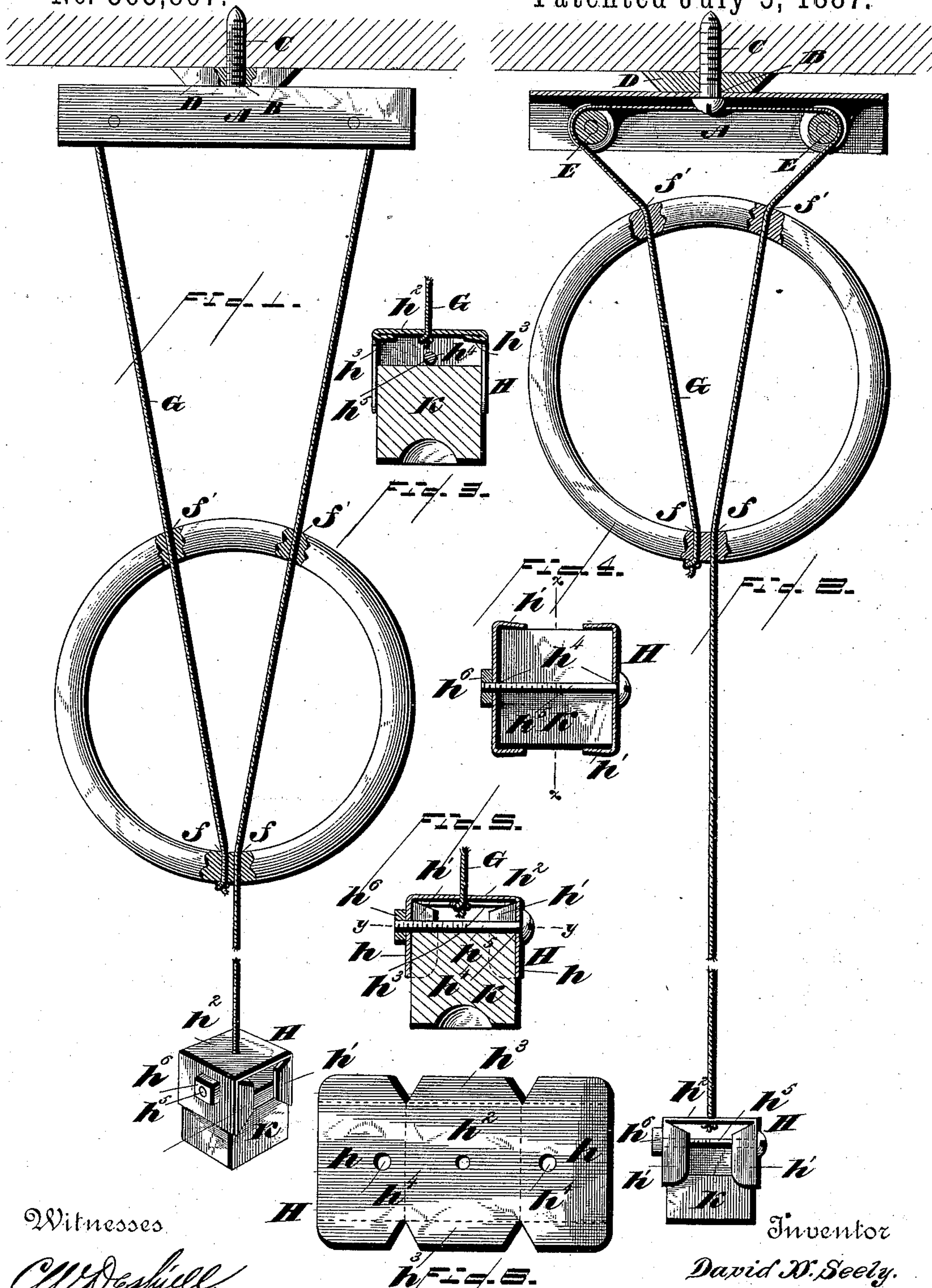


(No Model.)

D. W. SEELY.
CHALK SUSPENDER.

No. 365,867.

Patented July 5, 1887.



Witnesses

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UNITED STATES PATENT OFFICE.

DAVID W. SEELY, OF ELMIRA, NEW YORK.

CHALK-SUSPENDER.

SPECIFICATION forming part of Letters Patent No. 365,867, dated July 5, 1887.

Application filed November 23, 1886. Serial No. 219,679. (No model.)

To all whom it may concern:

Be it known that I, DAVID W. SEELY, a citizen of the United States, residing at Elmira, in the county of Chemung and State of New York, have invented a new and useful Improvement in Chalk-Suspenders, of which the following is a specification.

My invention relates to an improvement in chalk-suspenders for billiard-tables; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the drawings, Figure 1 is a side elevation of my invention complete, showing the weight-ring dropped when not in use. Fig. 2 is a sectional view of the same, showing the weight-ring pulled up to the pulley-frame when in use. Fig. 3 is a vertical transverse section of the chalk-holder on the line 2 2, Fig. 4. Fig. 4 is a horizontal section on the line yy of Fig. 5. Fig. 5 is a vertical transverse section on the line xx of Fig. 4. Fig. 6 is a plan view of the blank from which the chalk-holder is stamped.

A represents a rectangular frame or box, which is made from a single piece of sheet metal bent in the form of the letter U in cross-section and provided on its upper side, at the center, with an opening, B, through which the screw or pin C passes to enter the ceiling and secure the frame A thereto. On the screw or pin C is mounted a block, D, that is interposed between the pulley-frame A and the ceiling, and prevents the said frame from coming in contact therewith when the pulley-frame is rotated. It will be observed that the frame A is free to rotate on the screw, which thus forms a swivel for the frame. In the ends of the frame A, between the sides thereof, are journaled pulleys E, having grooved peripheries, which pulleys are thus arranged at some distance apart.

F represents a counterbalancing-weight, which is preferably made in the shape of a ring, provided on its lower side with openings f , which are arranged closely together, and on its opposite or upper side with openings f' , which are arranged a considerable distance apart. The distance between the top series, f' , of openings in the weight-ring is less than the distance between the pulleys E of the pulley-frame A.

G represents a suspending cord, which is passed through one of the lower openings, f , and upwardly through one of the top openings, f' , and has one end knotted to prevent it from being drawn through the opening f , thus securing the said cord to the weight. The cord then passes from opening f' upward to the pulley-frame A and down through the remaining openings f' and f in the weight-ring. To the lower end of the cord is attached a chalk-holder, H. This chalk-holder is formed from a single oblong piece of sheet metal, as shown in Fig. 6, the ends of which are bent at right angles to the central portions thereof, thereby forming end walls, h , whose outer vertical edges are bent at right angles to form side flanges, h' . The central horizontal portion, h^2 , of the chalk-holder, which connects the end walls, h , has its outer edges bent under, parallel with the said central portion, h^2 , thereby forming re-enforce strips h^3 , which strengthen the chalk-holder. Through the end walls, h , are made aligned openings h^4 , at a slight distance below the under side of the top h^2 . A screw, h^5 , passes through the openings and has at one end a nut, h^6 . In practice the nut is soldered to the chalk-holder, so as to be held from movement, the screw only being capable of adjustment. The piece of chalk, which is represented at K, is inserted between the end walls, h , and the latter are clamped together on the chalk by turning the screw h^5 , thereby firmly holding the chalk to the chalk-holder, as will be readily understood. The side flanges, h' , on the end walls, h , hold the chalk from lateral movement.

The operation of my invention is as follows: The device is suspended from the ceiling above the billiard-table. In order to lower the chalk when it is desired for use, it is only necessary to grasp the pendent end of the cord and draw on the same, and thereby draw the cord through the pulley-frame A and raise the weight, so as to permit the chalk to be lowered to any desired point. In order to raise the chalk, the ring is grasped and lowered on the cord, as will be readily understood. By providing the ring with the openings f' , arranged at a considerable distance from each other, the portions of the cord between the said ring and the frame A will be separated

and kept apart, thereby preventing the cord from becoming twisted or entangled by the twisting or rotary motion of the weight. The ring-shaped weight when in use circles around 5 and untwists the cord. It is necessary that the cord be kept untwisted, for when twisted it cannot be drawn through the weight without considerable effort. In Fig. 2 I show how far the weight can be drawn up in practice. 10 The arrangement of the openings f' of the ring at a less distance apart than the pulleys of the frame A is an important factor in preventing the weight from being drawn up so as to collide with the frame A and injure the 15 pulleys.

The chalk-holder herein described is capable of adjustment to hold any size piece of chalk, and is substantial and will not get out of order.

20 Having thus described my invention, I claim—

1. The chalk-holder made from a single piece of sheet metal and bent to form the top and depending end walls, h' , the said end walls 25 having the side plates or flanges bent at right angles to their outer edges, and the top having the bent re-enforced plates on its under side, for the purpose set forth, substantially as described.

30 2. The chalk-holder herein described, made from a single piece of metal bent to form the top and depending end walls, and the screw

for drawing the end walls together, the said end walls having a slight elasticity and adapted to expand when the screw is loosened. 35

3. In a billiard-chalk suspender, the pulley-frame A and the pulleys E therein, arranged at a distance apart, in combination with the cord passing over the pulleys, the weight having openings $f' f'$, arranged at a less distance 40 apart than the pulleys E, the cord having its pendent ends passing through the openings $f' f'$, one of the ends being secured to the ring and the other end being free and provided with the chalk, as set forth. 45

4. The frame A, having pulleys E, arranged at a distance apart, in combination with the cord passing over the pulleys, and the weighted ring G, having the cord connected thereto at points less distant than the space between the 50 pulleys E, as set forth.

5. In a chalk-suspender, the pulleys, in combination with the cord, and the weighted ring on the cord, the cord being passed through the center of the ring, leaving side portions of the 55 ring on each side of the cord, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

DAVID W. SEELY.

Witnesses:

HAMMOND M. SHEIVE,
LUMMAN D. SEELY, Jr.