

No. 678,948.

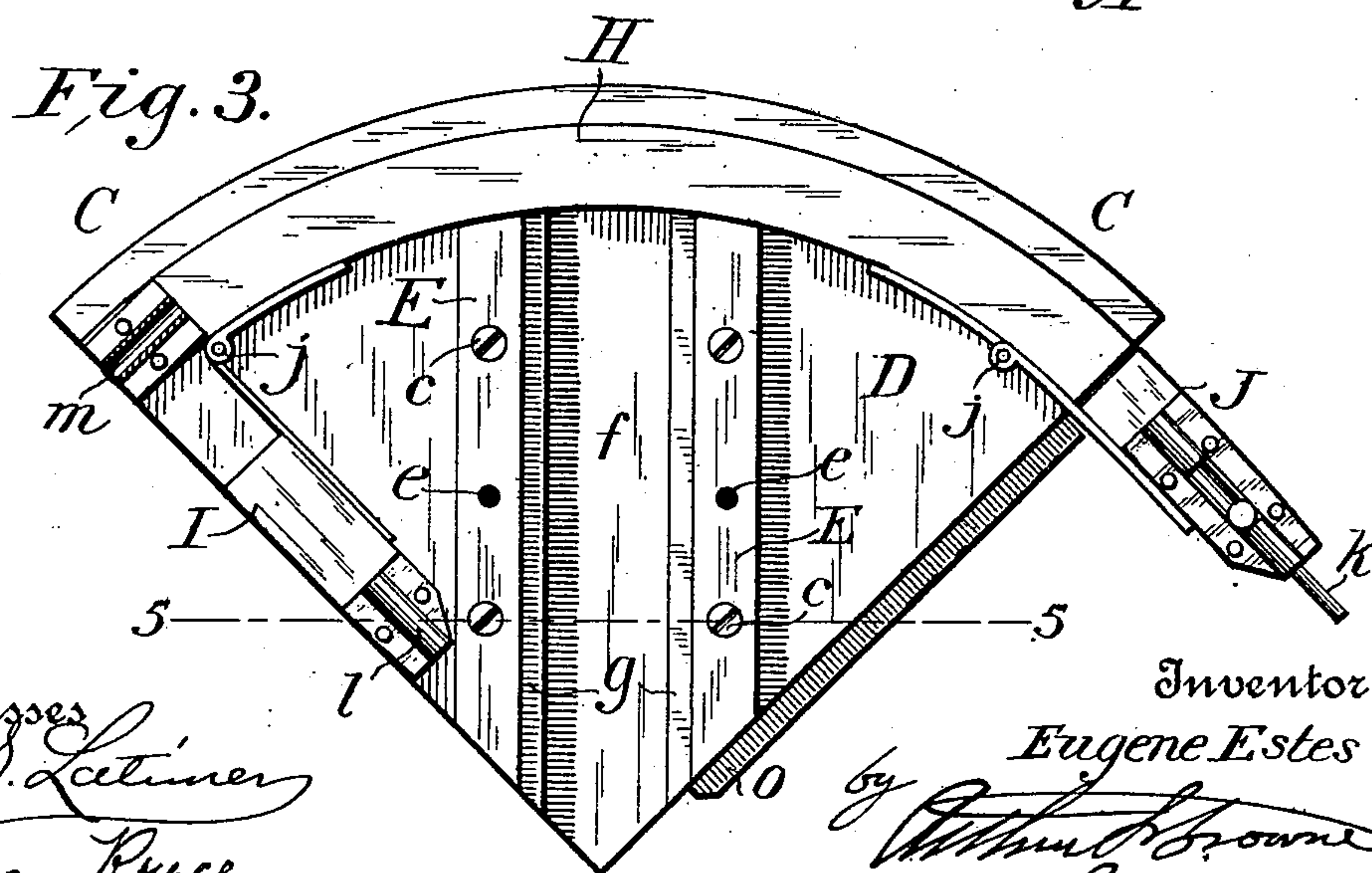
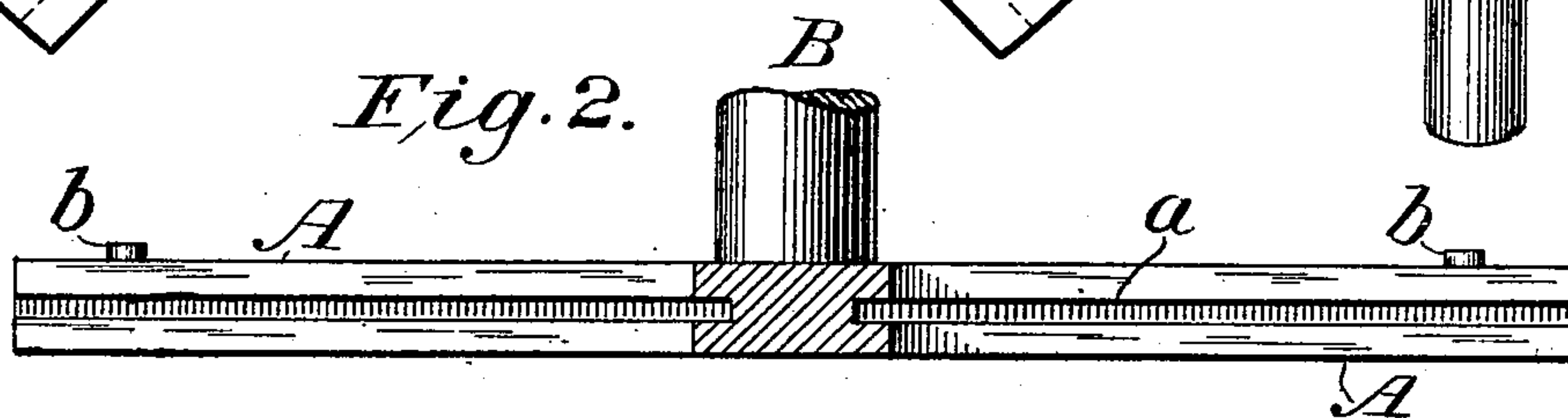
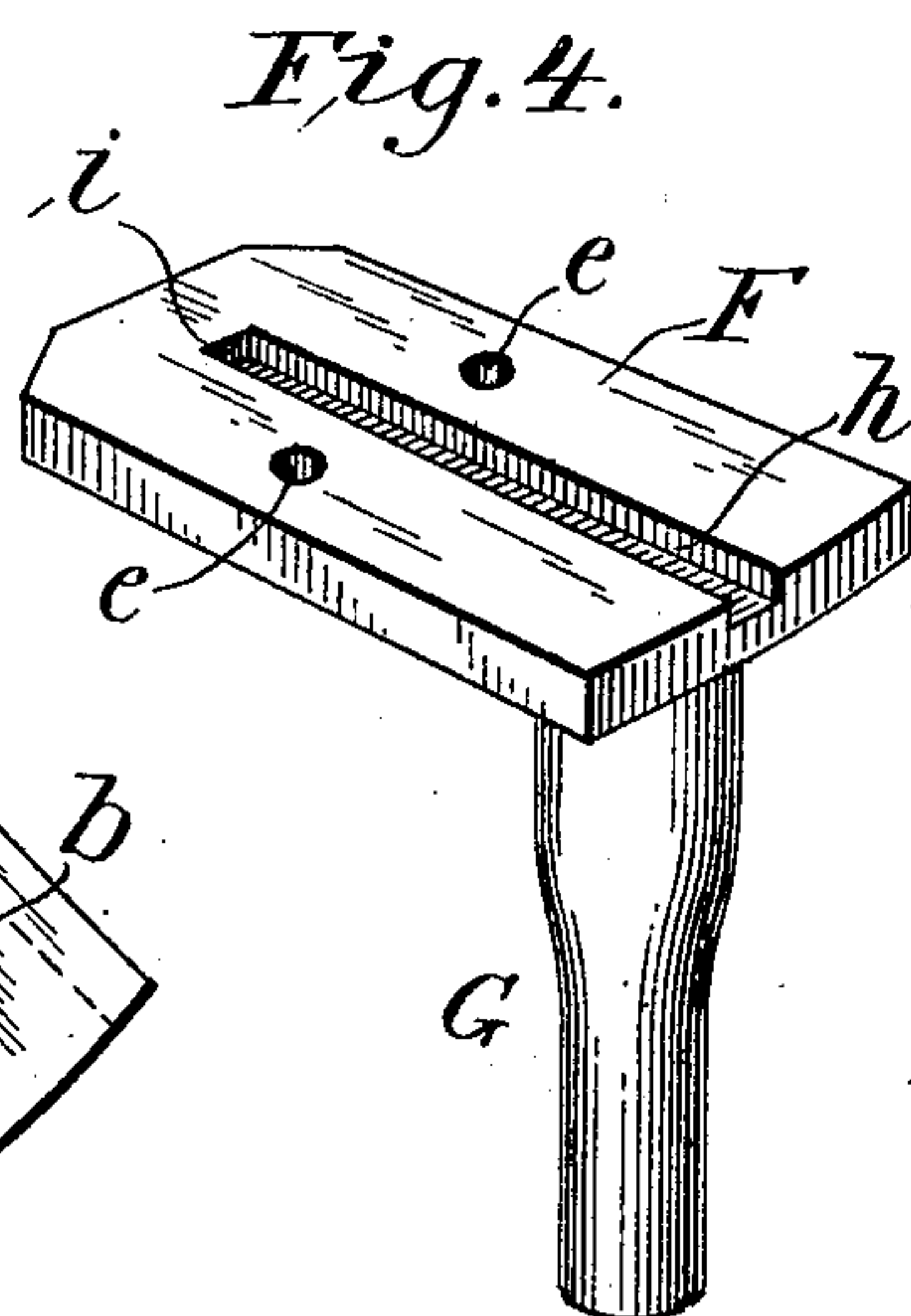
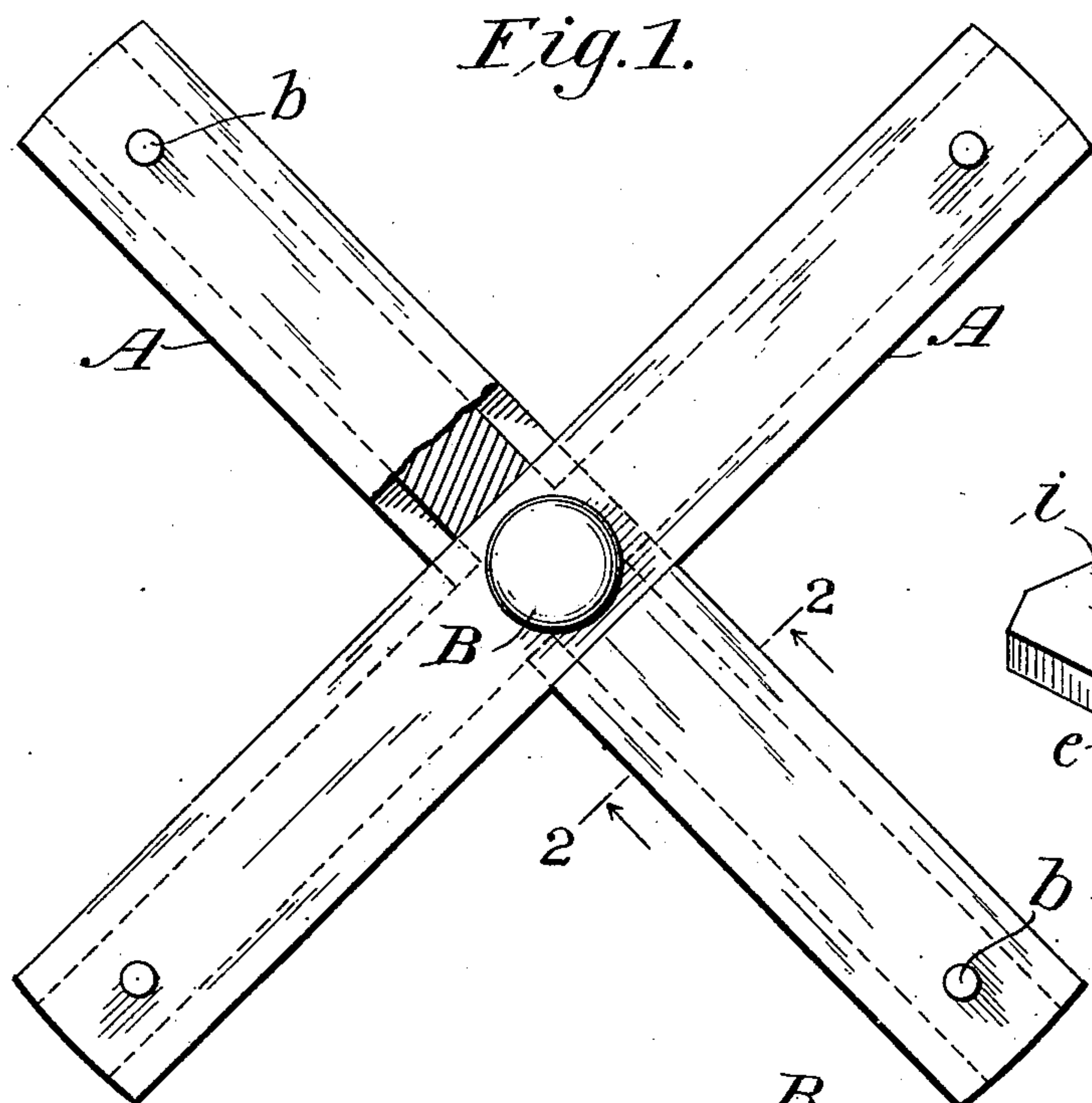
Patented July 23, 1901.

E. ESTES.  
EXTENSION TABLE.

(Application filed Aug. 4, 1900.)

(No Model.)

3 Sheets—Sheet 1.



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3 Sheets—Sheet 2.

Fig. 5.

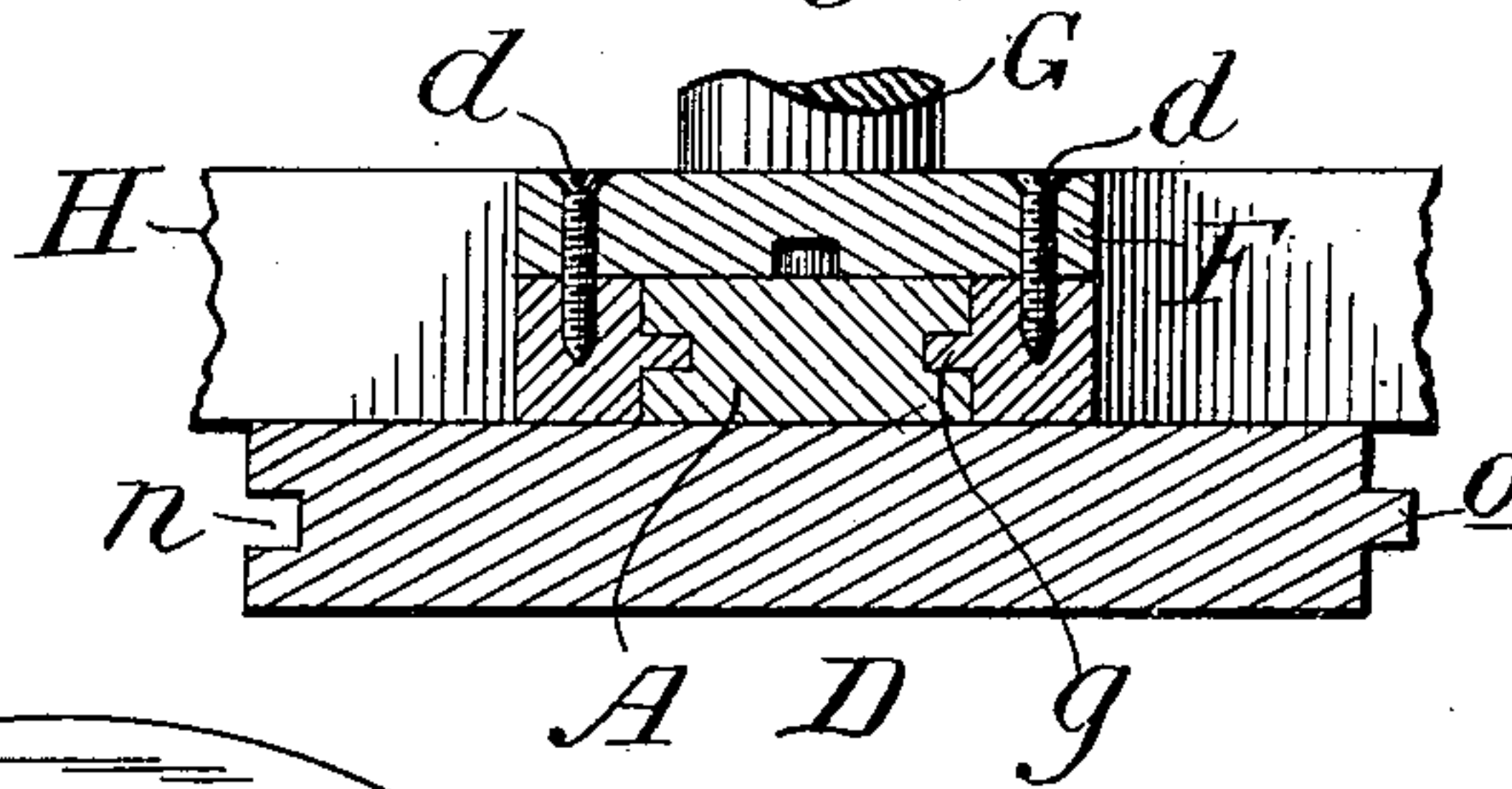


Fig. 6.

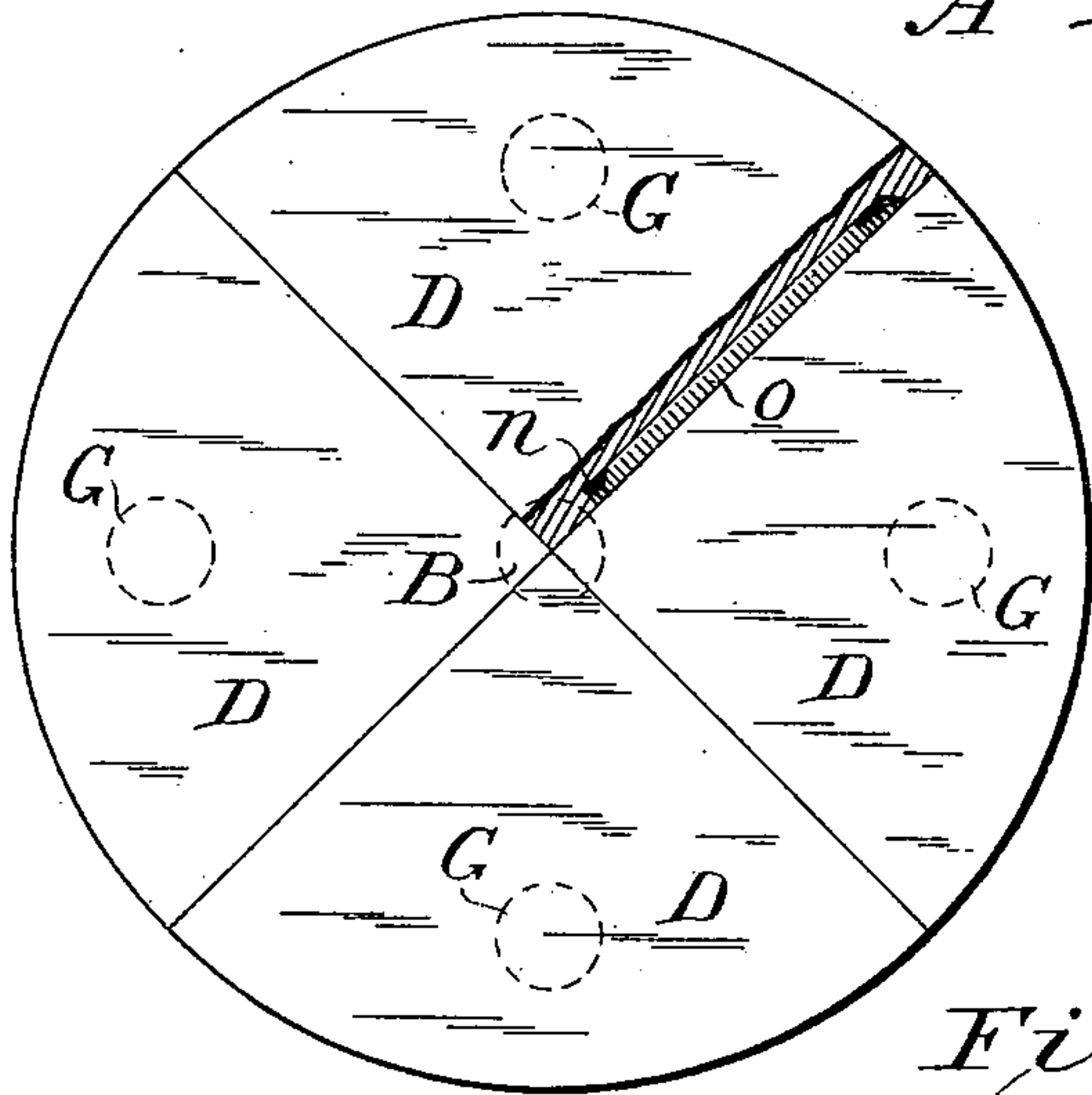


Fig. 8.

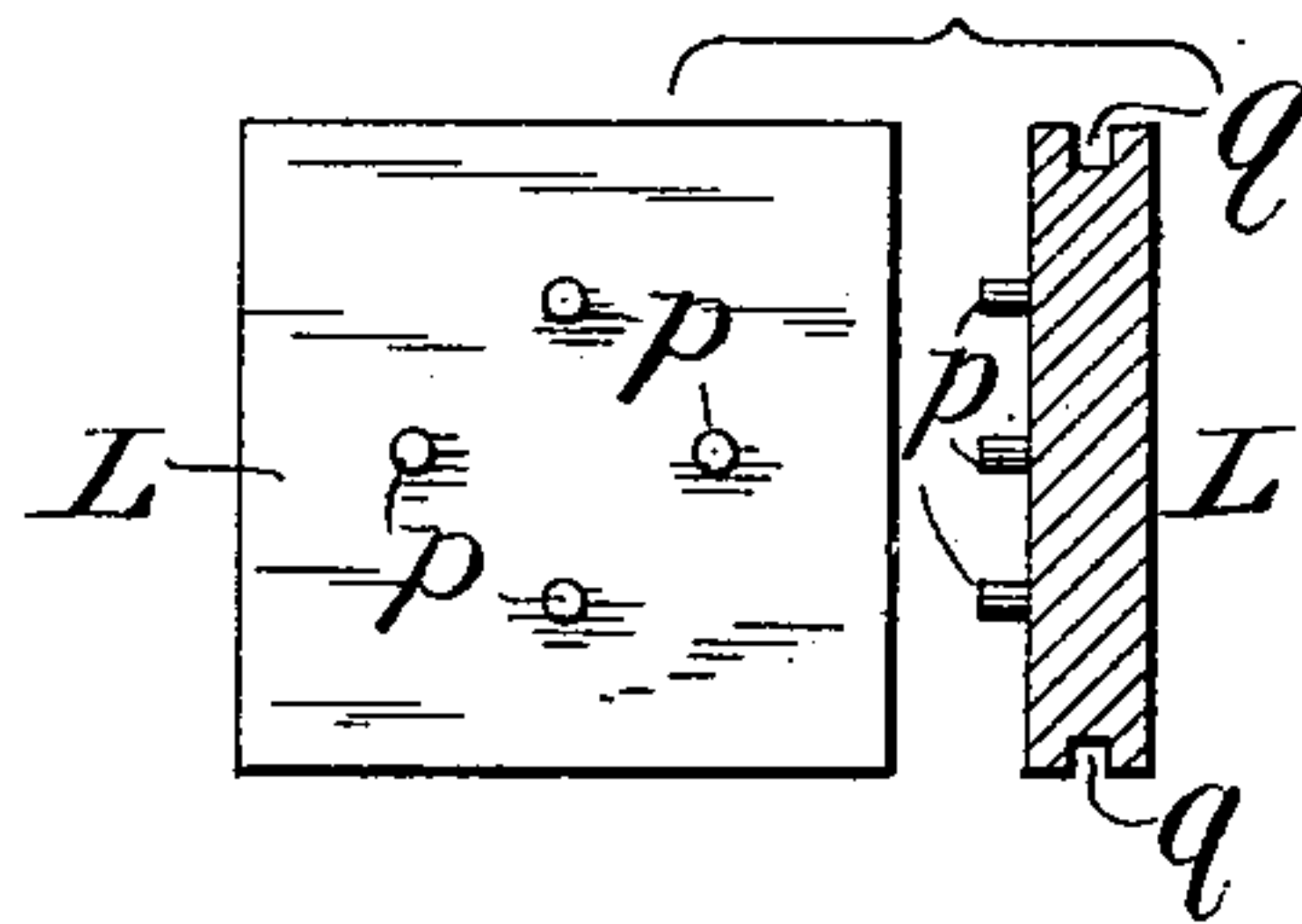


Fig. 9.

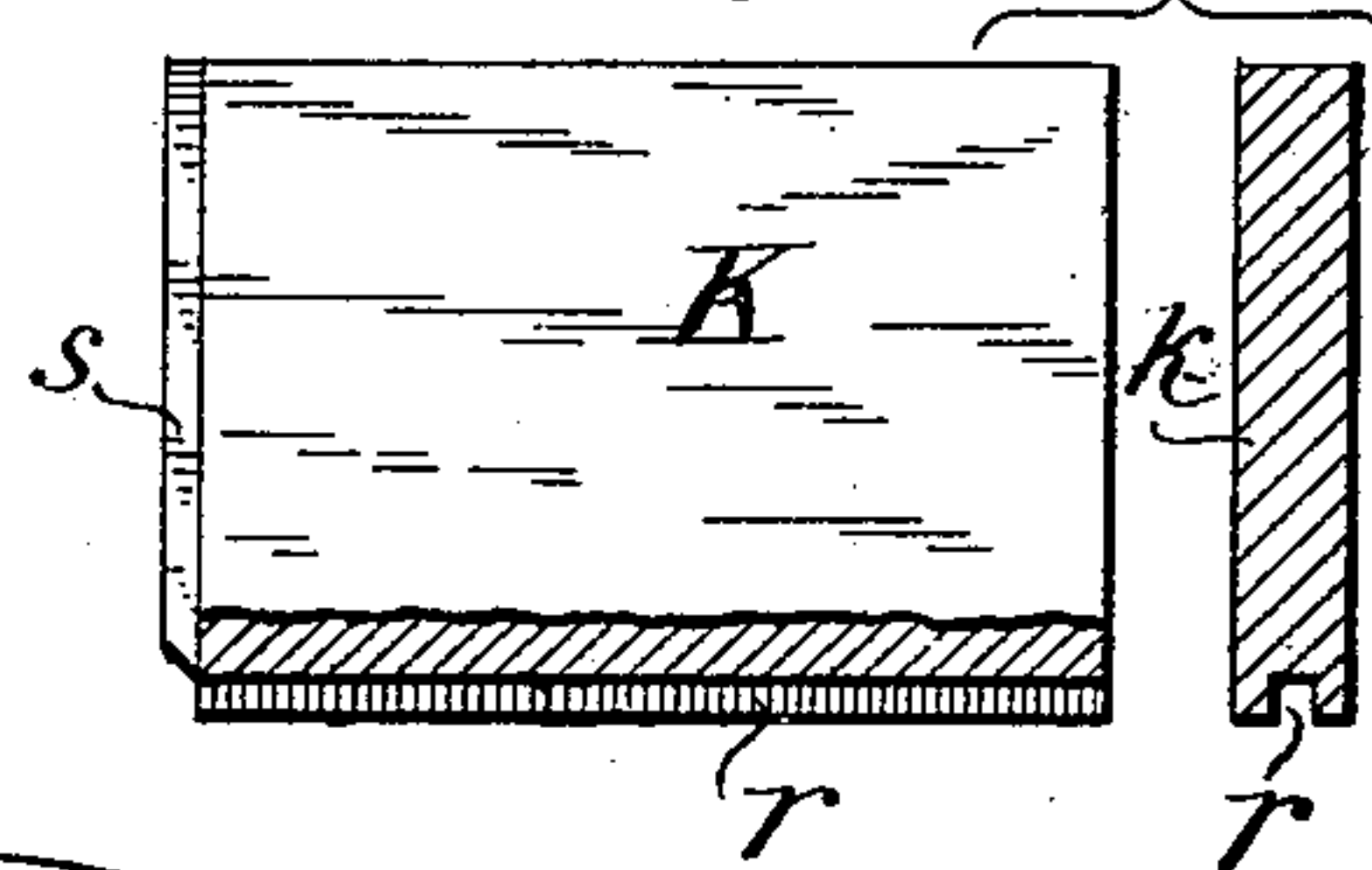
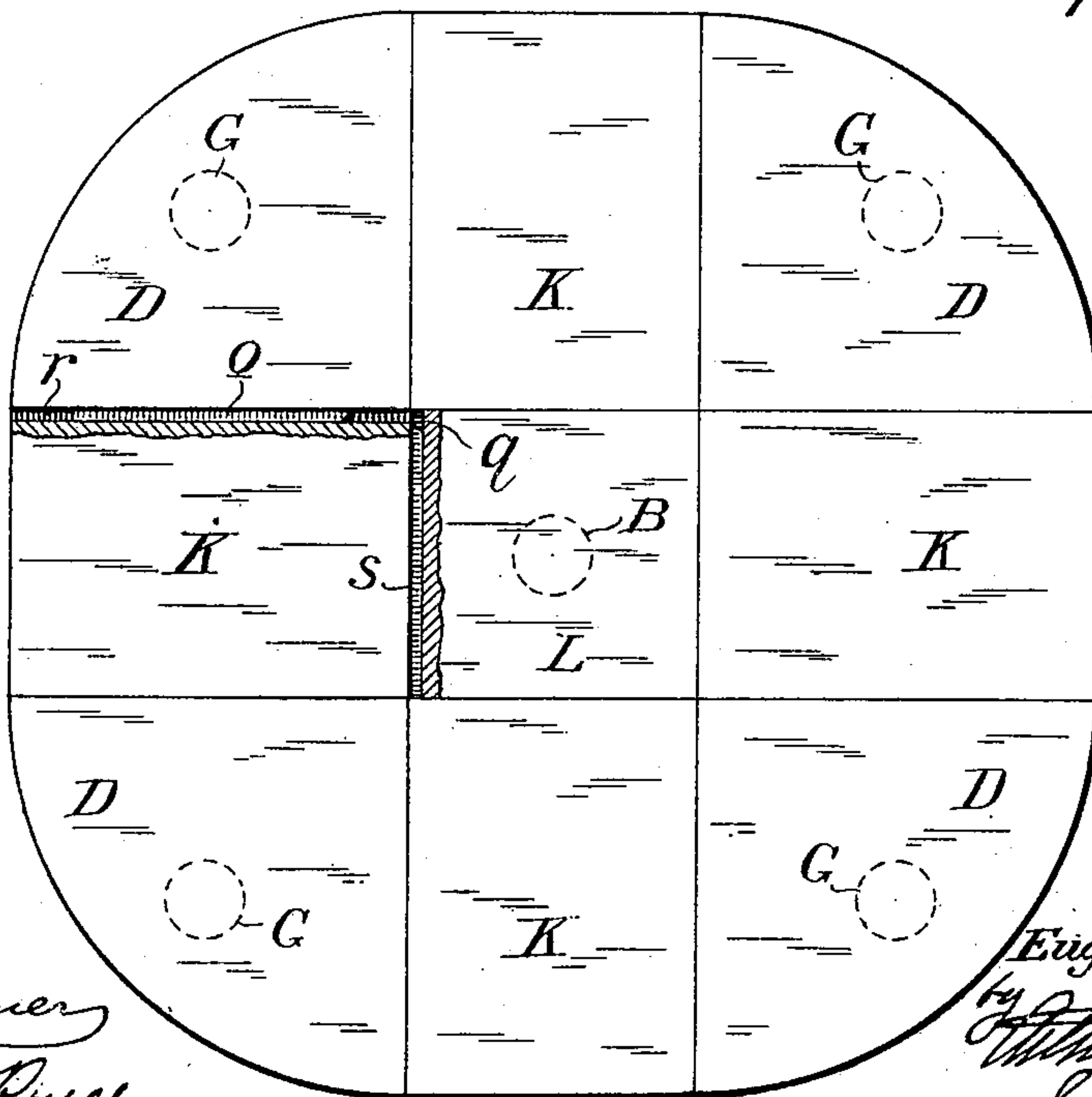


Fig. 7.



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Fig. 10.

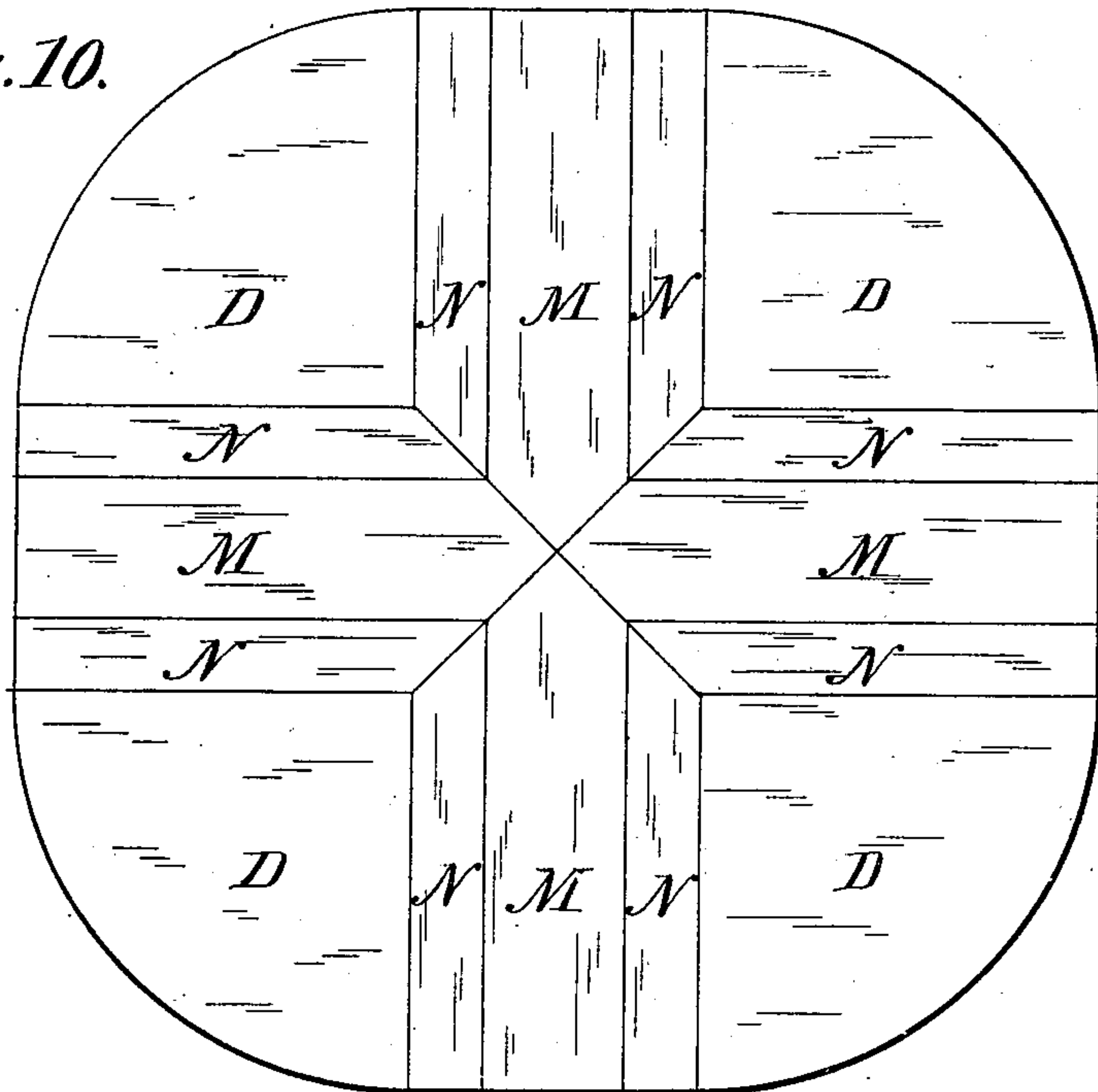


Fig. 12.

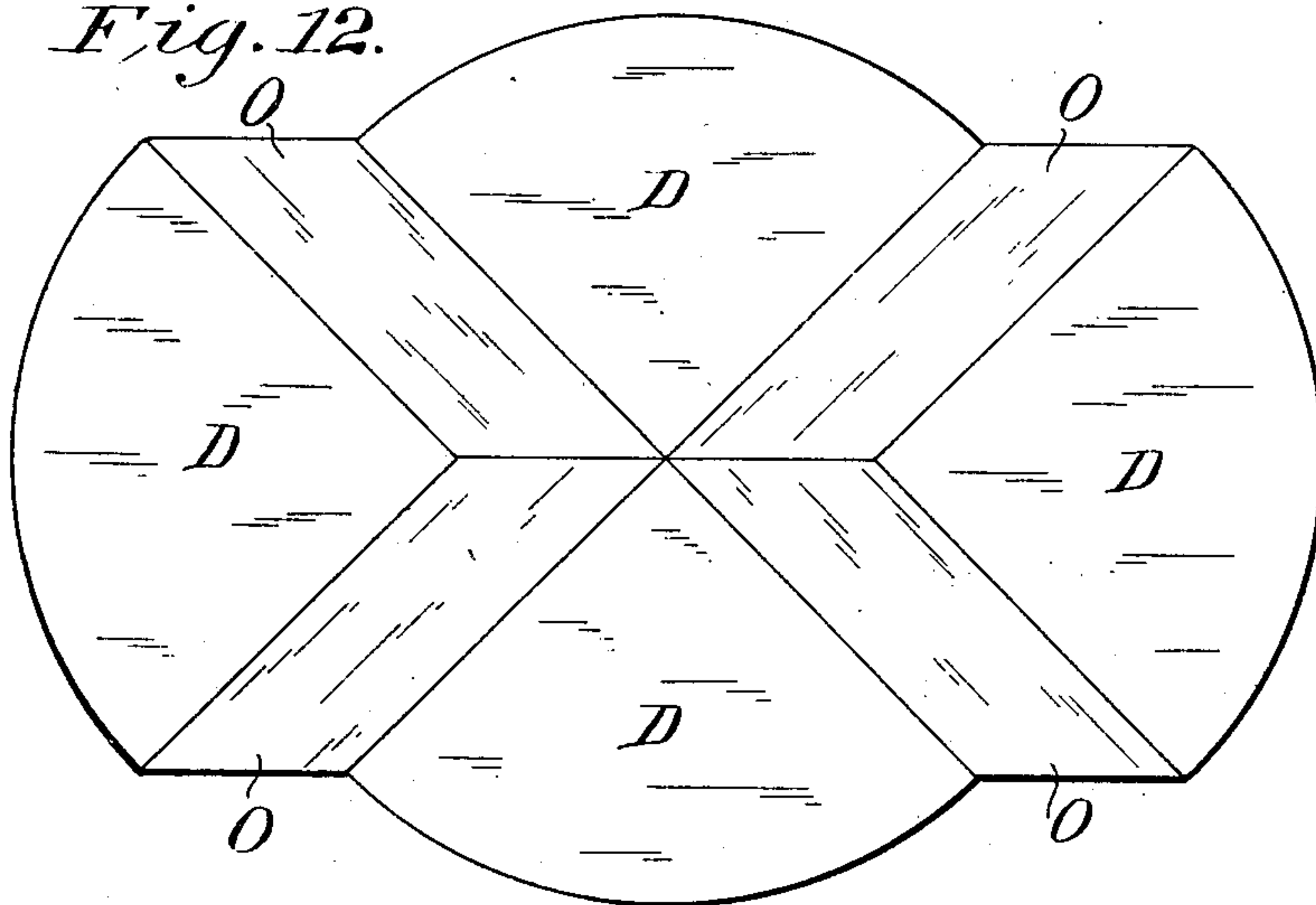
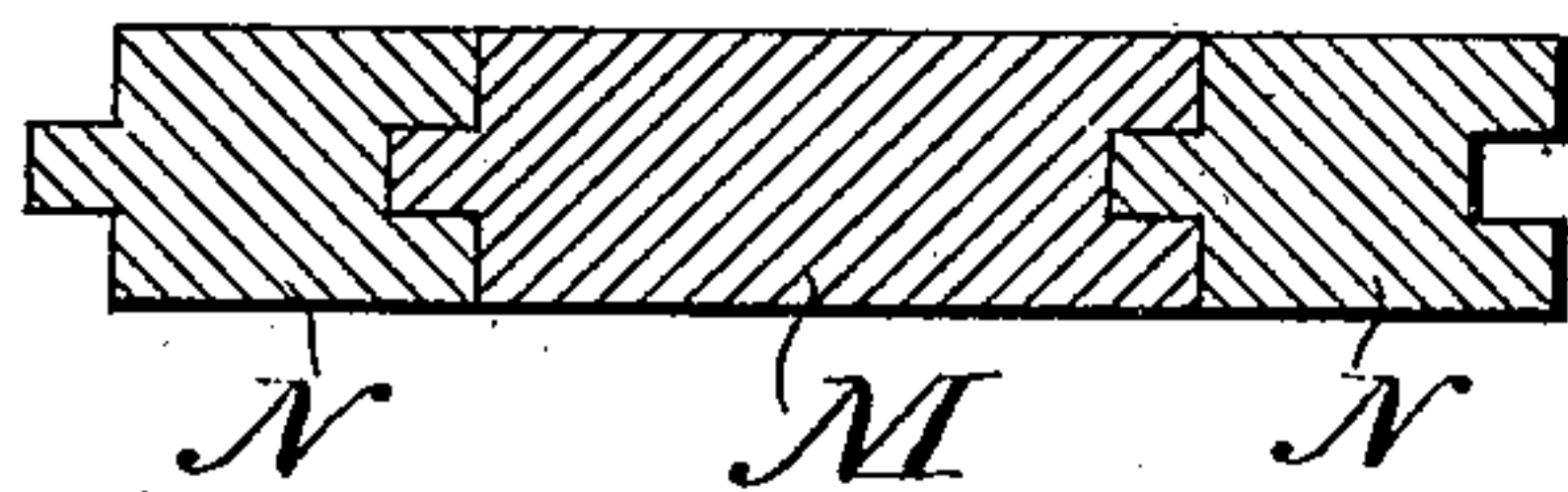


Fig. 11.



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# UNITED STATES PATENT OFFICE.

EUGENE ESTES, OF LOS ANGELES, CALIFORNIA.

## EXTENSION-TABLE.

SPECIFICATION forming part of Letters Patent No. 678,948, dated July 23, 1901.

Application filed August 4, 1900. Serial No. 25,954. (No model.)

*To all whom it may concern:*

Be it known that I, EUGENE ESTES, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Extension-Tables, of which the following is a specification.

The object of this invention is to produce a radially-extensible table in which the movable sections move radially outward from a common center. In this way it is possible to vary the diameter or width of the table as well as its length.

The present improvements are illustrated in the accompanying drawings, in which—

Figure 1 is an under side view of the frame of the table, partly broken away in order to show the construction. Fig. 2 is a section of the frame in the plane indicated by the line 2 2 in Fig. 1. Fig. 3 is an under side view of one of the radially-movable top sections. Fig. 4 is a perspective view of one of the radially-extensible legs which in practice is rigidly secured to each of the radially-movable sections. Fig. 5 is a vertical section in the plane indicated by the line 5 5 in Fig. 3, showing the leg secured to the top section. Fig. 6 is a plan view of the table complete, illustrating a circular table and showing the table in its primary position. Fig. 7 is a plan view of the extended and enlarged table, illustrating the same table shown in Fig. 6 when extended. Fig. 8 is a detailed view of the central piece employed when the table is extended to the position shown in Fig. 7. Fig. 9 is a detailed view of one of the intermediate extending leaves. Fig. 10 shows the table when extended, illustrating a different manner of filling in the top gaps due to the outward radial movement of the top sections. Fig. 11 is a cross-sectional view of the extension-pieces shown in Fig. 10. Fig. 12 illustrates the table extended lengthwise, but not widthwise.

The drawings show in Fig. 6 the foundation-table as circular in outline, and Figs. 7, 10, and 12 illustrate the table extended from this foundation. It is not necessary, however, that the foundation-table should be cir-

cular in outline, as any other shape would serve equally well to embody the present invention.

The frame of the table is illustrated in Figs. 1 and 2, and, as here shown, consists of two bars crossing each other and arranged at right angles, so as to form four radially-extending arms A A. These bars are rigidly connected together, and at the place where they cross a leg B is firmly secured, this leg constituting the center leg of the table. Each arm A has grooves *a* extending lengthwise along both edges, as shown, and each arm has a projecting stud *b* on its under side near its outer end.

The foundation-table has four radially-extensible sections, constituting the top of the table and the external legs, and as these four sections are all exactly alike a description of one will suffice for all. Each section C comprises a board D, flat on its top side, constituting a portion of the surface of the table. On the under side of this board D are fixed two ribs E E, secured thereto by screws *c* or by other means of attachment. To the under side of these ribs is secured a plate F, (see Fig. 4,) which is rigidly secured thereto by means of screws *d*, (or other means,) as shown in Fig. 5, the holes for these screws being indicated at *e e* in Figs. 3 and 4. Each of these plates F has secured to it on its under side one of the outwardly-movable legs G, constituting one of the external legs of the table. There is thus a table-leg secured to and constituting a part of each radially-movable section. The leg-plate F, the ribs E E, and the top board D include between them a guideway *f*, (see Fig. 3,) open at the inner end for the end of one of the arms A of the table-frame. Each arm A of the table-frame thus enters a guideway *f* in the corresponding movable section C. Each of the ribs E has on its inner face a longitudinally-projecting tongue *g*, which enters and slides in one of the grooves *a* on the corresponding arm A of the table-frame, as best shown in Fig. 5. The leg-plate F has a groove *h*, open at its outer end, but closed at its inner end, which slides over the stud *b* of the corresponding frame-



arm A, (see Fig. 5,) so that the outward radial movement of the section C is thereby limited when a section C has been moved out as far as is intended, the inner shoulder *i* (see Fig. 4) of the slot *h* then encountering the corresponding stud *b*, thereby preventing further outward movement. The movable section C, it will thus be noted, is firmly and rigidly connected with the table-frame, but at the same time is permitted to radially slide relatively thereto.

Affixed to the bottom of each section C is an outwardly-projecting apron H, (see Figs. 3 and 5,) which serves as a finish (as is usual in tables) and conceals the table-frame and the connections between the same and the sections. In order that this apron may be continuous when the table is extended, flaps I J, (see Fig. 3,) constituting extensions of the apron, are provided at opposite ends of the apron of each section, these flaps I J being connected by hinges *j j* with the apron H. In order that these flaps may be held in place when the table is extended, one, as J, is provided with a sliding bolt *k*, and the other flap I is provided with a corresponding sleeve *l* to receive the bolt. Also the apron H is itself provided with a sleeve *m* to receive the bolt *k* on the flap J in case the extension is not sufficiently great to permit both flaps to be used.

Each top board D of each section has a groove *n* along one edge (see Figs. 5 and 6) and a tongue *o* along the opposite edge, as shown also in Fig. 3. This tongue and this groove do not extend along their entire respective edges, as clearly shown at Fig. 6, so that their presence is not noticeable when the table is ready for use. This tongue and this groove register with the corresponding parts of the other sections when the foundation-table is in use, as indicated at Fig. 6, thus insuring the firmness of the table when in use.

Fig. 7 illustrates one way of extending the table. As here shown, all parts of the foundation-table are in use. In addition there are employed four leaves K and one center piece L, which are fitted as shown in Fig. 7. The center piece L has four downwardly-projecting studs *p* on its under side, which fit in the angles between the arms A of the table-frame, thereby maintaining the center piece in place. The center piece also has a groove *q* along each of its four edges. Each leaf K is of a size and shape to fit in between two of the top boards D D, and it has a groove *r* along one edge, which fits the tongue *o* of the adjacent board D. Each leaf K also has a tongue *s* along its inner edge, which fits the adjacent groove *q* of the center piece L. A table when thus extended has all of its parts securely held together.

On comparing Figs. 6 and 7 it will be noted that the foundation-table of Fig. 6 is extended both lengthwise and widthwise in or-

der to form the table shown in Fig. 7. The form of table shown in Fig. 7 would be convenient, for example, as a dining-table, and its foundation, as shown in Fig. 6, would be convenient for a card-table.

Fig. 10 shows a table, such as is shown in Fig. 7, produced by enlarging-pieces of different character. As shown in Fig. 10, the enlarging-pieces consist of central strips M and filling-strips N, which are mitered along their inner edges so as to fit each other without the intervention of a separate center piece, as in Fig. 7. It is entirely obvious that the same result would be secured if the parts N N were integral with the parts M. As shown in Fig. 11, the filling-pieces of Fig. 10 are tongued and grooved in order to fit each other and also the foundation-boards D D.

Fig. 12 illustrates a construction in which the table is extended lengthwise but not widthwise, the filling-pieces O O being of proper shape to fit between the foundation-boards D D when extended in this manner.

I claim as my invention—

1. An extension-table having, in combination, a frame having four radially-extending arms, each grooved along its opposite edges and having a downwardly-projecting stud near its outer end, and a central table-leg rigidly secured to the middle of said frame; four radially-movable sections each carrying a movable table-leg, each of said sections having on its under side radial ribs and a leg-plate which embrace and slide upon one of said frame-arms, each of said ribs having a tongue fitting in one of the grooves of the corresponding frame-arm, and said leg-plate having a groove closed at its inner end to constitute a stop, which groove slides over the downwardly-projecting stud of the corresponding frame-arm, and each of said sections having a top board with a tongue along one edge and a groove along the other edge fitting the corresponding parts of adjacent top boards, substantially as set forth.

2. An extension-table having, in combination, a table-frame comprising four radial arms, four radially-movable sections sliding along said arms, and filling-pieces for completing the top of the table when extended, said filling-pieces comprising a central piece having downwardly-projecting pins which fit in the corners between said frame-arms, substantially as set forth.

3. An extension-table having, in combination, a frame, radially-movable sections, each having a downwardly-projecting apron, and apron-flaps hinged to said apron, said flaps having cooperating bolts and sleeves, substantially as set forth, whereby the apron can be completed when the table is extended, substantially as set forth.

4. An extension-table having, in combination, a frame, radially-movable sections, each



having a downwardly-projecting apron, and  
apron-flaps hinged to said apron, said flaps  
having coöperating connections, substantially  
as set forth, whereby the apron can be com-  
5 pleted when the table is extended, substan-  
tially as set forth.

In witness whereof I have hereunto signed

my name in the presence of two subscribing  
witnesses.

EUGENE ESTES.

Witnesses:

SIDNEY J. PARSONS,  
ARTHUR T. SNELL.