

(No Model.)

F. R. WILLIAMS.

CHALK REPLACING DEVICE FOR BILLIARD TABLES.

No. 282,476.

Patented July 31, 1883.

Fig 1.

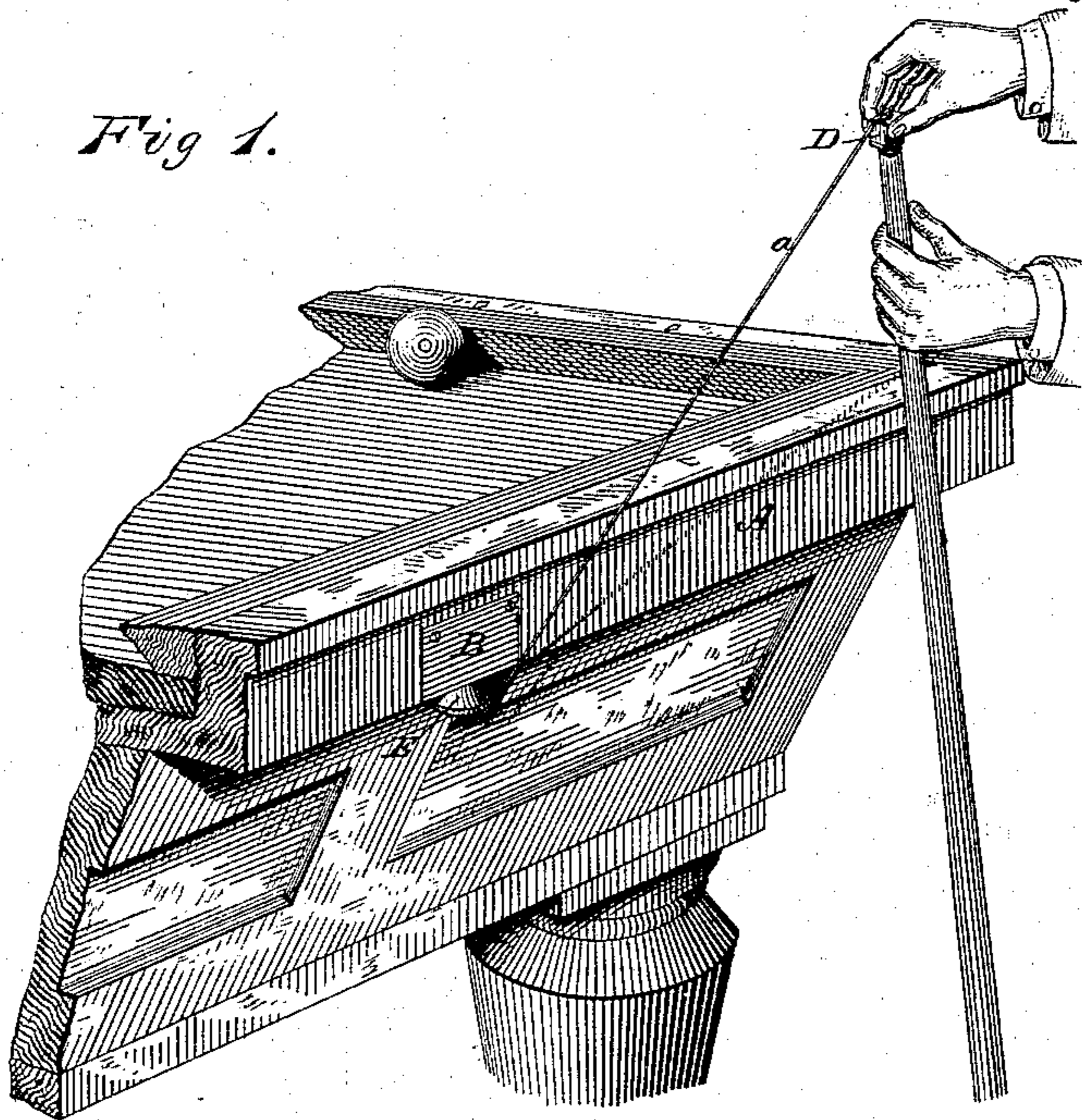


Fig 2.

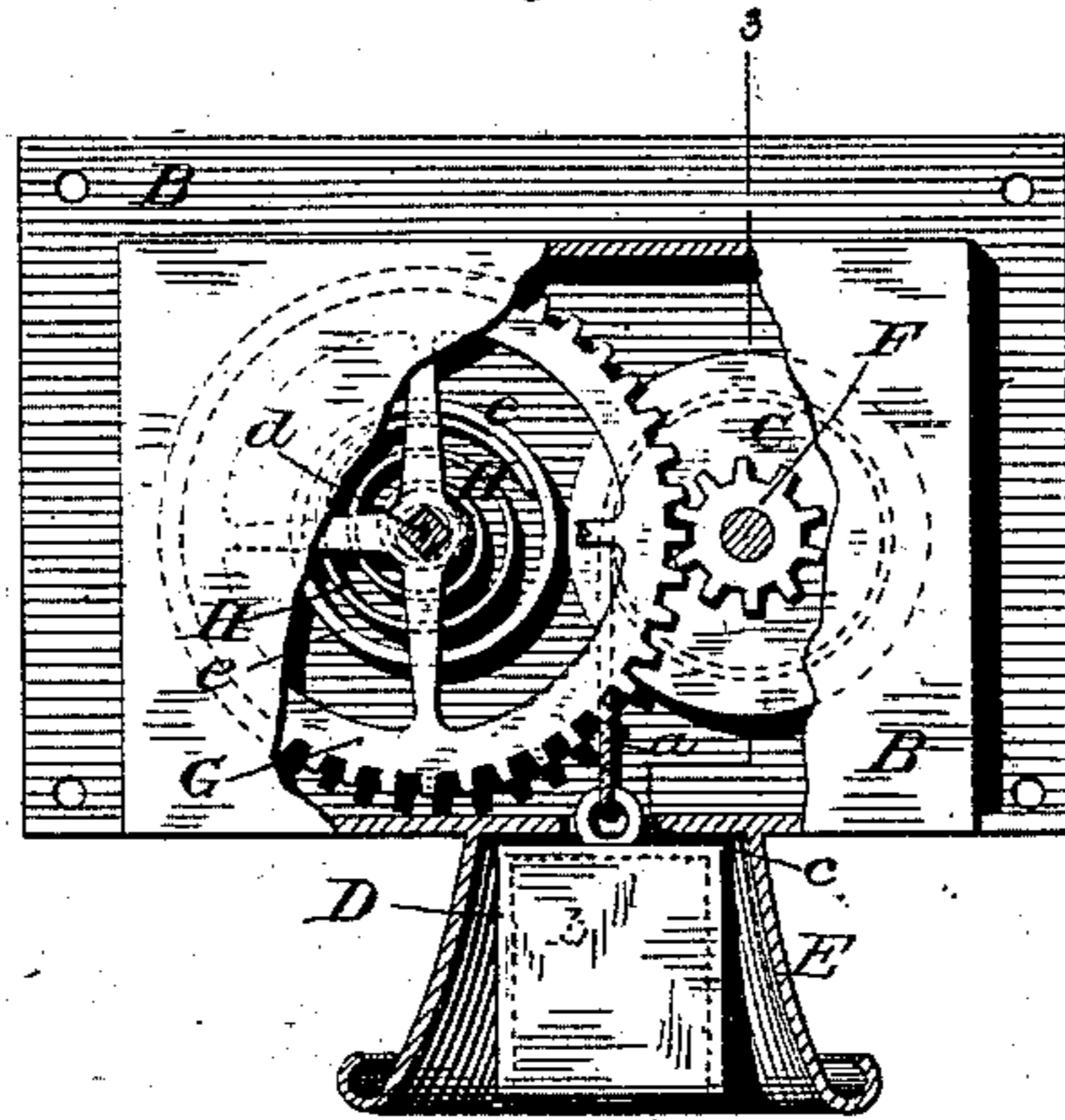


Fig 3.

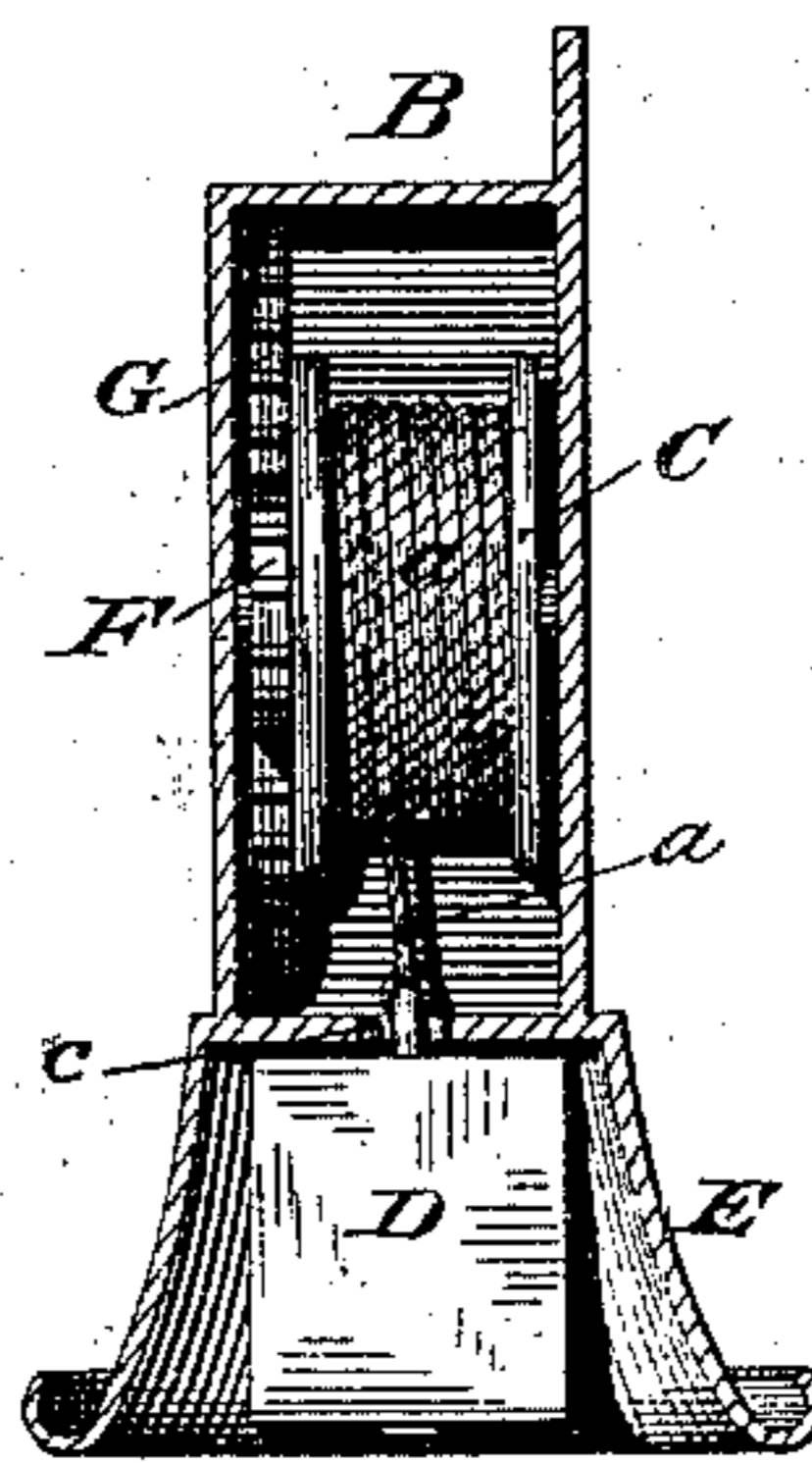


Fig 5.

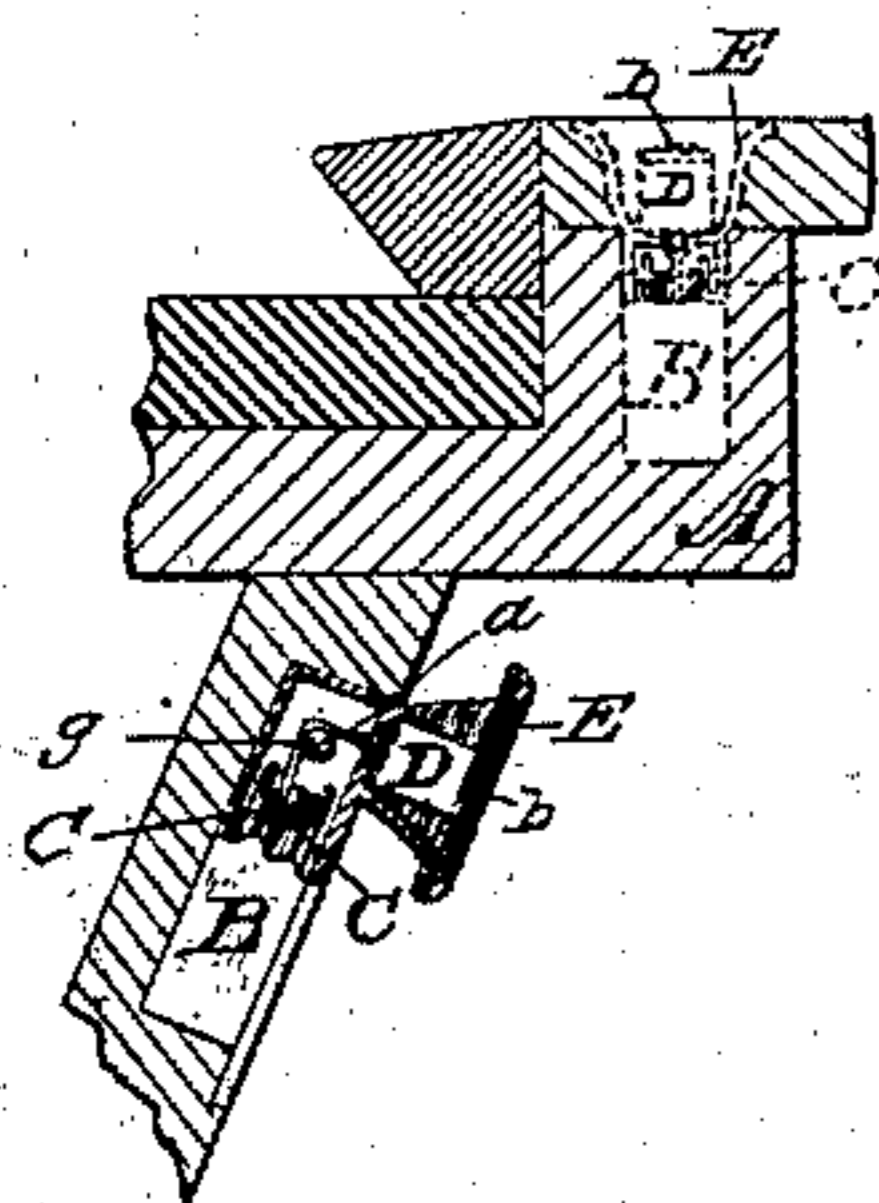
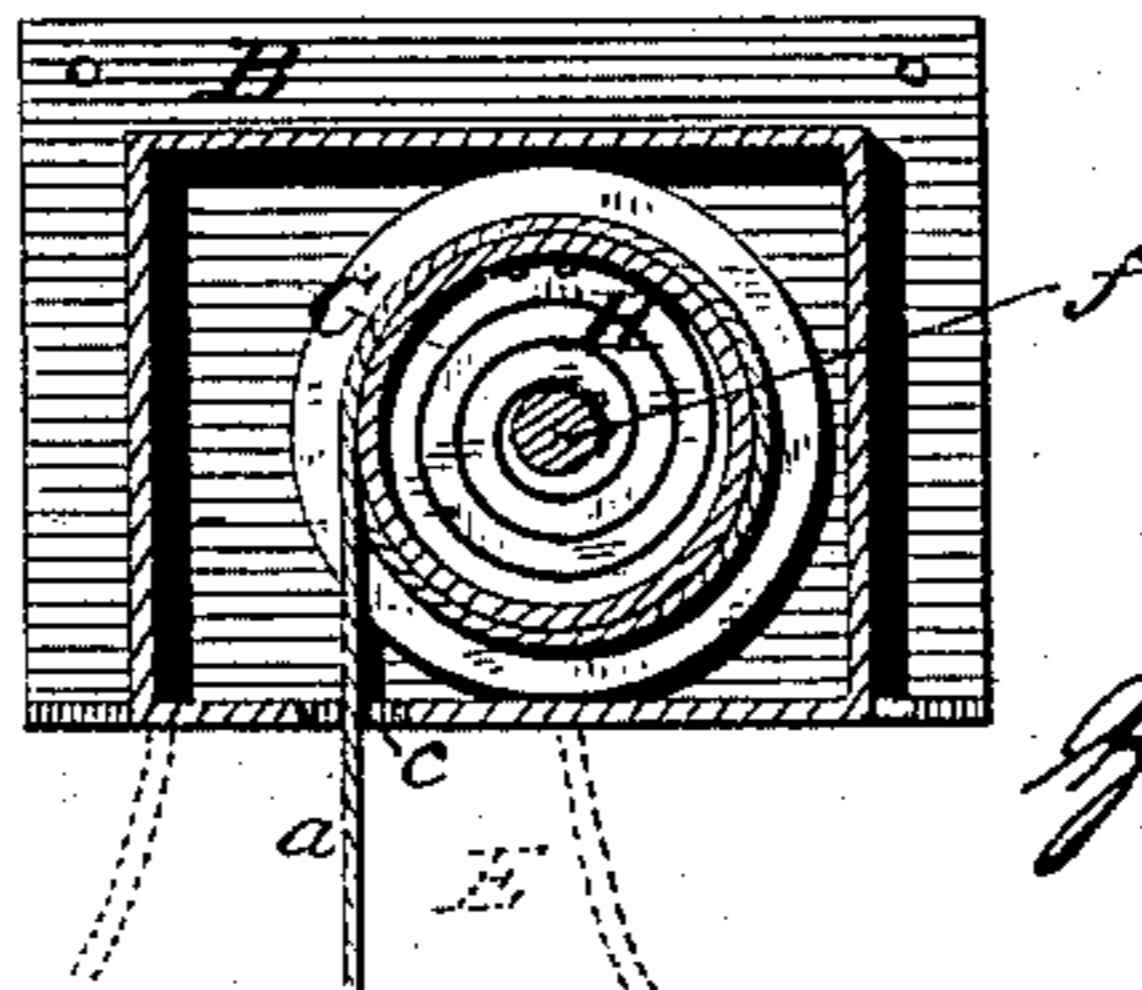


Fig 4.



WITNESSES

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CHALK-REPLACING DEVICE FOR BILLIARD-TABLES.

SPECIFICATION forming part of Letters Patent No. 282,476, dated July 31, 1883.

Application filed July 7, 1883. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS R. WILLIAMS, a citizen of the United States, residing at Shreveport, in Caddo parish and State of Louisiana, have invented certain new and useful Improvements in Chalk-Replacing Devices for Billiard-Tables; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to chalk-holders for billiard-tables; and it consists, first, in the construction, adaptation, and application to a billiard-table of a novel chalk-replacing device, whereby the chalk, after having been used by the player, is returned automatically to its "cup;" and, second, in a stationary chalk-cup fixed under the flange of the table-rail in such a manner as to be secure at all times from contact with the person of the player, as will be hereinafter more fully set forth.

In the drawings, Figure 1 is a perspective view of one corner of a billiard-table, showing my improved chalk-replacing device attached thereto. Fig. 2 is a rear elevation of the chalk-replacing device, showing a part of the back plate broken away, the chalk-cup being shown in vertical section. Fig. 3 is a vertical transverse section cut through line 3 3 of Fig. 2. Fig. 4 is a vertical longitudinal section of a modified form of chalk-replacing device; and Fig. 5 is a vertical transverse section cut through a portion of one of the billiard-table edges, showing still another modified form of my improved chalk-replacing mechanism.

Inclosed in or attached to a metal or other casing or frame, B, in such a manner as to admit of its easy revolution, is a drum or windlass, C. Wound around this drum, with its inner end securely attached thereto, is a string, chain, or wire, *a*, the outer end thereof being attached to a casing, D, which contains a block of chalk, *b*. (Shown in dotted lines in Fig. 2.) This casing has an opening in the end opposite to that to which the string *a* is attached, of sufficient size to admit of the insertion, and consequent contact with the inclosed chalk, of

the leather-tipped end of the cue. The peculiar construction of this casing does not form a part of this invention, however, as any well-known form of casing may be used in combination with my replacing device, its general description herein being merely for the purpose of illustrating a convenient method of attaching the string to the chalk. The string may, however, be directly attached to the chalk by tying, or in any other well-known manner, without affecting the operation of the device herein described.

Directly or indirectly attached to the frame B is a bell-shaped cup, E. This cup serves as a depository for the chalk, and may be made of metal, wood, or other well-known material. In order to present a yielding surface to the chalk as it is forcibly seated in its cup, the latter may be made of soft rubber or other pliable material. By this means the chalk is prevented from breaking. Through the bottom of this cup is made a small opening, *c*, through which passes the string as the chalk is withdrawn from and returned to the cup.

Rigidly attached to the side of the drum C, and having its center common with that of the drum, is a pinion-wheel, F. Meshing into this pinion-wheel is a gear-wheel, G, rigidly attached to its shaft *d*. To this shaft is secured the inner end of a coil-spring, H, the outer end thereof being attached to the frame B, preferably through the medium of a hollow spring-drum, *e*. The drum C, pinion-wheel F, gear-wheel G, and coil-spring H are so located in respect to each other as to cause the coil-spring to be wound up as the chalk is withdrawn from the cup, as shown in Figs. 1 and 2. As soon as the chalk is released from the grasp of or is carried back to the cup by the player, the resiliency of the wound-up coil-spring causes the drum to wind around itself the string to which the chalk is attached, thus automatically replacing the chalk in the cup.

In Fig. 4 is shown a modified form of my invention, whereby the pinion and gear-wheel and its shaft are dispensed with and the coil-spring H is made to operate inside of the drum or windlass C, the latter in this case being made hollow. The shaft *f* is made rigid to the frame B, the inner end of the coil-spring being attached thereto, while the outer end there-

of is attached to the inner surface of the hollow drum. I also prefer to have the chalk-cup project downwardly immediately under the usually projecting rail A of the table, as shown in Fig. 1. The projection of this cup and its position under the table-rail may be changed, however, as shown in Fig. 5, without affecting the nature of my invention. When the cup projects at right angles to the face of the frame B, as shown in strong lines in Fig. 5, I use a small friction-pin, *g*, which serves to guide the string as it is being wound upon or unwound from the drum C.

My improved replacing device may be inserted from the upper surface of the rail, as shown in dotted lines in Fig. 5, the cup opening upward, and being of sufficient depth to hold the chalk below the top surface of the table-rail.

In the several modifications shown and described the cup is prevented at all times by the rail from coming in contact with the person of the player, thereby preventing the "chalking" of the player's clothes.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is,—

1. In a chalk-replacing device, the drum C, upon which is wound the string to which the chalk-block is attached, in combination with spring H, substantially as described.

2. In combination with the drum C, upon

which is wound the string to which the chalk is attached, the pinion-wheel, gear-wheel, its shaft, and the spring, all operating as and for the purposes specified.

3. In combination with the drum C, upon which is wound the string to which the chalk is attached, and the spring H, the cup E, provided at its bottom with passage-way *c*, substantially as set forth.

4. In combination with the drum C, upon which is wound the string to which the chalk is attached, spring H, and frame B, the cup E, projecting at right angles to the face of the frame, and the guide-pin *g*, substantially as described.

5. In combination with the replacing device, as described, the cup E, constructed of soft rubber or other pliable material, whereby a yielding surface is presented to the chalk as it is forcibly seated in its cup, substantially as set forth.

6. In combination with the replacing device, as described, the drum C, spring H, cup E, chalk-holder D, and string *a*, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

FRANCIS L. WILLIAMS.

Witnesses:

WM. M. STEWART,
WM. M. SAYRE.