs, pins or projections, in combination with buttons or counters mounted on said support for movement therealong, as and for the purpose set forth.

15. In a counting or scoring device, a support, buttons or counters strung upon said support for movement therealong, said support provided with a longitudinal chamber, studs, pins or projections arranged to extend transversely of said chamber, and rings loosely suspended upon said studs, pins or projections, the external diameter of said rings and the distance apart of said studs, pins or projections, bearing a definite relation to the thickness of said buttons or counters, as and for the purpose set forth.

In witness whereof I have hereunto set my hand, this 5th day of November, 1900, in the presence of the subscribing witnesses.

FRED P. GORIN.

Witnesses:
E. C. SEMPLE,
CHAS. H. SEEM.