

No. 132,084.

Fig. 1.

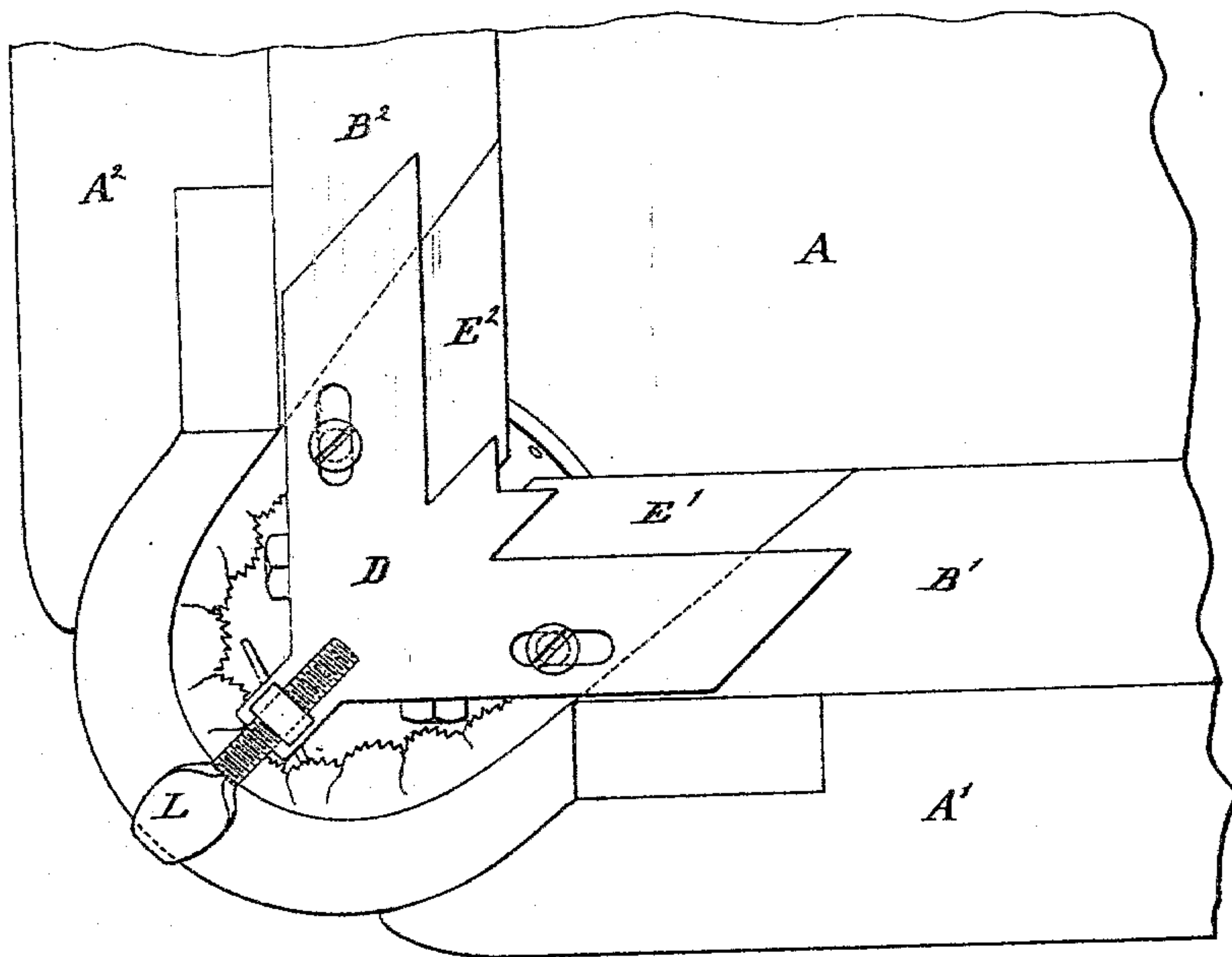
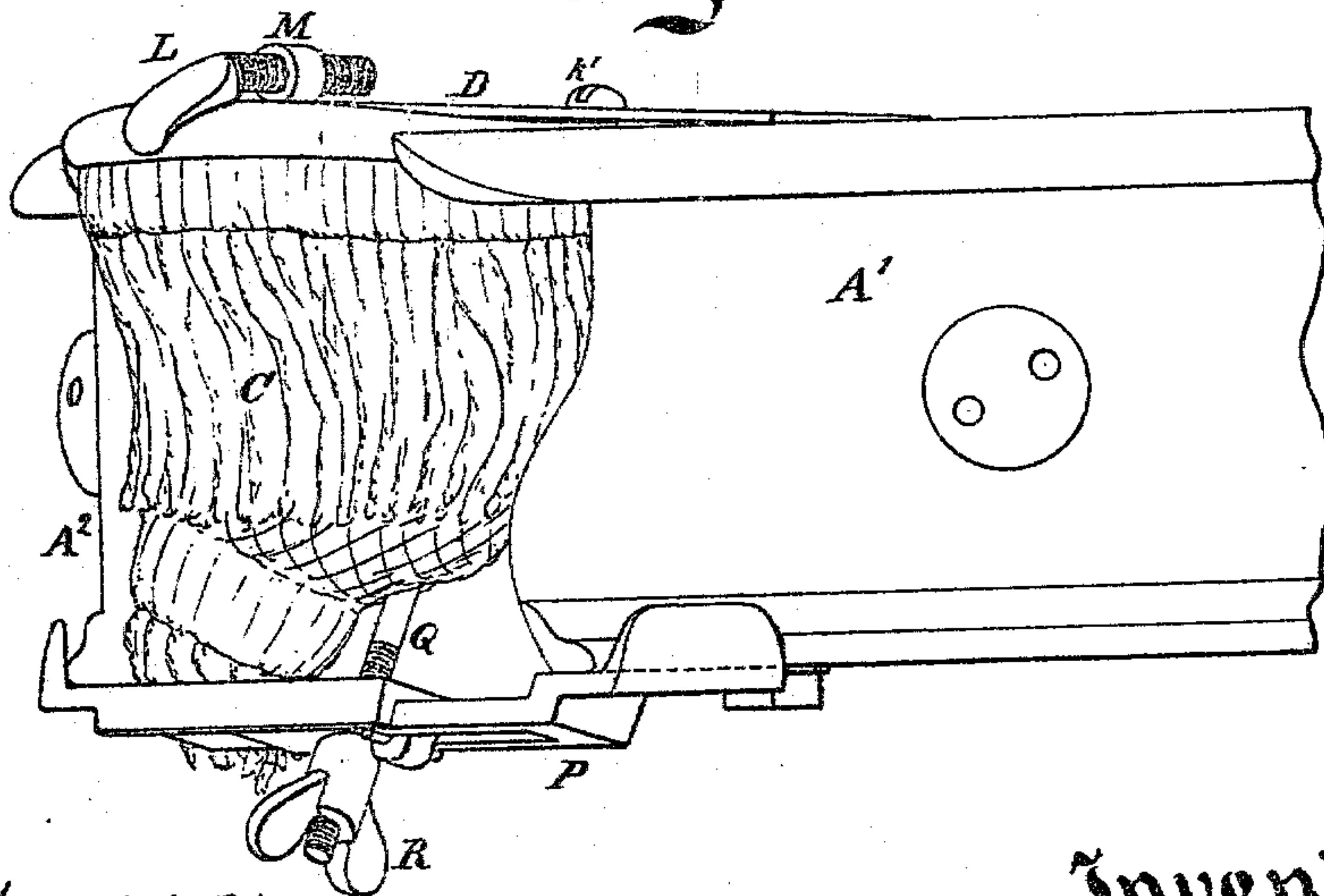


Fig. 2.



Witnesses

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John C. O'Connell

Inventor:

John Grant
by his attorney,
J. S. Gibson,

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Improvement in Billiard-Tables.

No. 132,084.

Patented Oct. 8, 1872.

Fig. 3.

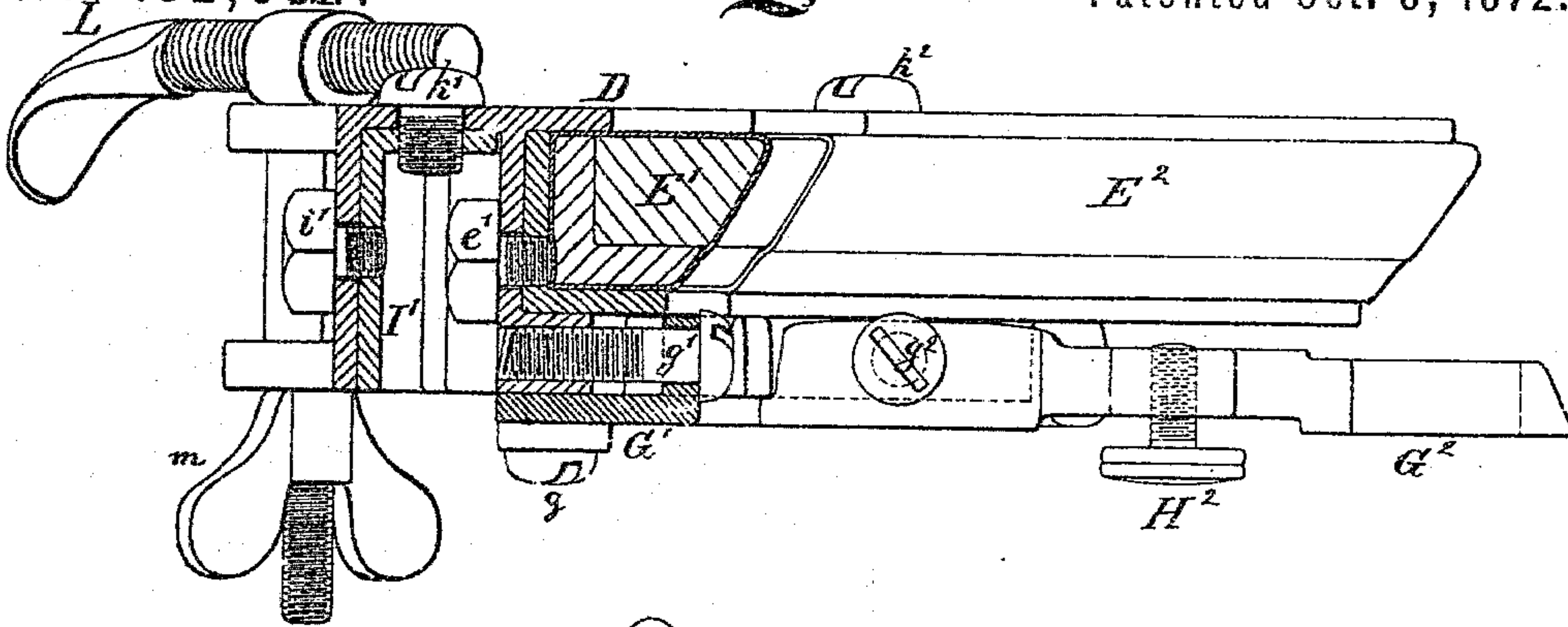
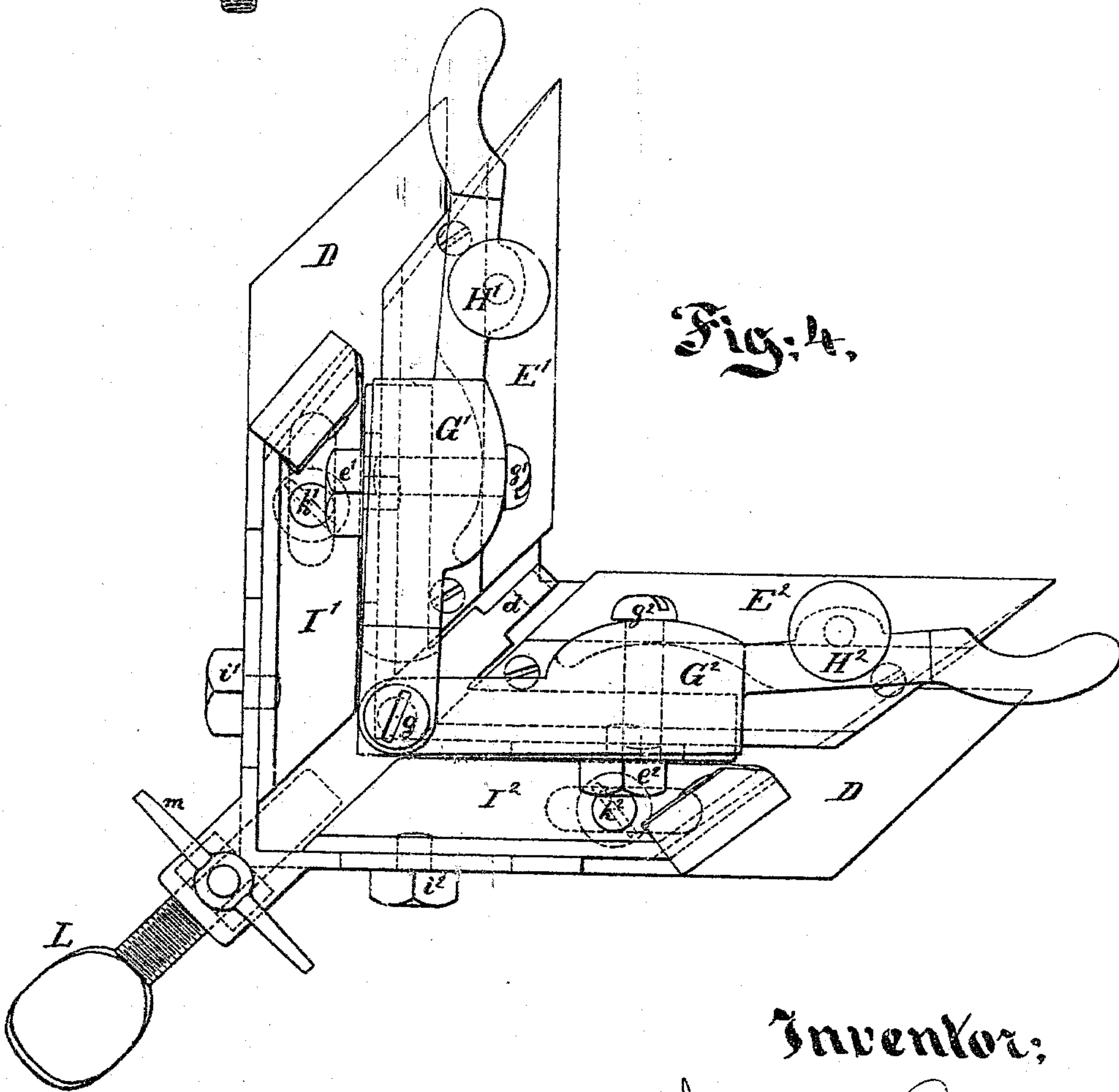


Fig. 4.



Inventor;

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S. D. Benson.

Witnesses:

Arnold Horwath.
Wm. C. Day -

UNITED STATES PATENT OFFICE.

JOHN HUNT, OF NEW YORK, N. Y.

IMPROVEMENT IN BILLIARD-TABLES.

Specification forming part of Letters Patent No. 132,084, dated October 8, 1872.

To all whom it may concern:

Be it known that I, JOHN HUNT, of New York city, in the State of New York, have invented a certain Improvement in Carom-Blocks or Removable Corners for Billiard-Tables, of which the following is a specification:

The object of the invention is to more perfectly adapt a four-pocket table to serve as a carom-table. Removable pieces intended for this purpose have been before employed, but they were deficient in adjustability. My invention allows of adjustment to provide for every condition, and furnishes reliable means for holding the removable parts very firmly in the right position.

The following is a description of what I consider the best means of carrying out the invention. The accompanying drawing forms a part of this specification.

Figure 1 is a plan view, showing the parts in place in a pocket; and Fig. 2 is a side elevation of the same.

The additional figures represent the parts detached from the table and on a larger scale. They represent only the parts which apply from above.

Fig. 3 is a vertical section on the line S S in Fig. 4, and Fig. 4 is a view from below.

Similar letters of reference indicate like parts in all the figures.

A¹ A² are the cushion-rails connected in any ordinary or suitable manner to the main table A. B¹ B² are the elastic faces, which are ordinarily termed the cushions, constructed in any ordinary or suitable manner. C is the net which receives the ball when it is pocketed. I use the term "pocket" to indicate the space between the jaws of the cushion or the space through which the ball has to pass to enter the net C. A description of one of my corners will suffice for the whole. D is the main frame of my removable part, and E¹ E² are adjustable sections of cushions secured thereon by bolts e¹ e², inserted through slots in the piece D. The cushions E¹ E² are of such material and so proportioned that their action shall be as much as possible like a corresponding part of one of the main cushions B¹ B². The back of each section E¹ E² is of iron, and the bolts e¹ e² allow of adjustment of the sections E¹ E² further from or nearer to each other. In setting them they are moved apart until they match fairly against or form, practically, each a continuation of the adjacent permanent

cushion. Then the bolts e¹ e² are tightened. It may be practicable to reach these bolts e¹ e² by a suitable wrench, to set them while the frame D is in place in the table; but it is about as well, in practice, to remove the frame D carefully, with its attachments properly placed, and tighten the bolts e¹ e² after such removal.

It is found that not only do the widths of pockets vary in different tables as ordinarily constructed, and even in different corners of the same table, but also that the depths of the pockets and the inclination and height of the cushions vary to a considerable extent.

The main frame D overlaps a little upon the lining of the cushions B¹ B². The height of the sections E¹ E² is not, however, dependent entirely or mainly upon that. There are adjustable pieces below which bear directly upon the surface of the main table A. G¹ G² are stops constructed in the form of levers pivoted to the part D by the screw g. These stops perform two important functions. By pressing horizontally against the inner faces of the cushion-lining they form reliable stops to prevent the entire carom-block from being driven backward, or caused to spring in the least under a strong blow. They are adjustable by means of the screws g¹ g². By tightening either of these screws—as, for example, g¹—the corresponding stop G¹ is moved strongly outward, and, by pressing against the fixed face of the adjacent cushion-lining B¹, the block D is adjusted inward. The stops G¹ G² perform another function. They receive the screws H¹ H² which are tapped into them, and stand with their broad smooth heads pressing fairly upon the surface of the table A below. The parts G¹ G² projecting or lapping under the part D, as shown, lift fairly thereon according as the screws H¹ H² are adjusted. The stops G¹ G² therefore perform the double functions of adjustable stops to hold the frame D and its connections against being pushed outward and adjustable supporting means to hold the same at the proper elevation. The frame D may or may not bear by its overlapping portion upon the upper surfaces of the cushion lining. The overlapping parts will usually be held up at a little elevation above the cushions, or, if it appears to touch, it will not bear with much force. It is important to allow for the elevation and depression of the cushions by means of the screws H¹ H², and therefore

the main bearing is on these screws at the bottom. A portion of the bearing may come on the overlapping parts of the frame D without damage, so long as there is capacity in the parts to descend lower when the screws $H^1 H^2$ are adjusted to admit it. I provide adjustable pieces $I^1 I^2$, held by bolts $i^1 i^2$, standing in slots in the outer portion of the frame D, and drawn upward by screws $k^1 k^2$, inserted through slots in the upper portion of the frame D. These adjustable pieces $I^1 I^2$ are constructed with beveled ends faced with leather, adapted to match under the slightly overhanging sides of the pocket. They serve to take hold on the sides of the pocket, and to hold the frame D and its connections firmly down, as also, and mainly, to hold it very firmly against sidewise movements. To adjust them, the screws $k^1 k^2$ and the bolts $i^1 i^2$ are slackened, and the parts $I^1 I^2$ are then moved outward until they bear firmly under the inclined sides of the pocket. Then the bolts $i^1 i^2$ are set up tightly, which fixes their position with regard to forward and backward movement, but allows them to be afterward raised slightly by the action of the screws $k^1 k^2$, in which motion they turn on the bolts $i^1 i^2$ as pivots. The setting-screws $k^1 k^2$, lifting on the stout leather-faced pieces $I^1 I^2$, cause the latter to draw downward on the entire apparatus by lifting under the slightly-inclined jaws or sides of the pocket. The back end of the frame D is supported by a stout hook-headed screw, L, which is constructed with a broad flat head, adapted to hook to and bear fairly on the pocket-frame, as represented. It is tapped, not directly into the piece D, but into a vertically-adjustable piece, M, which is supported in eyes formed on the piece D, and is adjustable upward and downward by means of the thumb-nut m , below. The inclination of the piece D and its attachments may be varied at will by changing the height of the piece M. A very important use of this adjustment is to compensate for the accidental bending down of the frame D, (sometimes termed the pocket-bow,) which is always liable to occur in the use of a table. P is a bar, extending across between the cushion-rails, and adapted, as represented, to receive a slender screw-bolt, Q, which is formed with an eye matching on a hook, d , formed within the angle of the frame D, and is provided with a thumb-nut, R, by which it may be tightened. The bolt Q is easily inserted and removed through one of the meshes of the net C. On slackening the nut R, the eye at the opposite end of the bolt Q may be disengaged from the hook d , and the parts P, Q, and R, removed. Then the parts above may be removed by moving the whole bodily inward toward the center of the table.

After the parts are once perfectly adjusted they should be kept so, taking care, by marking the parts or otherwise, that any given set of removable parts shall be always used in

the same corner. In removing the parts to exchange the condition of the table back to that of a pocket-table, it may be necessary to slacken the thumb-nut m , and thus allow the hook-bolt L to rise, in order to let go its hold upon the pocket-frame. It may be also necessary, in most cases, to slacken the screws $k^1 k^2$, or one of them; but the operator soon becomes accustomed to this, and by counting the number of turns or half turns given in each instance, and turning them again to the same extent on reapplying the parts to the table, the adjustment is made certain and very easy.

My invention requires no alteration in the table. It interferes in no way with the ordinary removal of the rails, and the replacing thereof. On the contrary, it allows, by its facility of adjustment, for all the disturbances and changes in the relations of the parts which are liable to result from ordinary or extraordinary repairs and adjustments.

I claim as my invention—

1. The stops $G^1 G^2$, and adjusting-means $H^1 H^2$, in combination with the sections of billiard-cushions $E^1 E^2$, as specified.
2. The vertically-adjusting means $k^1 k^2$, in combination with the sectional billiard-cushions $E^1 E^2$, and arranged to abut on the table A, as specified.
3. The cushion-sections $E^1 E^2$, adjustable confining-means $e^1 e^2$, and frame D, adapted to serve relatively to each other and to billiard-table pockets of different widths, as specified.
4. The vertically-adjustable piece M, and hook-bolt L, or its equivalent, in combination with the angle piece D, carrying adjustable sections of billiard-cushions $E^1 E^2$, and arranged to serve therewith, as and for the purposes specified.
5. The adjustable side pieces $I^1 I^2$, with means for adjusting outward and inward, and with means $k^1 k^2$, for strongly tightening the contact with the jaws of the pocket, as herein specified.
6. The cross-bar P, bolt Q, and nut R, in combination with a frame-carrying section of billiard-cushions, and adapted to serve therewith; as specified.
7. Sectional billiard-cushions, adjustable in width or distance apart, and adapted to match tightly in the pockets of billiard-tables, as specified.
8. The combination of a rigid angular frame, sections of billiard-cushions, means for adjusting their distances apart, means for adjusting the whole outward and inward relatively to the table, means for adjusting up and down, and means for adjusting the inclination, all substantially as herein specified.

In testimony whereof I have hereunto set my hand this 2d day of May, 1872, in the presence of two subscribing witnesses.

Witnesses: JOHN HUNT.
WM. C. DEY,
ARNOLD HÖRMANN.