

(No Model.)

C. A. PRIEST.

DESK.

No. 322,125.

Patented July 14, 1885.

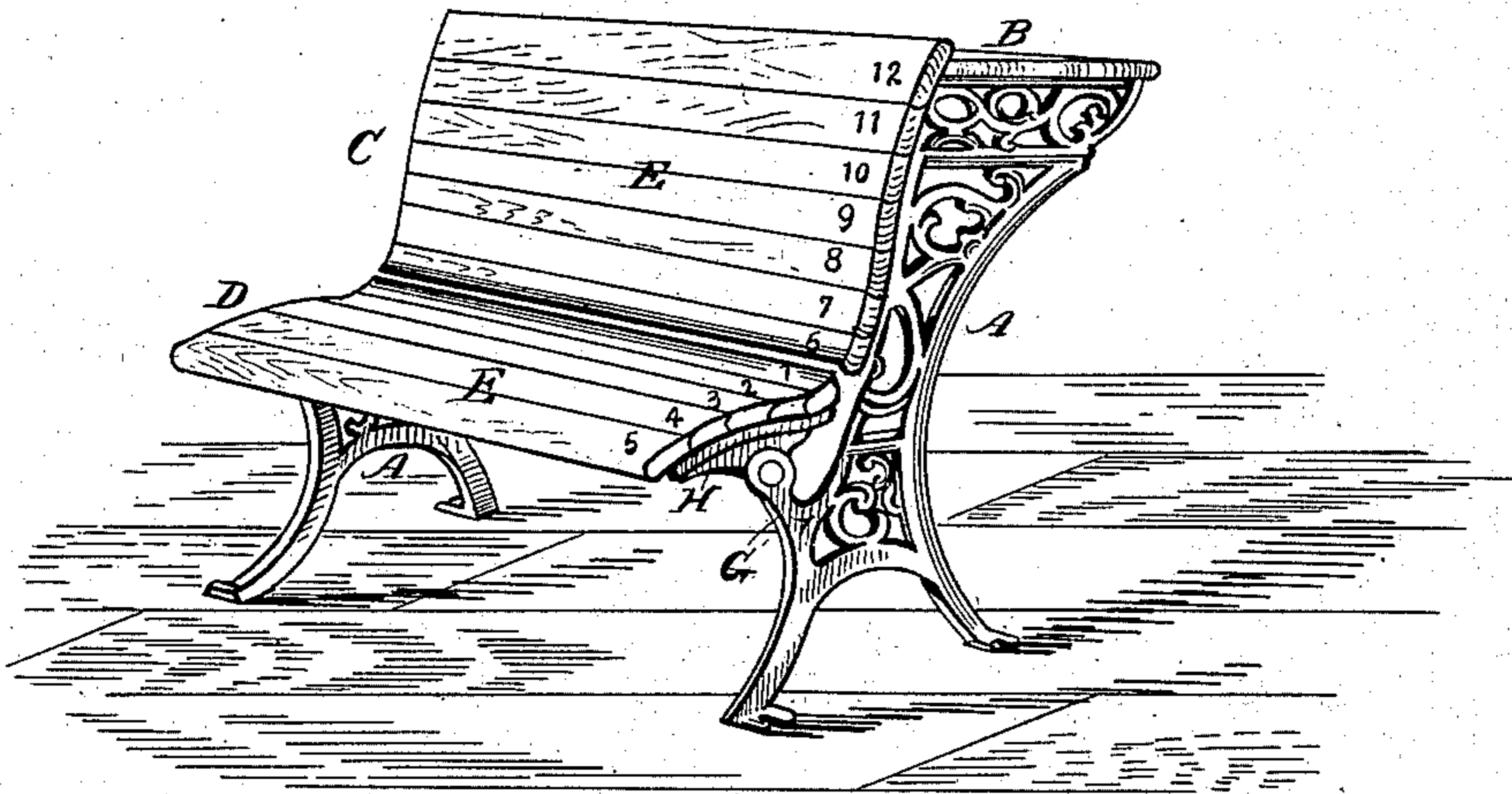


Fig. 1.

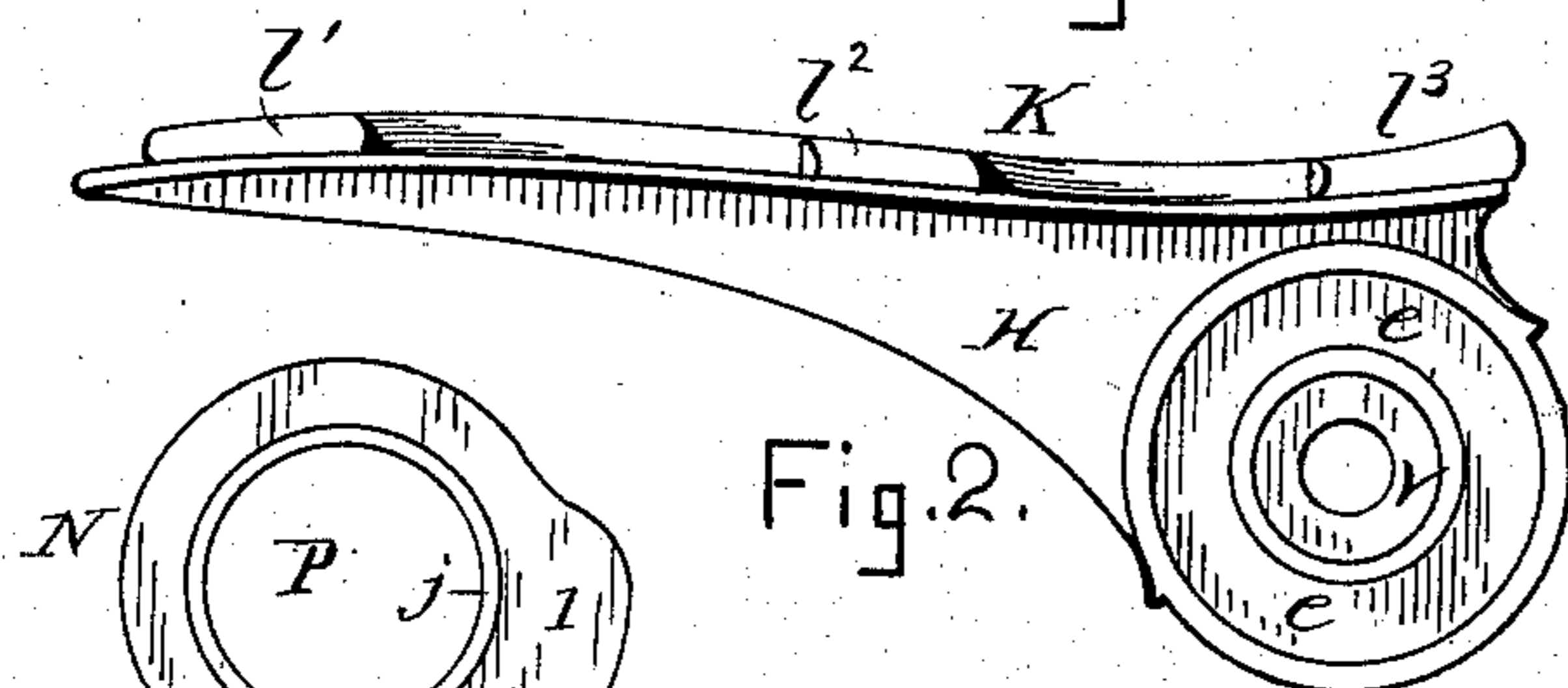


Fig. 2.

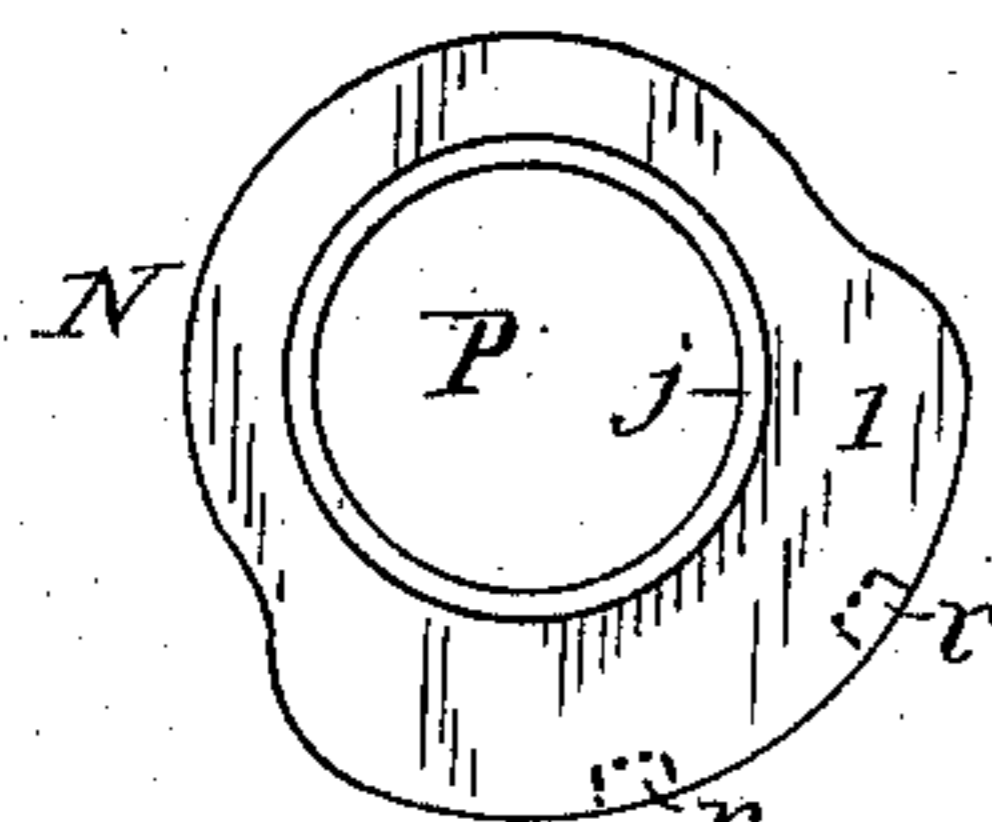


Fig. 10.

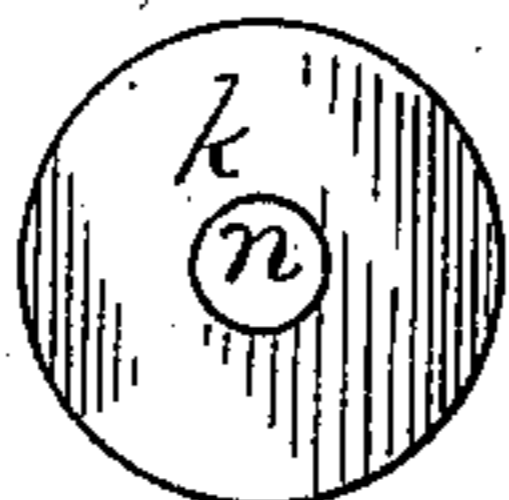


Fig. 11.

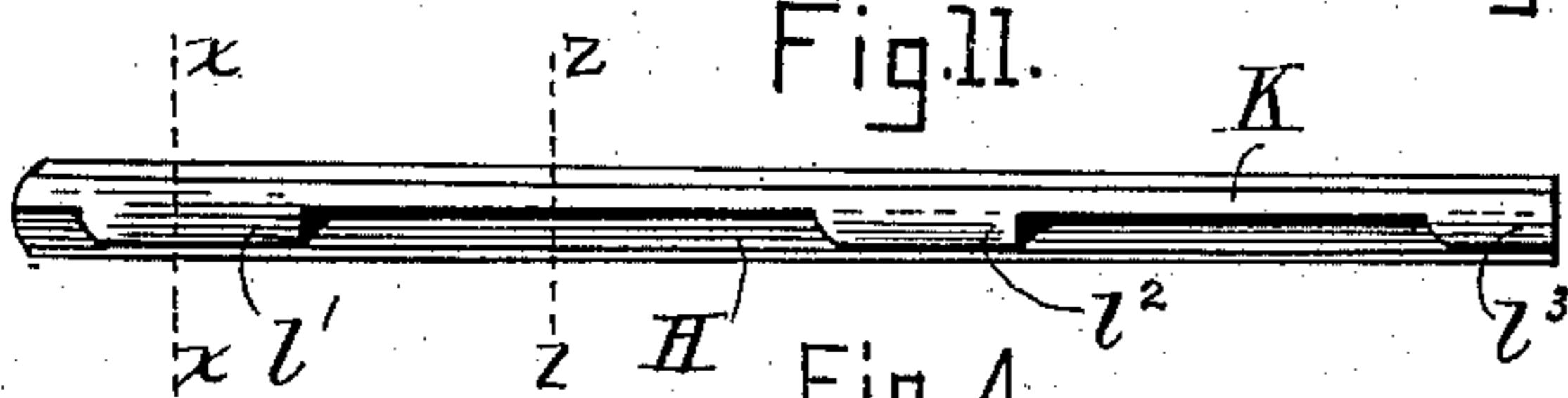


Fig. 4.

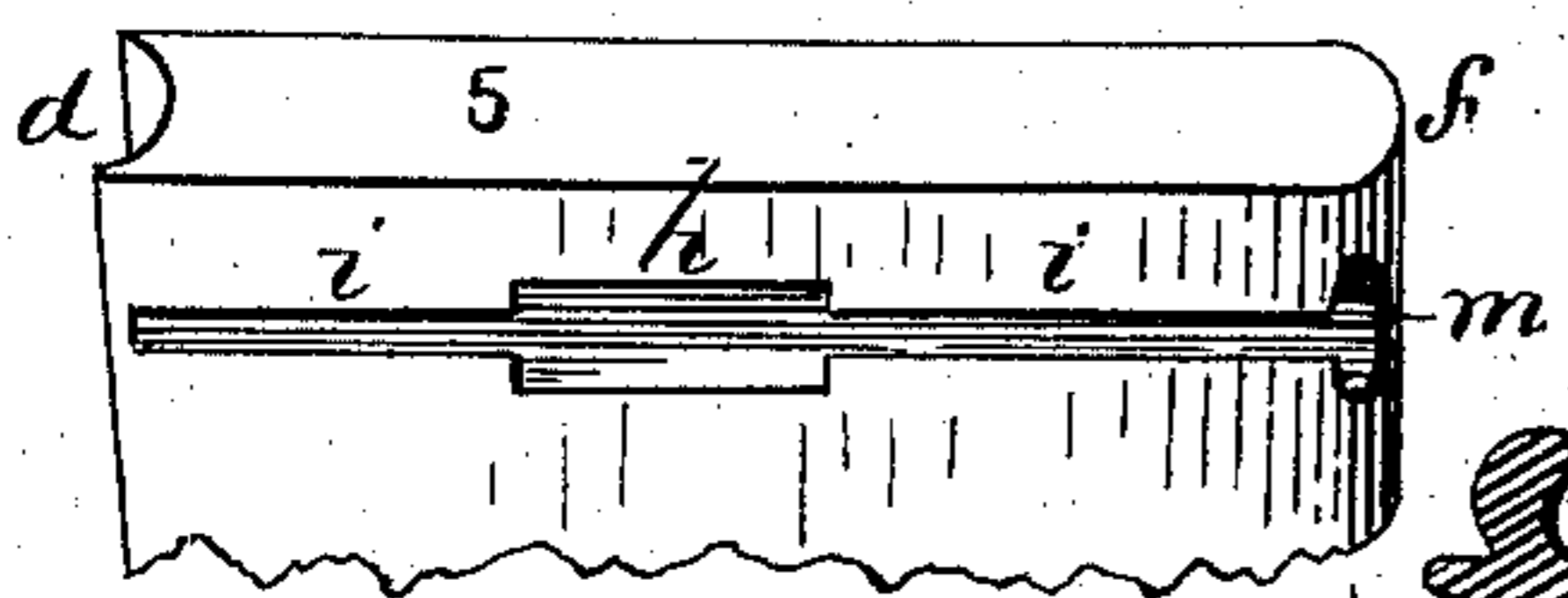


Fig. 5.

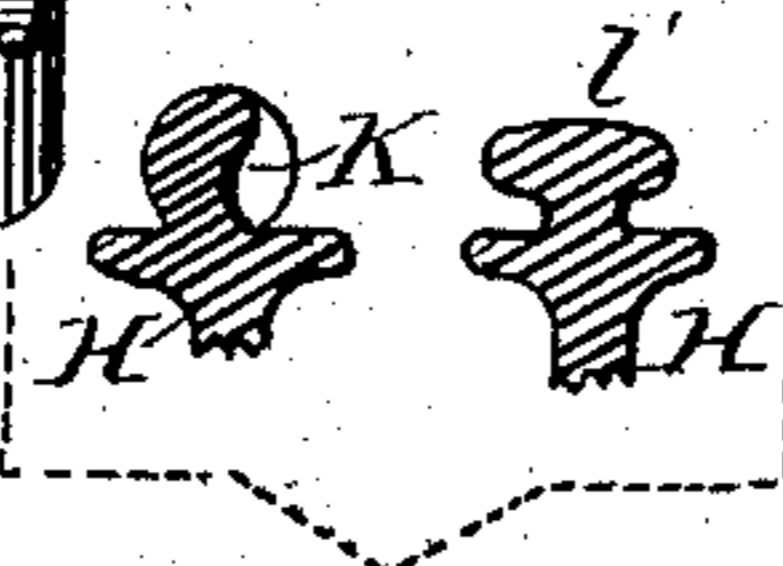


Fig. 6.

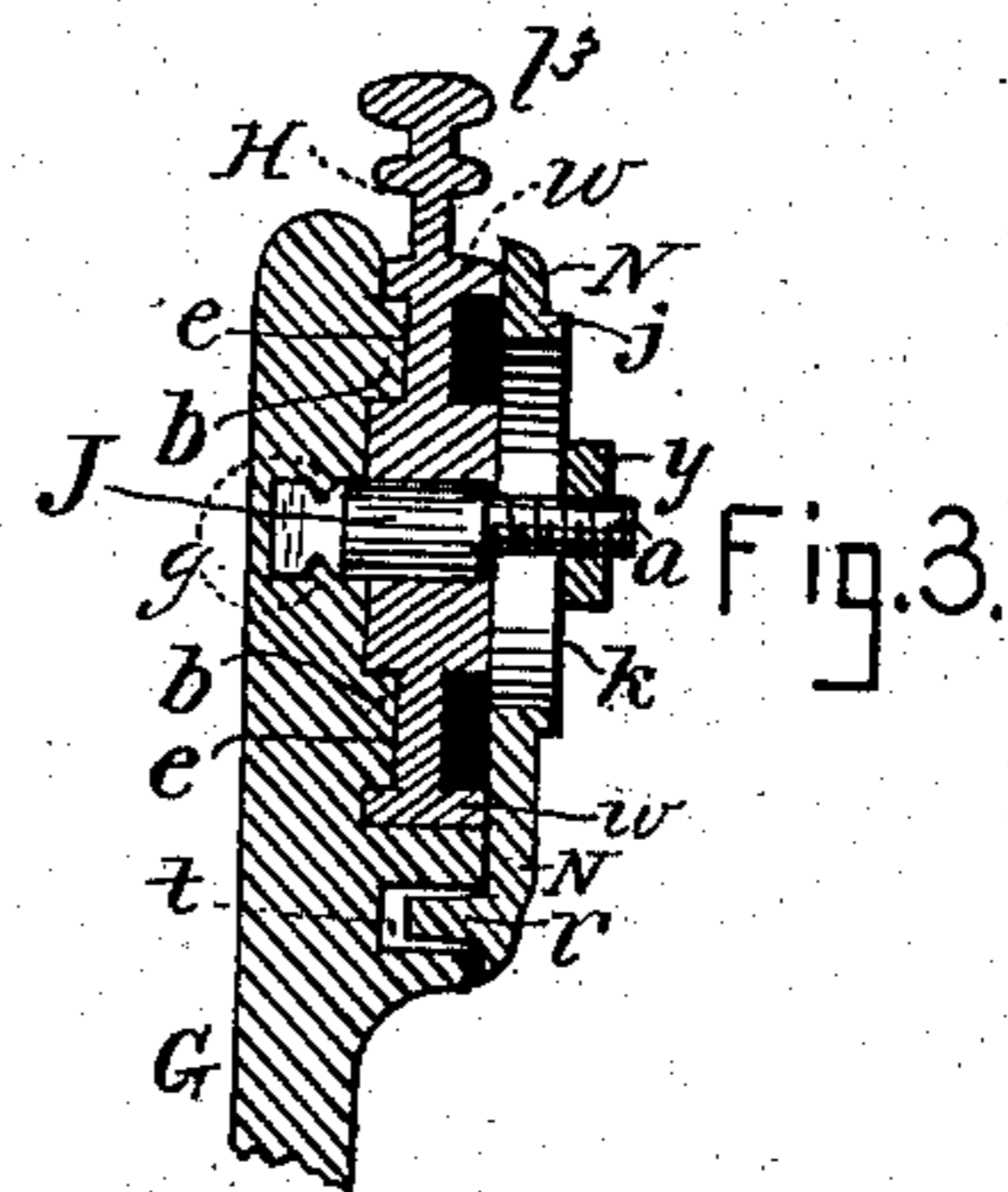


Fig. 3.

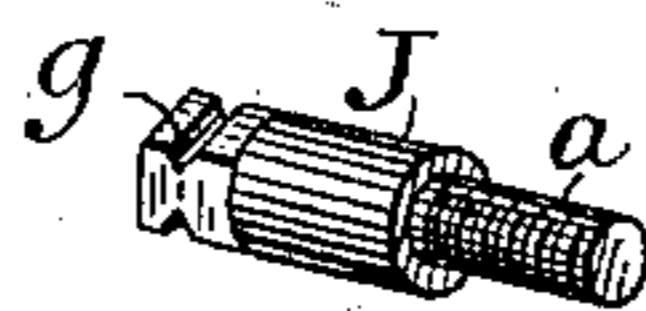


Fig. 9.

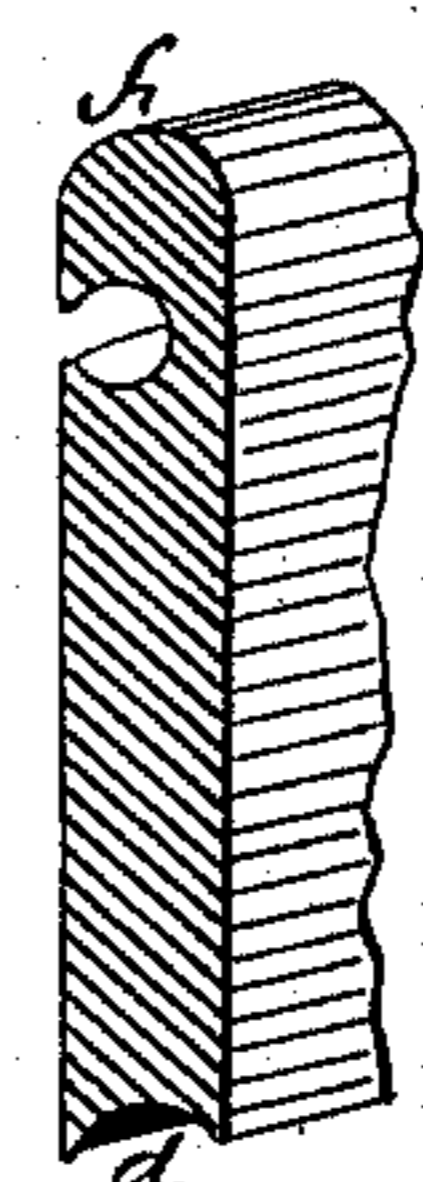


Fig. 8.

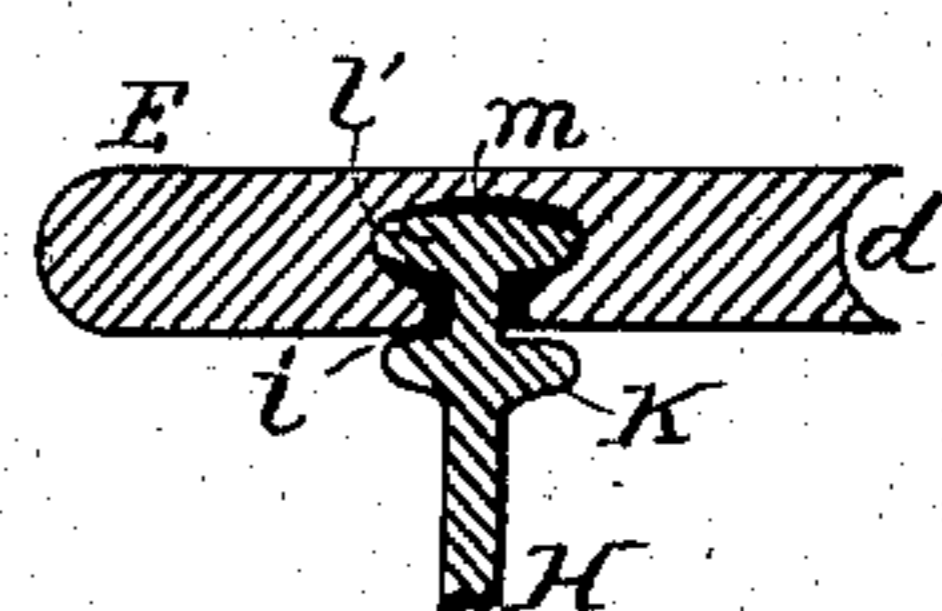


Fig. 7.

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UNITED STATES PATENT OFFICE.

CHARLES A. PRIEST, OF FITCHBURG, MASSACHUSETTS.

DESK.

SPECIFICATION forming part of Letters Patent No. 322,125, dated July 14, 1885.

Application filed March 5, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. PRIEST, of Fitchburg, in the county of Worcester, State of Massachusetts, have invented a certain new and useful Improvement in Desks, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is an isometrical perspective view representing my improved desk complete; Fig. 2, a side elevation of one of the seat-brackets detached; Fig. 3, a vertical transverse section of the joint of the seat-bracket; Fig. 4, a top plan view of the seat-bracket shown in Fig. 2; Fig. 5, a perspective view showing a slot in one of the slats; Fig. 6, vertical transverse sections of the rib and one of the locking-flanges of the bracket shown in Fig. 2; Fig. 7, a sectional view showing the locking-flange inserted in the hole of the slat; Fig. 8, a sectional view of a slat showing the ordinary form of hole; Fig. 9, a perspective view of the joint-bolt; Fig. 10, a view of the friction-plate, and Fig. 11 a plan view of the disk.

Like letters and figures of reference indicate corresponding parts in the different figures of the drawings.

My invention relates more especially to that class of desks which are employed in furnishing school-rooms, colleges, &c.; and it consists in a novel construction and arrangement of the parts, as hereinafter more fully set forth and claimed, by which a simpler, cheaper, and more desirable article of this character is produced than is now in ordinary use.

The nature and operation of my improvement will be readily understood by all conversant with such matters from the following explanation.

In the drawings, A A represent the side pieces; B, the top; C, the back, and D the seat.

The top is preferably formed in one piece; but the back and seat are composed of separable slats E, each slat having a rounded edge, *f*, and concaved edge *d*, except that at the rear of the seat and top of the back, which have both edges rounded.

Near the under side or back of each of the

slats, and at either end of the same, there is a transverse hole or perforation, *m*, extending entirely across the body of the slat, as shown in Fig. 5. This hole is oval in cross-section, as best seen in Fig. 7, and is connected with the narrow elongated slot *i*, which opens outwardly through the bottom or back of the slat and is coequal in length with the hole, the slot being enlarged near its center, as shown at *h*, for a purpose hereinafter specified.

The side pieces, A, are preferably composed of cast metal, and are so formed as to receive the top, back, and seat of the desk and hold them in proper position.

An arm, G, projects upwardly from the base of either side piece, to the outer end of which there is jointed a bracket, H, for supporting the seat E. This bracket is provided along its upper edge with a rib, K, preferably cast integral with its body, the rib being provided at regular intervals with laterally-projecting locking-flanges *l'* *l''* *l'''*, one of which is disposed near the free or forward end of the bracket, another at or near its center, and one at its jointed or inner end, the number being increased or decreased at pleasure or in accordance with the size of the seat and the width of the slats of which it is composed. A cross-section of one of the locking-flanges taken on the line *x x*, Fig. 4, is shown at *l'* in Fig. 6; also a cross-section of the rib K, taken on the line *z z* in Fig. 4.

In attaching the slats to the brackets to form the seat D, the rear slat of the seat, and which is numbered 1, is first placed upon the brackets between the locking-flanges *l''* and *l'''* in such a position that the ribs K of the brackets will enter the slots *i* and holes *m*, after which it is driven back into the position shown in Fig. 1, thereby causing the flanges *l'''* to engage the slat and hold it firmly in position. Slat No. 2 is then placed upon the brackets in the blank between the flanges *l''* and *l'''* with its concaved edge inward and against the rounded outer edge of the slat No. 1, the ribs K being inserted in its holes *m*, after which slat No. 3 is placed upon the brackets in the same manner but between the flanges *l'* and *l''* with its concaved edge inward, and driven back, causing it to engage the flange *l''* and press slat No. 2 into forcible contact with slat No. 1. Slat No.

4 is now placed with its rounded edge outward upon the brackets between the flanges l' and l'' , the ribs K being inserted in its holes m , and is pushed back against slat No. 3. After the slats Nos. 1, 2, 3, and 4 have been placed in position, as described, slat No. 5 is next placed upon the brackets in such a position as to permit the flanges l' to enter the enlarged sections h of its slots i and driven back until it is securely engaged with the flanges l' , and also brought into forcible contact with slat No. 4.

From the foregoing it will be obvious that all of the slats forming the seat are prevented from moving endwise by the ribs K, and that slats Nos. 5, 3, and 1 are respectively secured to the brackets by the flanges l' , l'' , and l''' , while slats Nos. 2 and 4 are held in position by the ribs K and the adjoining slats with which their edges are interlocked.

The enlarged section h of the slot i enables the slat No. 5 to be passed over and engaged with the locking-flange l' when said slat is nearly in contact with slat No. 4, thus obviating the necessity of driving it on over said flange for a distance corresponding nearly with its width, which would otherwise be requisite. The enlarged section h of the slot i also enables the slat to be used, when required, in substantially the same manner in connection with either of the other locking-flanges.

The front edges of the side pieces, A, above the seat D, are each provided with ribs and a series of locking-flanges, (not shown,) constructed and arranged in substantially the same manner as the ribs and locking-flanges on the brackets, the slats forming the back C, and numbered from 6 to 12, respectively, being also attached to the side pieces in substantially the same manner as the slats forming the seat are attached to the brackets; and it is therefore not deemed essential to more fully illustrate or describe this feature of the invention.

The top B is provided on its under side, near either end, with a transverse hole, m , and slot i , having one or more enlarged sections, h , (not shown,) the upper edge of each side piece, A, being provided with a rib, and locking-flanges adapted to engage and hold the top in position on the side pieces, in substantially the same manner that slat No. 5 is held in position on the brackets, the locking-flanges being inserted through the enlarged sections of the slots in the top when the top is a short distance from slat No. 12, after which it is driven into position and secured to the side pieces in a manner which will be readily understood without a more explicit description.

The hole m is oblong in cross-section, and has a greater diameter, vertically, than the locking-flanges l' l'' l''' , but the locking-flanges have a slightly greater diameter, laterally, than the hole, so that when a slat is driven onto its locking-flanges the flanges will press against the sides of the hole only, or endwise of the grain of the wood of which the slat is formed, thus preventing the flanges from split-

ting the slat, as would be the case were the holes round, as shown in Fig. 8, and the flanges formed to correspond therewith, but sufficiently large to wedge in the holes.

A horizontally-arranged screw-bolt, J, provided with nicks g , is cast into either arm, G, its threaded end a projecting inwardly and being provided with a nut, y . An annular flange, b , is formed on the inner side of the arm G, which works in a corresponding annular groove, e , formed in the bracket H. A hole, v , is formed in the bracket for receiving the bolt J, the bolt being prevented from working loose and escaping from its position in the arm by means of the nicks g , into which the molten metal flows in casting the arm.

A friction-plate, N, having an enlarged opening, P, at its center, and provided with inwardly-projecting studs r to hold it in proper position, is placed over the joint of the bracket, the studs being inserted in a groove or socket, t , formed in the arm G, and the inner face of the plate resting on an annular flange, w , projecting from the bracket H. The outer face of the friction-plate N is provided around the margin of the opening P with a rabbet or shoulder, j , for receiving and supporting the disk k having the central hole n . This disk is preferably composed of steel or elastic sheet metal, and when in use is passed on over the bolt J and rests on the shoulder j , the joint being tightened by simply turning in the nut y , and causing it to press upon the disk, thereby forcing the friction-plate against the flange w , and producing any desired degree of friction on the bracket.

I am aware that the seats and backs of school-desks have been constructed of slats; also that the slats have been provided with grooves and secured to their supports by locking-flanges, and do not, therefore, claim these features, broadly, or when in and of themselves considered; but,

Having thus explained my invention, what I claim is—

1. In a desk substantially such as described, a seat consisting of a hinged bracket provided with a rib having a series of locking-flanges disposed at intervals thereon, and a series of slats provided with transverse slots and holes into which the rib or rib and flanges are inserted in securing the slats to the bracket, some of said slats having concaved edges d , and rounded edges f , all combined and arranged to operate substantially as set forth.

2. In a desk substantially such as described, a back or side composed of a series of slats, every alternate slat of which is secured to its support, by means of locking-flanges on said support and transverse slots in the seats, the intermediate slats being secured in lateral position by the adjoining slats, and in longitudinal position by projections or ribs on the support, said projections or ribs entering slots in the lower or under sides of said intermediate slats without being interlocked therewith, substantially as described.

3. In a desk substantially such as described,
a back or seat composed of a series of slats,
every alternate slat of which is secured to its
support by means of locking-flanges, the in-
5 termediate slats being secured in position by
the adjoining slats, and by projections or ribs
on their support, said projections or ribs en-
tering the lower or inner sides of said inter-
mediate slats without being interlocked there-
10 with, substantially as described.

4. In a desk substantially such as described,
the friction-plate N, provided with the projec-
tions *r*, in combination with the arm G, hav-
ing the groove or socket *t*, and with means for

forcing said plate against the bracket H to 15
produce friction thereon, substantially as speci-
fied.

5. In a desk substantially such as described,
a slat provided at either end with a transverse
hole, *m*, which is oval in cross-section, and 20
with a slot opening into said hole, each slat
having a rounded edge, *f*, and a concave edge,
d, substantially as and for the purpose set
forth.

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Witnesses:

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