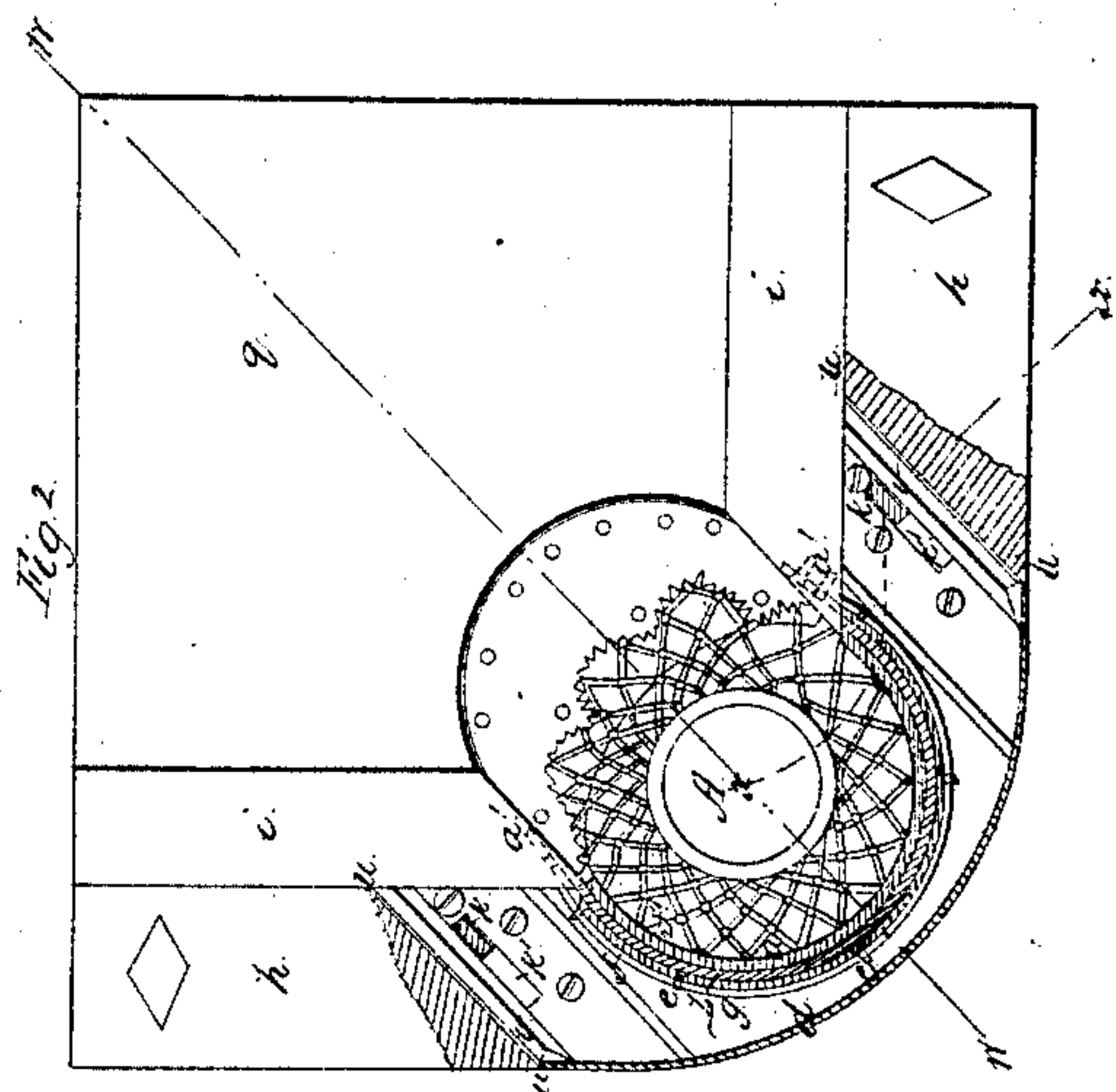
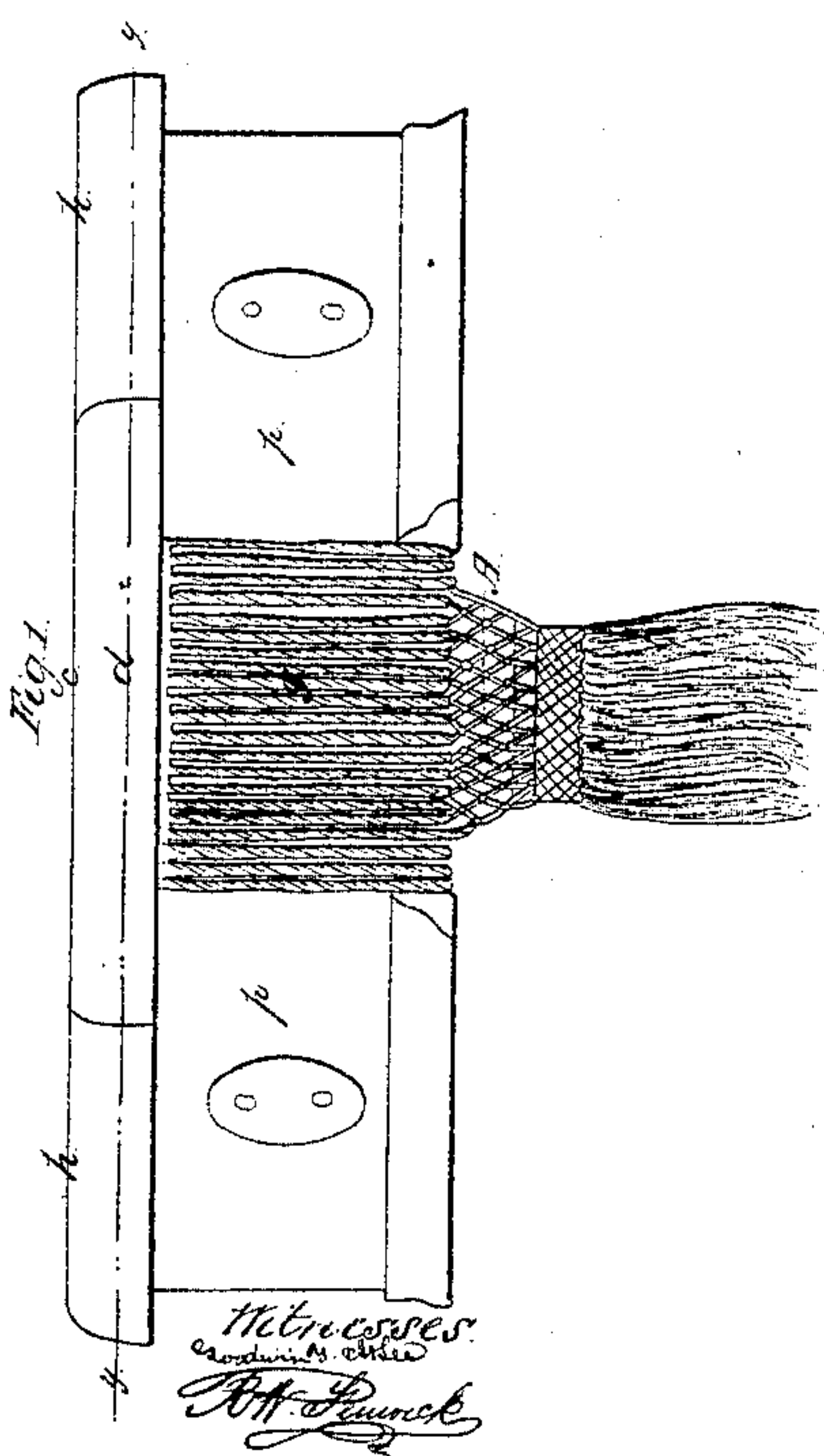
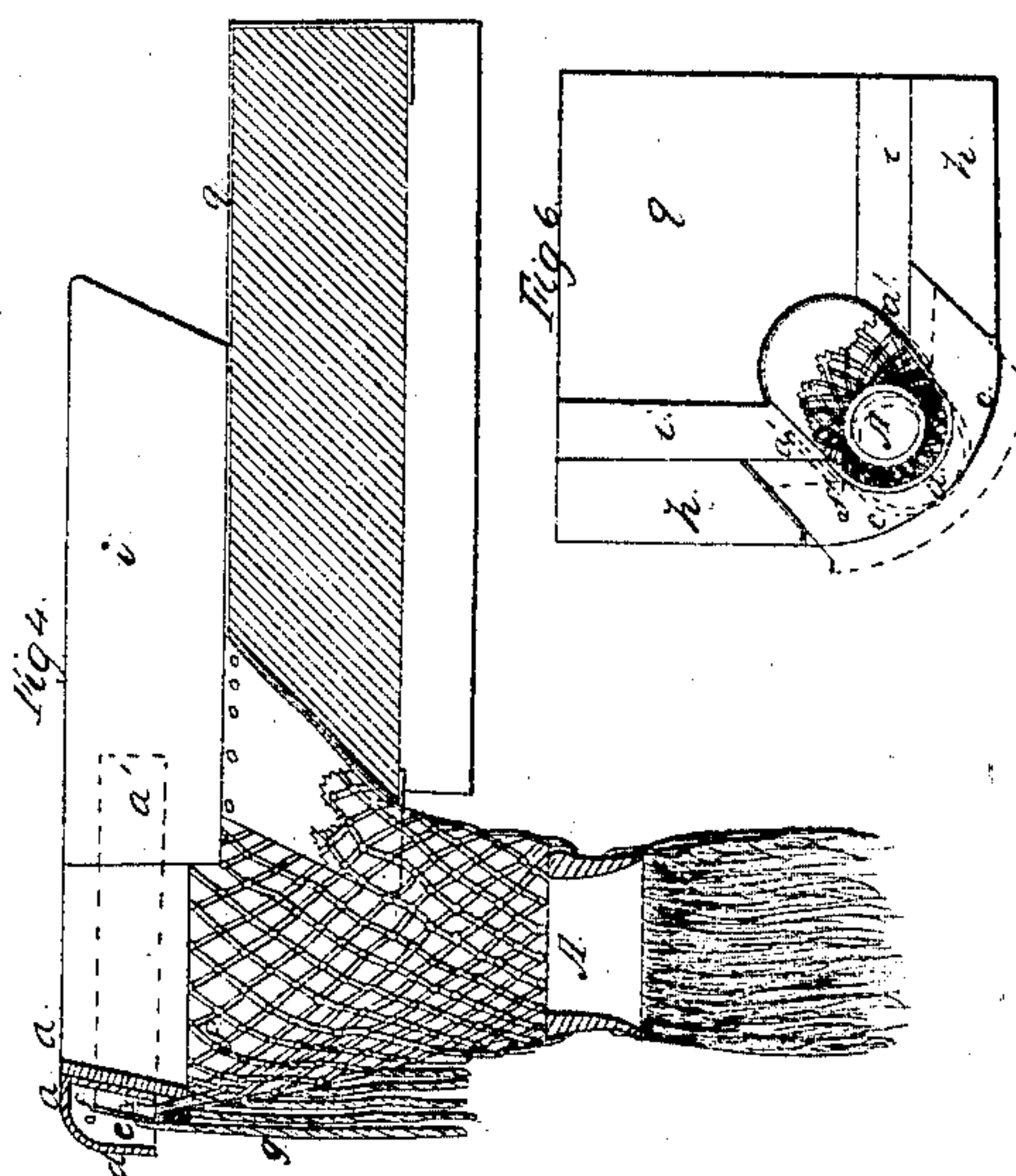
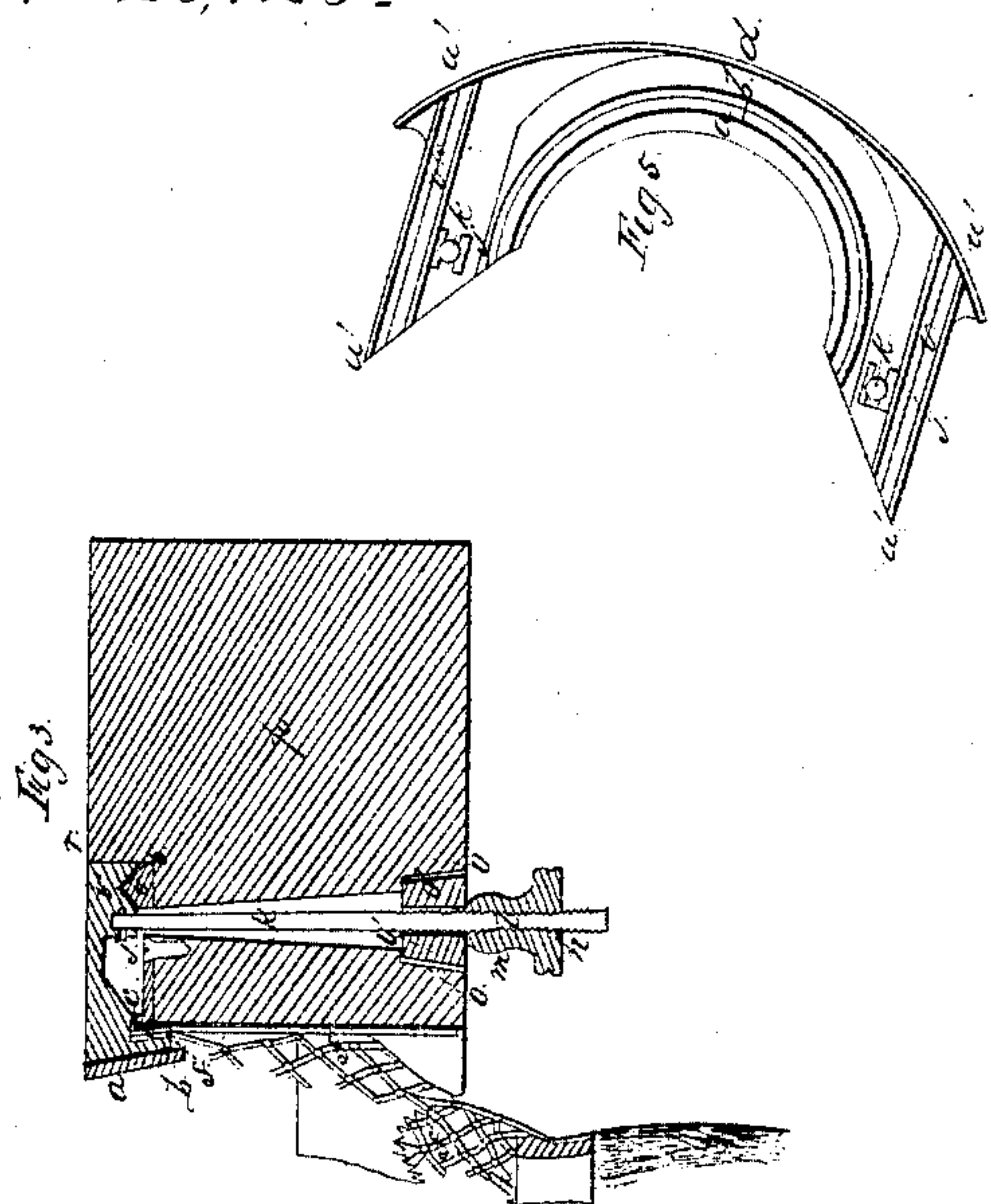


J. P. Ellicott,

Billiard Table

N^o 28128.

Patented May 1, 1860.



Inventor
James P. Ellicott

UNITED STATES PATENT OFFICE.

JAMES P. ELLICOTT, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR TO PHELAN & COLLENDER, OF NEW YORK, N. Y.

BILLIARD-TABLE-POCKET IRON.

Specification of Letters Patent No. 28,128, dated May 1, 1860.

To all whom it may concern:

Be it known that I, JAMES P. ELLICOTT, of the city and county of Washington and District of Columbia, have invented a new and useful Improvement in Billiard-Table-Pocket Irons; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1, represents an end view. Fig. 2, a top view and partial horizontal section on the line y, y , of Fig. 1. Fig. 3, a vertical section in line x, x , of Fig. 2. Fig. 4, a vertical section in line w, w , of Fig. 2. Fig. 5, a bottom view of the pocket iron, and Fig. 6, a top view of the whole device, the black lines show the iron in the position it occupies before the ball has struck it. The red lines show the iron as it appears when it has yielded to the force of the ball.

Similar letters of reference, in each of the several figures indicate corresponding parts.

The nature of my invention consists, 1st, in a pocket iron of a billiard table which yields when struck by a ball and regains its original position after the force of the ball has been spent. One advantage of such a yielding pocket iron, is that it prevents the balls from leaping over the pocket iron when striking it with great force, in as far as the pocket iron while yielding absorbs the force of the ball and causes it to drop into the pocket. Another advantage of it is that it saves wear and tear of billiard balls. In the usual style of billiards, the pocket iron is stationary and the balls frequently entering with great force, soon cut through the leather covering and leave the iron naked. After that, the balls when entering the pocket strike the iron and are thereby injured and rapidly destroyed. It is evident that in a yielding pocket iron, the covering of the iron will not be near as much worn as in a stationary one.

It consists, 2nd, in hinging the pocket iron to two arms combined with elastic washers and ball shaped nuts, for the purpose of allowing the pocket iron to yield with a parallel motion.

It consists, 3rd, in grooving the pocket iron so that the outer side of the pocket iron and of the rail of the billiard table shall be one continuous surface and a recess

for introducing the netting and elastic strap formed and thus a neat finish secured and the player not interfered with.

By this means, difficult "hazards" and "caroms" can be played from the corner as well as from the sides of the billiard table, which cannot be done on the billiard table as heretofore constructed, where the pocket iron has to be raised above the level of the billiard table rail in order to do away, as much as possible, with the injury arising from the concussion received from a ball going into the pocket with force and striking against a surface which is stationary and not constructed to yield and thereby to consume the momentum of the ball. Independent of this height of the pocket iron, there is, in the usual style of billiard table, the thickness of the covering of leather added to that height. This increased height of the pocket iron and covering makes it impossible for the player to play certain balls from the corners. On my billiard table however, it will be observed, the covering only comes up to the upper edge of the pocket iron, and the upper surface of the billiard table rail, so that balls can be played with equal facility from the corners as well as from the sides of my billiard table.

To enable others skilled in the art, to make and use my invention, I will proceed to describe its construction and operation.

The rail h, h , of my billiard table has a recess r, s , for the reception of the pocket iron b, c, d , so that the surface of the pocket iron when the latter has been placed into said recess shall be level with the surface of the rail h, h .

The shape of the top and outer side of the pocket iron is such as to form a continuous surface with the top and outer side of the billiard table rail. This will be plainly understood from Fig. 1, which represents the top surface of the rails h, h , and pocket iron d, c , to be one continuous horizontal line; and from Fig. 2, which represents one continuous outline of the rails h, h , and pocket iron d .

The diagonal sides u, u, u, u , of the recess r, s , (against which the sides u', u' , of the pocket iron fit) are parallel, as will be seen from Figs. 2 and 5, so that the pocket iron may be free to move out and in on that diagonal line. The pocket iron is further guided in this direction by the notches v' ,

in the under side of the pocket iron fitting over guide rails *v*, projecting over the bottom of the recess *r*, *s*. The notches and guide rails are also parallel to the sides *u*, *u*, of the recess.

Two arms *k*, *k*, are hinged to the under-side of the pocket iron, as seen at *j*, Fig. 3. These arms extend through slots *k'*, *k'*, in the bottom of recess *r*, *s*, and through the solid frame *p*, of the billiard table rail. The under end *l*, of each of the arms *k*, *k*, is screw threaded and passes through a mortise *o*, in the underside of the frame *p*, and an india rubber washer *o'*, loosely fitting the mortise, is slipped over the end *l*, of arm *k*, and a nut *m*, *n*, is screwed over the end *l*, so as to bear with its ball shaped top *m*, against the under surface of the india-rubber washer *o'*. Whenever the pocket iron is struck by a ball with sufficient force to move it out on its guide rails *v*, *v*, the india-rubber washers *o'*, yield sufficiently to permit the arms *k*, to accommodate themselves to that motion of the pocket iron, and their upper ends to move backward in the slots *k'*, while the tension of the washers pressing against the nuts *m*, serves to keep the pocket iron down on its guide rails. The top surface of the nuts is rounded or ball shaped in order that no corners or edges of the nuts shall come in contact with and increase the compression of the washers, while the arms swing in their slots. By means of this combination of notches *v'*, guide rails *v*, hinged arms *k*, elastic washers *o'*, and nuts *m*, a perfect parallel movement of the pocket iron is obtained.

The pocket iron has on its inner side a semi-circular rim *b*, which inclines inwardly toward the top surface *c*, of the pocket iron, as is shown in Fig. 4. This rim is covered with a layer of vulcanized india rubber *a*, *a*, of the quality used for belting so as to receive the blow of the ball. The covering *a*, *a*, possessing a certain degree of softness, adds toward absorbing the force of the ball, in conjunction with the yielding of the pocket iron. Besides, the covering has the same inward inclination as the rim *b*, of the pocket

iron and its upper edge is level with the upper surface *c*, of the pocket iron so as to bend to deflect a ball downward when being struck by it, and thus to insure a perfect drop of the ball into the pocket A.

The inner rim *b*, outer rim *d*, and top *c*, of the pocket iron form a groove *b*, *c*, *d*, in the underside of the pocket iron (see Fig. 4) for the following purposes. A number of pins or lugs *e*, project from rim *b*, into said groove for the pocket netting *f'*, to be hung on, as represented in Fig. 4. An india-rubber strap *f*, fastened to the billiard table frame at both ends (as seen at *a'*, *a'*, Fig. 2) is sprung over the rim *b*, in the groove *b*, *c*, *d*, and serves to throw the pocket iron back into its original position and keep it tight to the cushions *i*, *i*, after it has yielded to a ball.

The curtain *g*, is fastened to the strap *f*. The upper edges of the curtain and of the netting, as well as the india-rubber strap, are all hidden in the groove *b*, *c*, *d*, of the pocket iron, the outer rim *d*, and top *c*, of which form a perfect finish with the railing of the billiard table.

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

1. A pocket iron of a billiard table substantially as described, so that it may yield when struck by a ball and regain its original position after the force of the ball has been spent, as and for the purposes set forth.

2. Hinging the pocket irons to two arms combined with elastic washers and ball shaped nuts, substantially as described, for the purpose of allowing the pocket iron to yield with a parallel motion, as set forth.

3. The pocket iron, substantially as described, so that the outer side of the pocket iron and of the rail of the billiard table shall be one continuous surface, and a recess for introducing the netting and elastic strap formed, and thus a neat finish secured and the player not interfered with, as set forth.

JAMES P. ELLICOTT.

Witnesses:

GOODWIN Y. ATLEE,
R. W. FENWICK.