H. W. Collender.

Billiard & Dining-Table.

No. 77001 Patented Apr. 21, 1868.

Fig: 1.

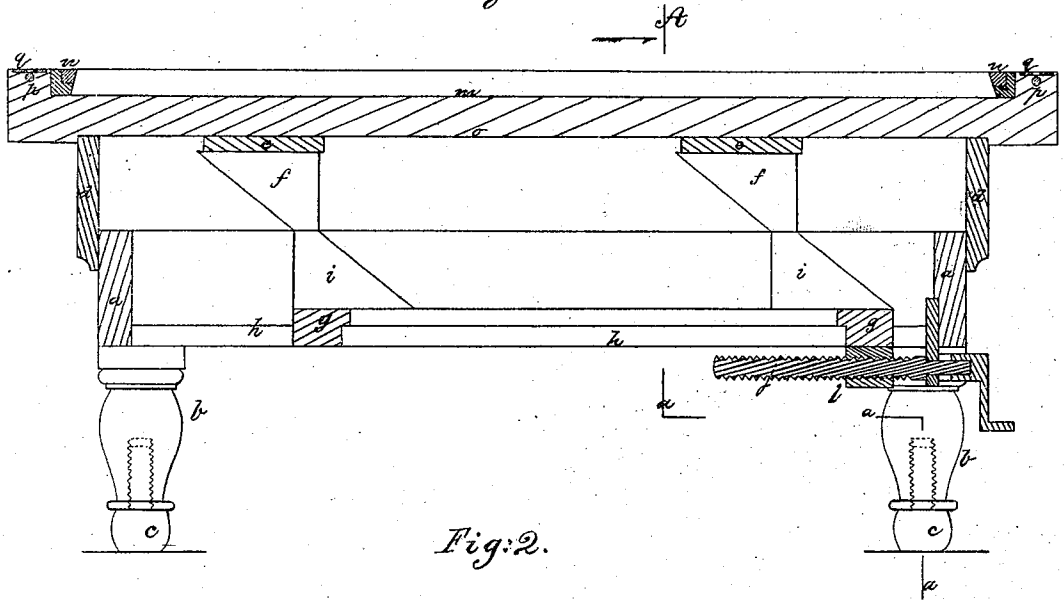


Fig: 2.

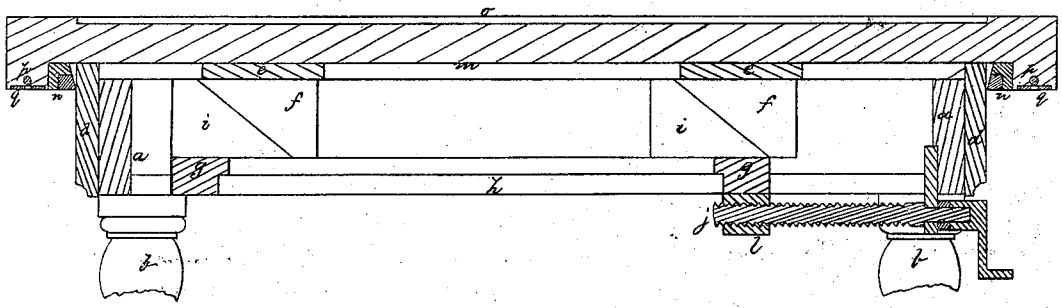


Fig: 3 A, a,

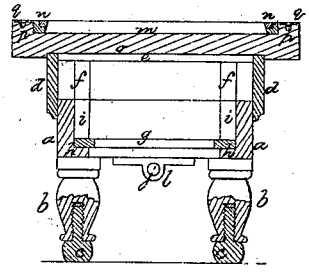
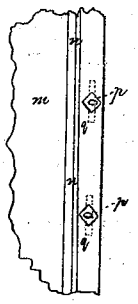


Fig: 4.



Witnesses
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HUGH W. COLLENDER, OF NEW YORK, N. Y.

Letters Patent No. 77,001, *dated April* 21, 1868.

BILLIARD AND DINING-TABLE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, HUGH W. COLLENDER, of the city, county, and State of New York, have invented a new and useful Improvement in Combination-Tables for Billiards, and other uses; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a longitudinal vertical section of the table as arranged for playing billiards.

Figure 2 is a like view of the table when converted for dining or other uses.

Figure 3, a cross vertical section, on a smaller scale, of the table taken in the plane of the line A *a* of fig. 1; and

Figure 4, a detail view, showing plan of angle-sight plates and spirit-levels.

The same letters indicate like parts in all the figures.

Tables have heretofore been made convertible, so that they could be used either for playing billiards or for dining, by constructing them in manner suitable for playing billiards, and providing them with a series of leaves to be put on when used for dining or other purposes, and as the surface is required to be higher for playing the game of billiards than for other uses, the top frame of such tables was provided with screws, extending downwards, and tapped into the legs, so that by turning the screws, the frame could be elevated or depressed, spirit-levels being inserted in the frame to indicate when brought to the required level for playing billiards. Such mode of construction is objectionable, because, first, of the inconvenience of putting on and taking off the top leaves whenever the table is required to be converted; second, of the trouble of turning so many screws to change the height of the table every time it is converted, there being one screw for each leg, and the length of time required to get the surface of the table level every time it is converted; and third, of the difficulty, if not the impossibility, of having the table firm and steady, the frame being connected with the legs by means of screws, which must be made to turn freely, and which, if made to fit accurately at first, will soon become loose by wear.

By my said invention I avoid all the above-named difficulties.

In the accompanying drawings, *a* represents a quadrangular frame of the required size, firmly secured in any suitable manner to the legs, *b*. The lower ends of the legs are provided with screw-base pieces, *c*, for adjusting the level of the table, or it may be levelled in any other suitable manner. To the outer surface of the frame *a* is fitted a second frame, *d*, which I term the table-bed frame, and so fitted thereto as to slide up and down accurately, but with sufficient freedom not to bind. The sides of the outer frame *d*, at the top and between the ends, are connected by two cross-braces, *e e*, and from those cross-braces four hangers, *f f*, extend down inside of the inner frame *a*, their lower edges being bevelled all in the same direction.

Within the inner frame there is fitted a carriage, *g*, which slides on horizontal ways, *h h*, and this carriage is provided with four cam-pieces, *i i*, bevelled to correspond with the bevel of the hangers *f f*, and the extreme end of the hangers and cams is formed with a flat surface beyond the bevel.

A screw-shaft, *j*, provided with a crank-handle, *k*, is journalled to one end of the inner frame *a*, and works in a nut, *l*, in one end of the carriage *g*, so that by the turning of the said screw-shaft the carriage, with its cam-pieces *i*, can be readily moved back and forth to elevate or depress the outer frame.

The billiard-bed, *m*, and the surrounding cushions, *n*, are to be made as represented, and as is well known to billiard-table manufacturers, and the under, or rather the other face, *o*, of this bed, is properly formed to be used either as a dining-table, a library, or a work-table, and if desired, this surface may be formed with a slightly-projecting border, to prevent the bed from slipping when the other surface is used for playing billiards; but this is not necessary, as the weight of the bed resting on the outer frame will prevent slipping. When the bed is to be used for other purposes it is inverted, and the billiard-surface placed on, and the cushions surrounding the outer frame *d*, so that the bed cannot slip.

Spirit-levels, *p*, are inserted in recesses made in the cushion-blocks, and the plates, *q*, which form the angle-

sights, have each a mortise of nearly the size of, and are secured to the cushion-blocks immediately over, the spirit-levels, to answer the double purpose of marking the middle of the length of each of the cushions, and of protecting the spirit-levels.

From the foregoing, it will be seen that the bevelled hangers *f* rest on the cam-pieces *i* of the carriage *g*, so that if the ways on which the carriage slides be true and parallel with the surface of the billiard-bed, and the flat surface of the cam-pieces *i* and hangers *f* are accurately fitted, by simply turning the one screw-shaft, the outer frame, with the table-bed, can be readily depressed to the required height to be used for dining, writing, or reading, and, when required for playing billiards, elevated until the flat surfaces of the hangers *f* rest on the flat surface of the cam-pieces *i*, so that when the billiard-bed has once been levelled, whenever so elevated it will be level, thus avoiding the necessity of adjusting the level every time the table is converted.

To avoid friction, the carriage *g* may be made in two parts, with the bevel of the two sets of cam-pieces *i* and hangers *f* reversed, and the screw-shaft *j* formed with a right and a left-handed thread to fit nuts in the two parts of the carriage. In this way the force exerted to elevate the outer frame and bed will be exerted in opposite directions instead of being exerted all in one direction.

It will be obvious that the number of bearing-points of the bed on the carriage or carriages may be increased by increasing the number of cam-pieces and hangers, but I have found four to be sufficient.

And it will also be obvious that some of my said improvements may be used without others; as, for instance, the mechanism for elevating the bed may be used to advantage without a reversible bed, by using a series of leaves to cover the billiard-surface when the table is to be converted into a dining-table.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The elevating-mechanism, substantially such as herein described, in combination with a billiard-table bed which is convertible, so that it can be used for playing billiards, or for dining or other uses, as described.

2. The combination of the elevating-mechanism, the movable or outer bed-frame *d*, and the reversible bed *m*, substantially as and for the purpose described.

3. The combination of the elevating-mechanism, the outer or bed-frame *d*, the bed *m*, or the equivalent thereof, and the adjustable base-pieces *c* of the legs, substantially as and for the purpose described; and

4. The combination of the spirit-levels with the angle-sight plates, substantially as and for the purpose described.

HUGH W. COLLENDER.

Witnesses:

ANDREW DE LACY,

WM. H. BISHOP.