

No. 865,874.

PATENTED SEPT. 10, 1907.

P. M. CUNNINGHAM.
CONVERTIBLE POCKET CAROM BILLIARD TABLE.

APPLICATION FILED APR. 29, 1907.

2 SHEETS—SHEET 1.

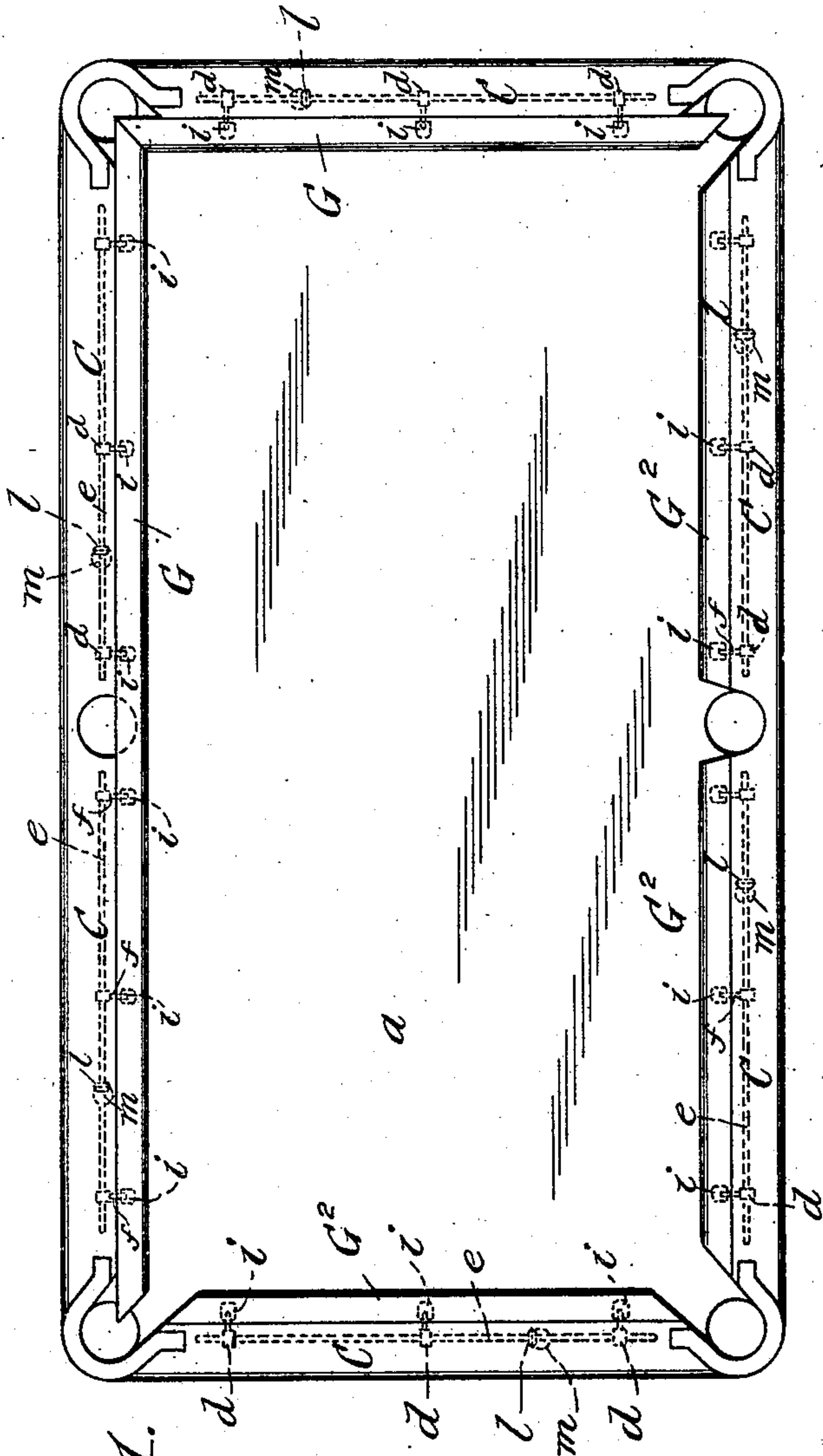


Fig. 1.

WITNESSES

H. J. Rocher
J. Segui.

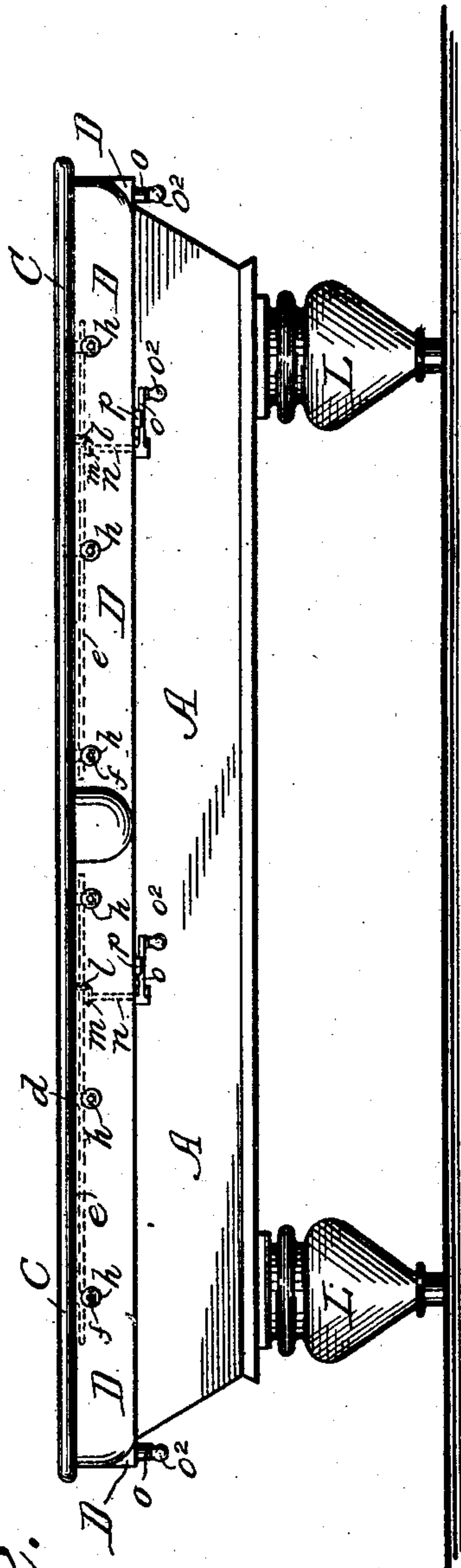


Fig. 2.

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2 SHEETS—SHEET 2.

Fig. 6.

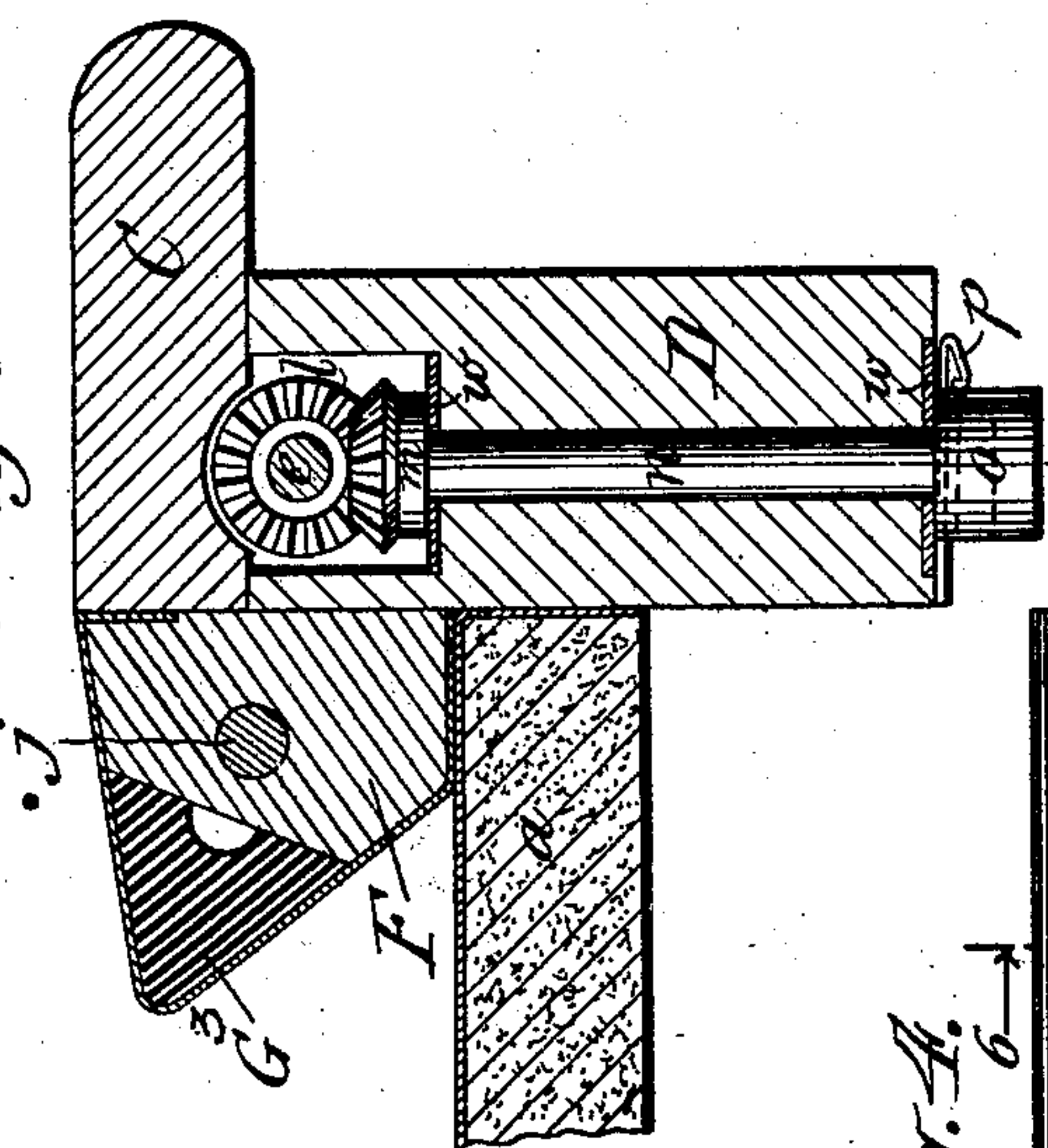


Fig. 4.

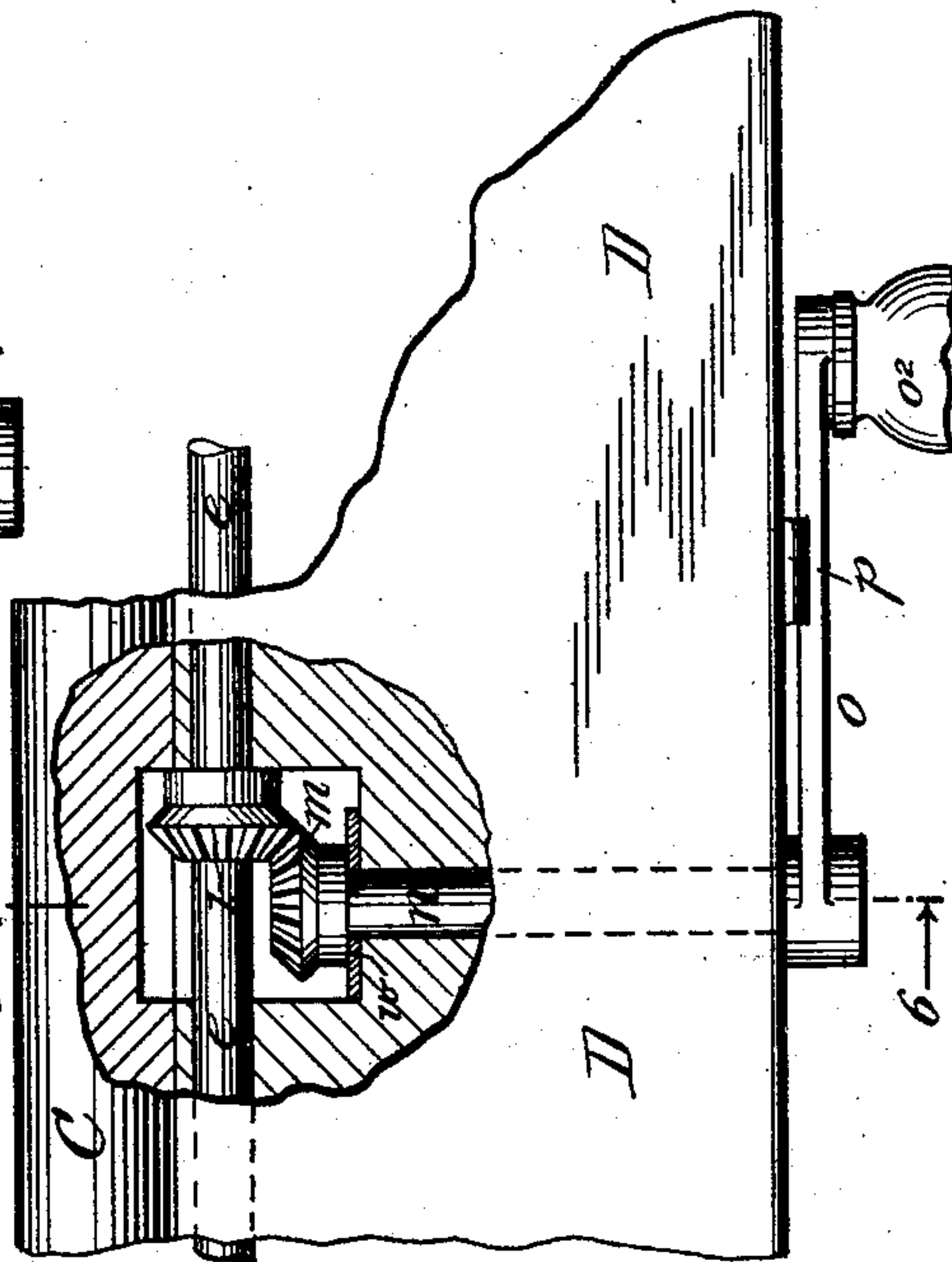


Fig. 5.

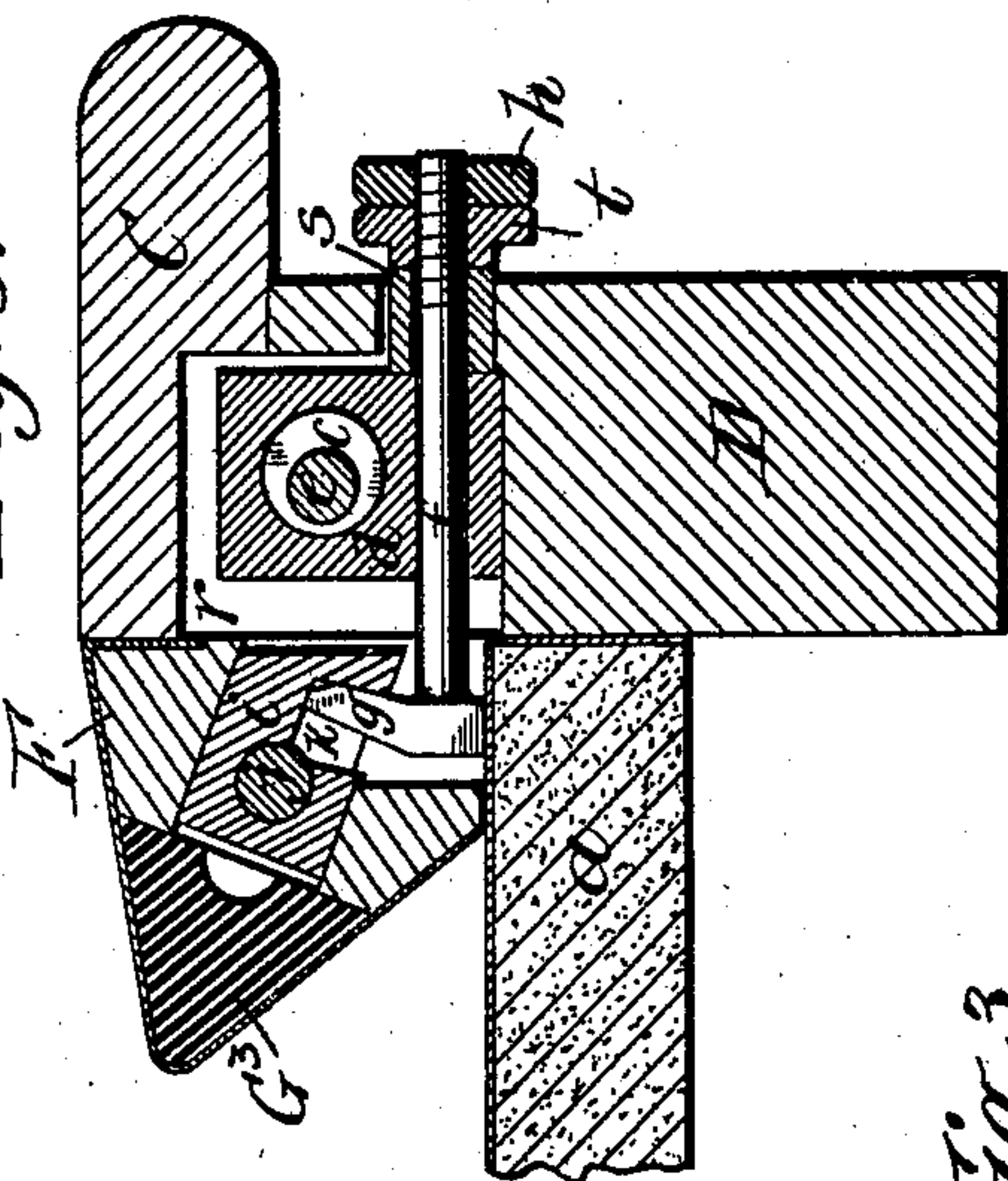
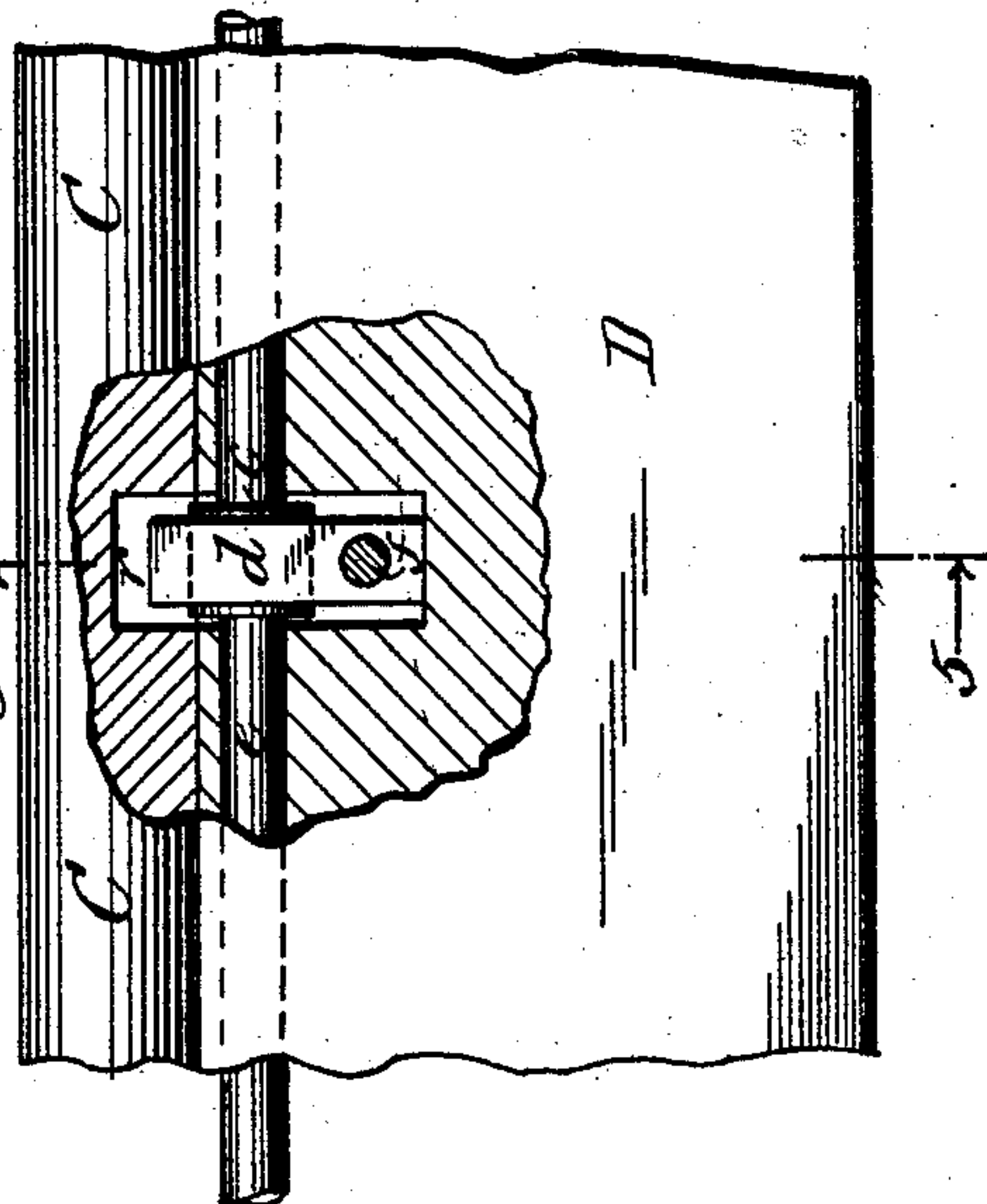


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

PATRICK M. CUNNINGHAM, OF NEW YORK, N. Y., ASSIGNOR TO THE BRUNSWICK-BALKE-COLLENDER COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF OHIO.

CONVERTIBLE POCKET-CAROM BILLIARD-TABLE.

No. 865,874.

Specification of Letters Patent.

Patented Sept. 10, 1907.

Application filed April 29, 1907. Serial No. 370,877.

To all whom it may concern:

Be it known that I, PATRICK M. CUNNINGHAM, a citizen of the United States, and a resident of the city of New York, borough of the Bronx, in the county and State of New York, have invented certain new and useful Improvements in Convertible Pocket-Carom Billiard-Tables; and I do hereby declare the following to be a full, clear, and exact description of my said invention, reference being had to the accompanying drawings, which make part of this specification.

My invention relates to that type of convertible pocket-carom billiard table, in which there are employed, in connection with a permanently arranged set of bed-rails, (to which are attached the usual pocket-irons of a pocket billiard table) two sets of, interchangeable, cushion sections; one adapted to serve the purposes of a set of cushions for a pocket table; and the other to serve the purposes of a set of cushions for a carom table.

A convertible pocket-carom table of this type is shown and described in U. S. Letters Patent granted to me, on the 17th day of July, 1906, No. 826,088; and my present invention has for its object to improve or make more useful and desirable the species of convertible table set forth in my said patent, by rendering it capable of transformation from a pocket to a carom table, and vice versa, more expeditiously and more conveniently.

To this end and object my invention may be said to consist in the hereinafter described novel means employed for effectuating the securement in place on the table; and the detachment therefrom, of the removable and attachable, interchangeable, sets of pocket cushion sections, and carom cushion sections, more expeditiously and more conveniently than was heretofore possible of accomplishment.

To enable those skilled in the art to fully understand and practice my invention, I will now proceed to more fully describe the same, referring by letters to the accompanying drawings, in which

Figure 1 is a top view of a convertible table of the species made the subject of my said Letters Patent, and comprising the improvements made the subject of this application. And in said figure, I have, for the purposes of illustration therein, of the two kinds of interchangeable cushion sections, shown the table supplied at the top and right hand side of the view with carom cushion-sections; and at the lower and left hand sides with pocket cushion-sections. Fig. 2 is a side elevation of my improved table. Fig. 3 is a partial side elevation of one of the cushion rails; broken away to show some of the interiorly arranged parts; and drawn on a much larger scale—nearly full size. Fig. 4 is a similar elevation of the cushion rail, taken, however, from another

point of view to show one of the hand-levers or crank handles for working a cushion-section locking-mechanism; and in like manner broken away to visually disclose certain other interiorly located parts. Fig. 5 is a vertical cross section taken in a plane indicated by the broken line 5—5 at Fig. 3. Fig. 6 is a similar sectional view taken in a plane indicated by the broken line 6—6 at Fig. 4.

In the several figures, the same part will be found always designated by the same letter of reference.

a is the bed of the table, which is supported by the usual broad-rails *A*, constituting the table body, that, in turn, rests on suitable legs *L*; while *C*, *D* are the two, securely united parts of the cushion-rails of the table; all made and arranged together, as shown, after the fashion of an ordinary billiard table of the modern, approved make. Of course, the cushion rails, or more properly speaking, in the species of convertible table shown, the bed-rails *D*, *C*, have their vertically arranged, major, parts *D*, securely fastened, by means of the usual "cushion-rail bolts," to the table bed *a*; and the latter has its top surface covered with billiard cloth in the well known manner. And, as peculiar to that style of convertible table shown, the wooden strips *F*, (that in non-convertible tables are called "cushion-linings") having permanently combined with them the rubber cushion-strips *G*³, and covered with billiard cloth, constitute the "cushion-sections" of the table. Of these cushion-sections there are, as in the case of my patented table; (and every convertible table of like species) two sets; one set comprising two long and two short sections such as shown at *G*, of Fig. 1, to be applied to the table when the latter is to be used for carom billiards; and the other set comprising six short sections, such as seen at *G*², Fig. 1, to be applied to the table when it is to be used as a pocket table. In my patented table, these different, interchangeable, or separately used, sets of cushion-sections are securely attached to, or combined with, the several bed-rails of the table, through the media of a number of nut-like metallic pieces, located in the wooden strips *F*, (several in the strip of each cushion-section) and either fast with, or mounted on, metallic rods or bars that are located in the strips; and a number of thumb screws arranged in the bed rails so that while their inner, threaded end portions engage the said nut-like devices of the strips *F*; their outer headed ends are easily accessible for manipulation; all as fully set forth in my said patent. And while, as I have found in practice, with the construction made the subject of my patent, either set of cushion-sections that may be, at pleasure, combined with the bed-rails is perfectly held in place firmly, and may be readily detached therefrom, in

converting the table from a carom to a pocket, and vice versa, it is a great improvement to render this sort of table capable of a much more rapid conversion, with greater convenience, to the person or persons, effecting the transformation. And by means of the improvement made the subject of this case, I have found, by actual practice, that the transformation can not only be very much more rapidly effected; since either the locking in place, or unlocking for removal of each cushion-section is effected by the manipulation of a single hand operated part; but, furthermore, the more rapid transformation is effectuated with greater convenience, since instead of having to walk to a great number of different points around the table and manipulate many thumb-nuts the person has only to go to a few different points (about half a dozen) around the table, and at each simply grasp the handle of a crank-lever, and give the latter a short vibratory movement, or swing, in a horizontal plane. I have also found, in practice, that in the use of any sort of locking means comprising several members to each cushion-section, it sometimes occurs that in a table in which all these members of the locking mechanism, or all the separate fastening devices may work perfectly at first, and during the use of the table for some time, after continued use of the table some one (or more) of the fastening devices will not draw home and as perfectly hold in working condition the attached cushion-section at the vicinity of such fastener device as it did when the table was first put in use. And a secondary object of my present invention is to provide a remedy for this evil—not of frequent occurrence but liable to sometimes arise.

The main part of my present invention lies in providing the metallic longitudinally arranged, rod or bar *j* (see now Fig. 5) of the cushion-section strip F, with a series of metallic shoe-pieces *i*, each formed with recess, or cavity at *k*, in which cavity is accommodated hook-end *g* of a horizontally disposed rod, or bar *f*, which, when moved, axially in one direction, operates, by the engagement of the hook *g*, with the shoe piece *i*, to draw home into working position the cushion-section F, and when moved in an opposite direction wholly frees the hook *g* from engagement with the shoe *i*, to permit the removal, in an upward direction, of the cushion-section and its attached shoe piece *i*.

The movement, endwise, of the bar *f*, is effected by means of a horizontally movable block *d*, to which it is fastened, and which is arranged as shown within a housing *r*, in the bed-rail D; and which is caused to move back and forth, transversely of the rail by means to be presently described. This block *d* is, as shown, provided with a lateral, tubular extension at *s*, through which passes the outer end portion of the rod *f*; and the latter is screw-threaded for a nut *t*, and also, preferably, has on it also a jam-nut *h*; all in such manner (as plainly appears at Fig. 5) that a movement outwardly of the block *d* (into the position seen at Fig. 5) will operate by the pressure of the outer end of *s*, on the nut *t*, to draw the rod *f* outwardly and cause its hook end *g* to pull the cushion-section F, "home", hard against the inner face of the bed-rail C, D. And, by reason of oblique or inclined bearing surfaces of the hook *g* and shoe *i* where these parts contact the latter, and with it the cushion-

section will be drawn, or forced downwardly, onto the table-bed, at the same time the section is drawn forcibly outward against the bed-rail as just explained. Of course, a movement, in the opposite direction, (or inwardly) of the block *d*, will cause this rod or bar *f* to be moved so that the clamping hook *g* will be moved within the recess, or cavity *k*, in a manner and to an extent to result in the hook *g* becoming wholly disengaged from the coacting surface of *i*, so that the cushion section may then be lifted out of place. The movements of the block *d*, just described, are effected by means of an eccentric cam-block *e*, that is mounted fast on a shaft *e*, that is located interiorly of the bed-rail, as seen, and turn in suitable bearing therein; the said cam-block *e* being fitted in the block *d*, as plainly shown at Figs. 5 and 3; and a sufficient rotatory movement of the rock-shaft *e* to, approximately, the extent of a half revolution, causes the cam-block *e* to move the sliding block *d* back and forth sufficiently to produce the effects above explained, concerning the forcible drawing home into the firm working condition and disengagement of the hook *g* from shoe *i*.

It will be understood, of course, that there are as many blocks *d*, with their combined devices, as there are shoe-blocks *i* to each cushion-section; and that there are two long rock-shafts *e*, arranged in the two side bed-rails; and two short ones, in the two end bed-rails; as plainly shown, in dotted lines at Figs. 1 and 2; and that, in the cushion-sections of each set (for carom playing and for pocket playing) the shoe-blocks *i* are all positioned so as to register with the several clamping hooks *g*; so that no matter whether a set of four carom cushion-sections, or a set of six pocket cushion-sections, be applied to the stationary bed-rails, all the shoe blocks of either set of cushion sections will coact with the set of locking devices of the bed-rails.

Each one of the six rock-shafts *e* is provided, at a suitable locality, lengthwise of the shaft, with a fast bevel pinion *l*, (see now Figs. 4 and 6) with which meshes a like pinion *m*, that is mounted fast on the upper end of a vertically arranged rock-shaft, or arbor *n*, that is located as shown within the vertical piece, or part D of the bed-rail, so as to turn freely in its bearings therein; and that is provided at its lower end with a crank lever *o*, having a comfortably shaped handle *o*² adapted to be grasped by hand.

Preferably, two metal plates *w*, *w*; perforated to form bearing for the rock-shaft *n*, are secured to the wooden bed-rail part D; and the combined arrangement of the parts shown is such that, by swinging, or turning the crank lever *o* horizontally out from beneath the bottom of rail piece D to the extent, approximately, of a quarter vibration; and back again into the position shown (in which the crank *o* is out of the way of the player; and, practically out of sight) the pinion *m* will operate, through its mate *l*, to rock the shaft *e* sufficiently to effectuate, alternately, through the media of the work parts already alluded to, the disengagement of the clamping hooks *g* from the shoe-pieces *i*; (to permit the removal of a cushion-section) and the clamping forcibly in place, in a working condition of the said cushion-section.

By combining each rod or bar *f*, with its actuating block *d*, so as to be capable of adjustment relatively thereto; *i. e.*, so that the bar *f* can be set and held in

slightly different positions, endwise, by first loosening the jam nut *h*, then slightly unscrewing, or screwing up the nut *t*, the cushion-section locking mechanism (the blocks *d* of which must always, all move to the same extent) is given the capacity for a variation in the clamping operation of any one (or more) of the fastening devices as compared with the action of the others. And this capability, as I have said, is desirable and advantageous, because of the liability, after some time of use of the table, of some one or more of the fastener devices losing its original perfection of action, and not drawing the cushion-section home securely enough at the vicinity of such fastener devices.

As every one skilled in the art knows, a convertible table, to meet in the most eminent degree, the requirements of the user of such table, must be of such construction that, not only will it, while comparatively new, have all the cushion-sections held very firmly in place; but, furthermore, it must retain this capability, even after the table shall have been used a good while, and its working parts become slightly, and sometimes unevenly work worn. Hence a desideratum is gained by the structural feature I have last described.

Having now so fully shown and described my im-

proved table that those skilled in the art can make and use it, what I claim therein as new and desire to secure by Letters Patent is:

1. In a convertible pocket-carom billiard table, of the species shown, the combination with the table bed; a stationary bed-rail; and a removable cushion-section, of a set of fastening-mechanism members immovably arranged in the said cushion-section; a set of fastening-mechanism members movably arranged in the bed-rail, to coact with the members in the cushion-section; and means for simultaneously operating all the said members of the said bed-rail; substantially as and for the purpose set forth.

2. In a convertible pocket-carom billiard table, of the species shown, the combination with the table bed; a stationary bed-rail; and a removable cushion-section, of a set of locking-mechanism members immovably arranged in the said section; a set of movable fastening device members in the bed-rail; means for moving said members simultaneously; and means for adjusting each one of said bed-rail members, separately, or independently of the others; for the purpose specified.

In witness whereof I have hereunto set my hand this 27th day of April, 1907.

PATRICK M. CUNNINGHAM.

In presence of—

J. N. McINTIRE,
EDWARD F. BAYER.