

H. C. HAYT.
 APPARATUS FOR ILLUMINATING BILLIARD TABLES.
 No. 177,938. Patented May 30, 1876.

Fig. 1.

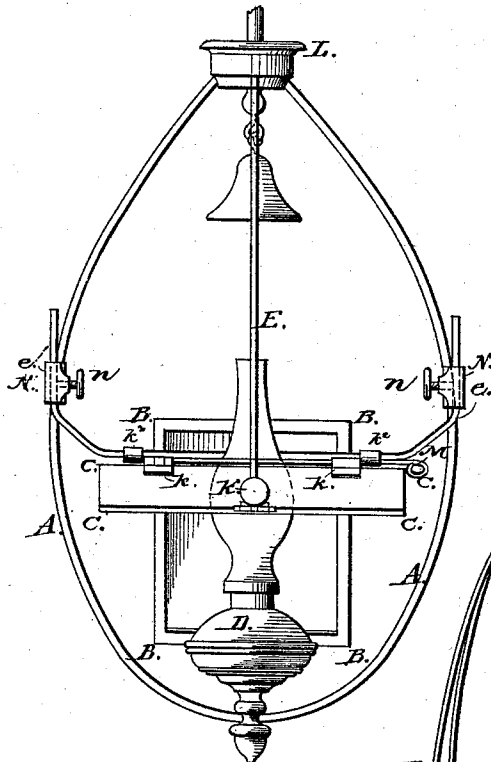


Fig. 2.

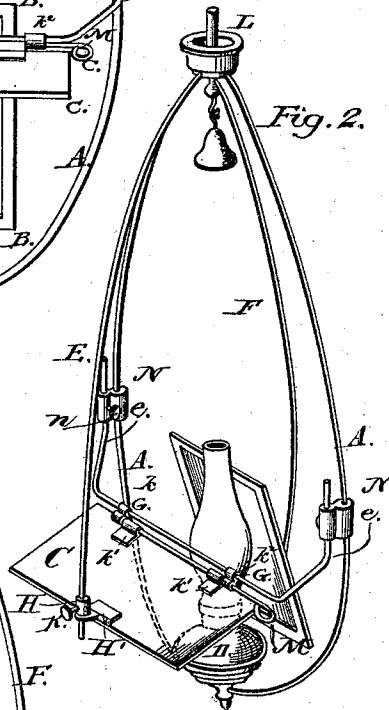
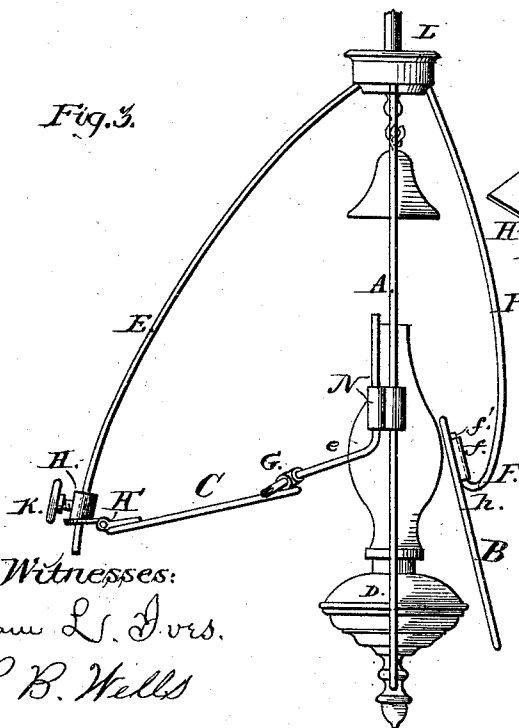


Fig. 3.



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Inventor:
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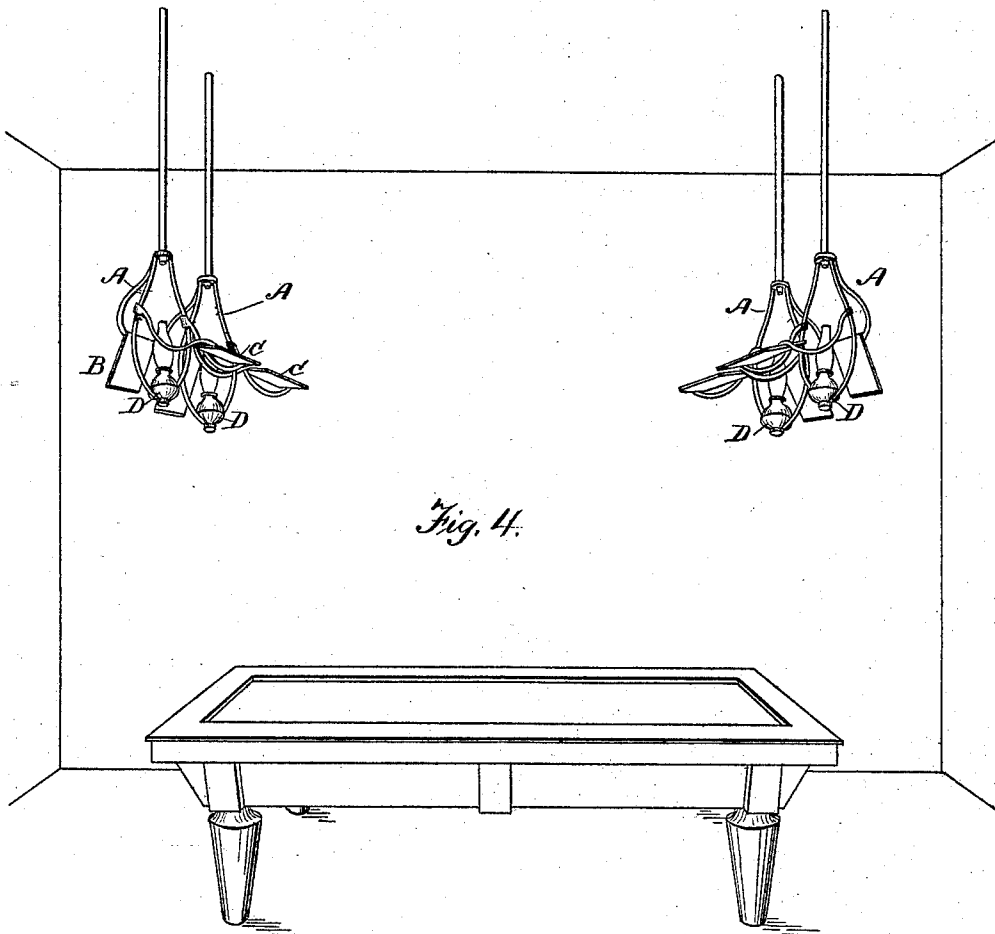


Fig. 4.

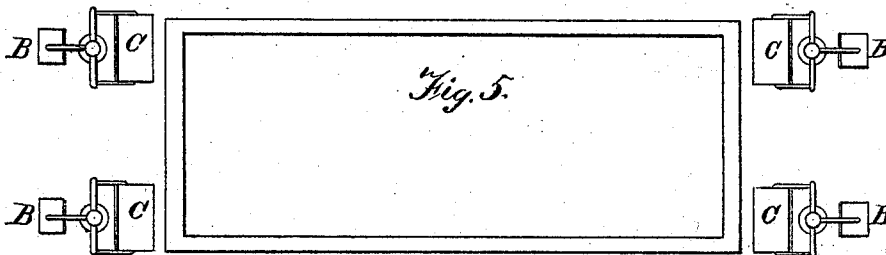


Fig. 5.

Witnesses:
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UNITED STATES PATENT OFFICE.

HUGH C. HAYT, OF SENECA FALLS, NEW YORK.

IMPROVEMENT IN APPARATUS FOR ILLUMINATING BILLIARD-TABLES.

Specification forming part of Letters Patent No. 177,938, dated May 30, 1876; application filed October 23, 1875.

To all whom it may concern:

Be it known that I, HUGH C. HAYT, of Seneca Falls, in the county of Seneca and State of New York, have invented certain new and useful Improvements in Apparatus for Illuminating Billiard-Tables, and for other purposes, of which invention the following is a specification, to wit:

The object of my invention is to provide an apparatus for illuminating billiard-tables, and for other purposes, whereby a more evenly-distributed and stronger light may be thrown upon the surface to be illuminated more conveniently, and at less cost, than by devices now in use.

The primary design of this invention is to obviate the use of gas for lighting billiard-tables by improving upon the devices now employed with kerosene and other materials for reflecting and economizing light.

This invention may, however, be adapted, also, by a simple modification, to use with gas, with the same improved results.

The following is a description of my invention, reference being had to the accompanying drawings.

Figure 1 is a view of my invention as seen from the center of the table by one facing the fixture. Fig. 2 is a perspective of the same, showing the attachments and position of the mirror nearest the table. Fig. 3 represents my invention as seen by one standing opposite the end of the table, and at one side. Fig. 4 is a perspective view of a table with lamps arranged in accordance with my invention, and Fig. 5 is a plan view of the same.

A A A A is a lamp-frame, supporting the lamp D, or any light which may be used, and is fastened into a hollow block, L, which is attached directly to the ceiling by screws, or to a rod, as shown, supporting the fixture. B B B B is a plane mirror, of suitable size, framed and backed with tin or other suitable material, supported from the block L by the curved rod F, which is at right angles to the frame A A. The rod F is bent upon itself at the point *h*, forming the hook *f'*. *ff* is a loop fastened to the back of the mirror B B, which receives the hook *f'*, forming an adjustable attachment.

The above-described mirror may be adjusted

to its proper position and angle relative to the light D by bending the rod F and the hook *f'*, and by moving the mirror upon its axis. It may also be easily removed by simply lifting it off the hook.

C C C C, Figs. 1 and 2, is another plane mirror, of like construction to the one above described, which is supported and adjusted by the parts hereinafter described.

N N are two small double cylinders. Through one portion of each the frame A A passes, and to it the cylinders are fastened by solder or otherwise. Through the other portion of each cylinder the ends of the rod *e e* pass freely, and are secured by the set-screws *n*, thus forming an adjustable fastening.

k k are double loops, through one portion of which the rod *e e* passes, and to which it is soldered or otherwise fastened. *k'* are single loops fastened to the back of the mirror. M M is a wire or small rod passing through the loops *k k'*, thereby forming a hinge. H is a small cylinder, through which the curved rod E passes; and in order that it may adapt itself to the rod when the mirror is raised or lowered it is provided with the hinge H', which hinge is fastened to the back of the mirror. K is a set-screw, which keeps the mirror in position when adjusted at the proper angle. The rod E is fastened into the block L in a position exactly opposite the rod F, and also at right angles to the frame A A.

Now, by the above-described devices, the mirror C C may be adjusted to any required angle with reference to the light D, may be raised or lowered, and, when adjusted, is held securely in position. By withdrawing the rod M M this mirror may also be easily removed for cleaning or other purposes.

The ends of the frame A A and the rods E and F pass through the hollow block L, as hereinbefore stated. The frame A A, being in one piece, is fastened on the inside of the block by riveting or soldering, or in any secure manner. The rods E and F are fastened in a similar manner, or by screwing them into the block.

For the purpose of illuminating a billiard-table I prefer to use four of the devices hereinbefore described, arranged as described hereafter, although the number and arrangement

may perhaps be varied. Two of the fixtures described are suspended at each end of a billiard-table, a few inches outside of the rail, at a convenient height therefrom, and about twenty inches apart from center to center, and at equal distances from the corners of the table, as illustrated in Figs. 4 and 5.

By this device the lights are removed from the table, leaving the center of the table free for playing and counting, and not liable to be injured by oil from the lamps, when lamps are used. The lamps are also less liable to be broken or injured when used with this device. This arrangement of the lights is also pleasanter for the player than other devices now used for the same purpose, as the lights are so placed as not to dazzle his eyes.

By means of my invention above described, used as hereinbefore stated, a large portion of the light which would naturally pass away from the table, and not be utilized, is reflected by the mirrors directly upon the table, and distributed evenly over its whole area. The positions of the lights also reduce all shadows to a minimum.

While, by means of the mirrors above described, the light upon the table is greatly intensified, affording a clear, even, and brilliant light for the players, at the same time, the light not being too much confined, the room is also brilliantly illuminated.

I claim as my invention—

1. The combination of four or more lamps or gas-jets arranged over a billiard-table, two at each end, with described reflectors, adapted to reflect the light of each lamp downward and toward the opposite end or the middle of the table, substantially as described.

2. In combination with the lamp D or gas-jet, an adjustable inclined reflector, B, arranged on one side of the lamp, and an independently-adjustable reflector, C, arranged on the opposite side of the lamp, said reflectors having their reflecting-surfaces toward each other, substantially as described.

HUGH C. HAYT.

Witnesses:

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