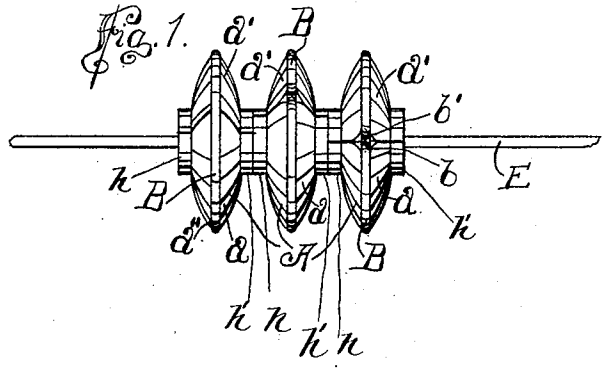
(No Model.)

W. S. HANNAFORD.

BILLIARD COUNTER.

No. 520,987. Patented June 5, 1894.

Fig. 1.



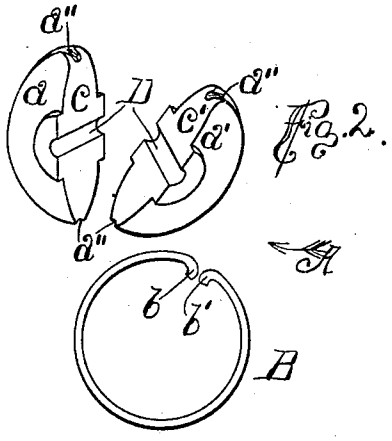


Fig. 2.

Fig. 3.

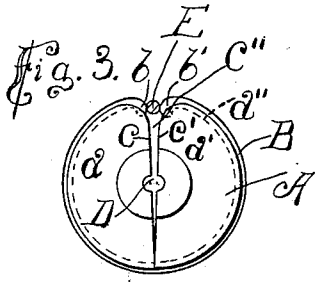
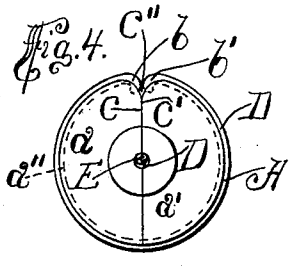


Fig. 4.



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BILLIARD-COUNTER.

SPECIFICATION forming part of Letters Patent No. 520,987, dated June 5, 1894.

Application filed April 21, 1893. Serial No. 471,360½. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM SALE HANNAFORD, a citizen of the United States, residing at Pasadena, in the county of Los Angeles and State of California, have invented a new and useful Billiard-Counter, of which the following is a specification.

My invention relates to cleft or divided counters for billiard games which counters consist of transversely divided buttons provided respectively with a hole through the center whereby they may be strung upon a wire and provided with a spring for holding the parts together.

The object of my invention is to provide a billiard counter of this class which can be applied to the wire with greater ease than counters of this class heretofore made. Also when the spring clamp is arranged around the hub of the button and not around the rim of the button it is practically impossible to force a wire into the wire receiving opening in the button without removing the spring clamp from the hub, for the reason that the point at which the pressure is applied to compress the parts together is near the center of the button, and in springing the two members apart the point of contact is transferred to the outer edge of the button and a leverage is thus given to the clamp which is practically impossible to overcome without making the clamp so weak that it will not hold the two members rigidly together when the button is in place upon the wire. Also to protect the counters from splitting and chipping. Also to reduce the cost of such counters.

My invention comprises a billiard counter consisting of the transversely cleft or divided button provided with the counting-wire receiving opening arranged communicating with the cleft of the button, and an open ring spring clamp arranged with its ends respectively at opposite sides of the cleft to hold the parts of the button together.

It also comprises said cleft button having its open ring spring clamp arranged around the rim of the button with its ends respectively at opposite sides of the mouth of the cleft.

It also comprises such button provided around its rim with the cleft and having the ends of its spring clamp provided with the points arranged at the mouth of the cleft to respectively engage the outer edges of the walls thereof.

It also comprises the button having such ring bent inward at its ends to engage the outer edges of the walls thereof and to form a convenient entrance for the wire.

The accompanying drawings illustrate my invention.

Figure 1 is a plain front elevation of a fragment of wire with three of my improved counters in position thereupon. Fig. 2 is a perspective view of the various parts of one of my improved counters separate from each other. Fig. 3 is an end view of the counter showing a wire just entering the slot or slit. Fig. 4 is an end view of a counter with a wire shown in position in the wire receiving opening.

A represents the counter which is preferably made in two semicircular halves *a a'* forming when placed together, a circular button which is provided upon each side with an axially arranged outwardly projecting hub *h h'*, and is provided around its extreme outer rim with a peripheral groove *a''* the plane of which is substantially midway between the ends of the hubs, and which groove is adapted to receive and retain an open ring spring metal clamp B which is adapted and arranged to press the two members of the counter together. The ends of this spring clamp are each respectively bent inward to form a point *b b'* adapted and arranged to engage with its respective half of the counter.

In practice, if the counter wire is already provided with a series of integral wooden counters, the proprietor of a billiard hall may provide himself with a complete set of my improved counters and whenever a counter becomes broken or split from rough usage, one of my improved counters may be substituted therefor by placing the counter against the wire in the position shown in Fig. 3 and forcing the button upward and at the same time pulling the wire downward, the sloping edges *b b'* of the spring clamp B allows the wire to slip easily into the cleft between the opposing faces *c c'* of the two members between which it slides until it enters the perforation or wire opening D when the clamp B forces the two members together.

The expense of making my improved counter is very little more than that of making the common integral wooden counter, and a complete set of my counters may be provided at slight cost.

The spring metal clamp may be nickel-plated and my improved counter in addition to being indestructible is also highly ornamental. In case it is desired to change the position of the counters upon the wire with relation to each other, the change may be effected without any difficulty and without removing more than one counter from the wire at the same time.

In removing the counters from the wire the two members $a\,a'$ are grasped and sprung outward to separate the opposing faces $c\,c'$ a sufficient distance to open the cleft c'' to allow the wire E to be removed from the opening D.

The opening b'' in the spring clamp is arranged in line with the opposing faces $c\,c'$ of the two members and the ends $b\,b'$ of the clamps are bent inward to engage the members of the counter and to form a guideway to guide the wire between the opposing faces of the two members.

By forming the counter in two sections and encircling the two sections with the spring metal clamp, the parts are yieldingly pressed together and it is impossible to shoot the counters together upon the wire with sufficient force to cause the two members to split, and even if such members should split, the spring clamp will hold the pieces firmly together so that the counter will still be intact. The clamp encircling the rim of the counter also prevents chipping the edge of the counter, which has never heretofore been accomplished, so far as I am aware. The cleft counters which are secured together by bands encircling the hub are as liable to edge chipping as the ordinary integral button. Furthermore, by my invention consisting in arranging the groove around the rim of the button instead of around the hubs of the button, the pressure of the clamp is brought to bear against the center of the button instead of at each side of the center as it is where the clamps are arranged encircling the hubs, and for this reason the one clamp which I provide will hold the button in shape equally as well as two clamps arranged upon the hubs of the button.

I am aware that billiard counters have heretofore been formed in sections secured together by two spring clamps arranged around the hub of the counter on opposite sides of the button, but my invention is distinguished from this form of counters by having the opening in the spring clamp and the mouth of the cleft arranged together as shown so that free passage is allowed for the wire from the rim into the center of the counter and but one clamp is thus required and the same serves as a protection against chipping the edge of the button. The friction of the clamp serves in a measure to hold the ring in proper position with its ends respectively on opposite sides of the mouth of the cleft but it is preferable to secure the clamp firmly in its position so that it cannot be displaced; and this is accomplished by the inwardly projecting points arranged at the ends of the clamp to set into the button on the opposite sides of the mouth of the cleft thus retaining the ring in position with its opening coincident with the mouth of the cleft so that the wire can be readily inserted and withdrawn without removing or shifting the ring.

Now, having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The billiard counter set forth, consisting of the transversely cleft button provided upon each side with an axially arranged outwardly projecting hub and provided around its extreme outer rim with a groove whose plane is substantially midway between the ends of the two hubs, such button being also provided with an axially arranged wire-receiving opening communicating with the cleft of the button, and an open ring spring clamp arranged in the groove.

2. The billiard counter set forth consisting of the cleft button provided around its rim with a groove and having a wire receiving opening arranged communicating with the cleft of the button, and an open ring spring clamp arranged in the groove around the rim of the button and provided at its ends with points arranged at the mouth of the cleft to respectively engage the outer edges of the walls thereof.

3. The billiard counter set forth consisting of the cleft button having a wire receiving opening arranged communicating with the cleft of the button, and an open ring spring clamp arranged around the rim of the button and having its ends bent inward and arranged at the mouth of the cleft to respectively engage the outer edges of the walls thereof.

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