

E. B. SHELDON.
BLOCK FOR PRINTERS' USE.

No. 483,814.

Patented Oct. 4, 1892.

Fig 1

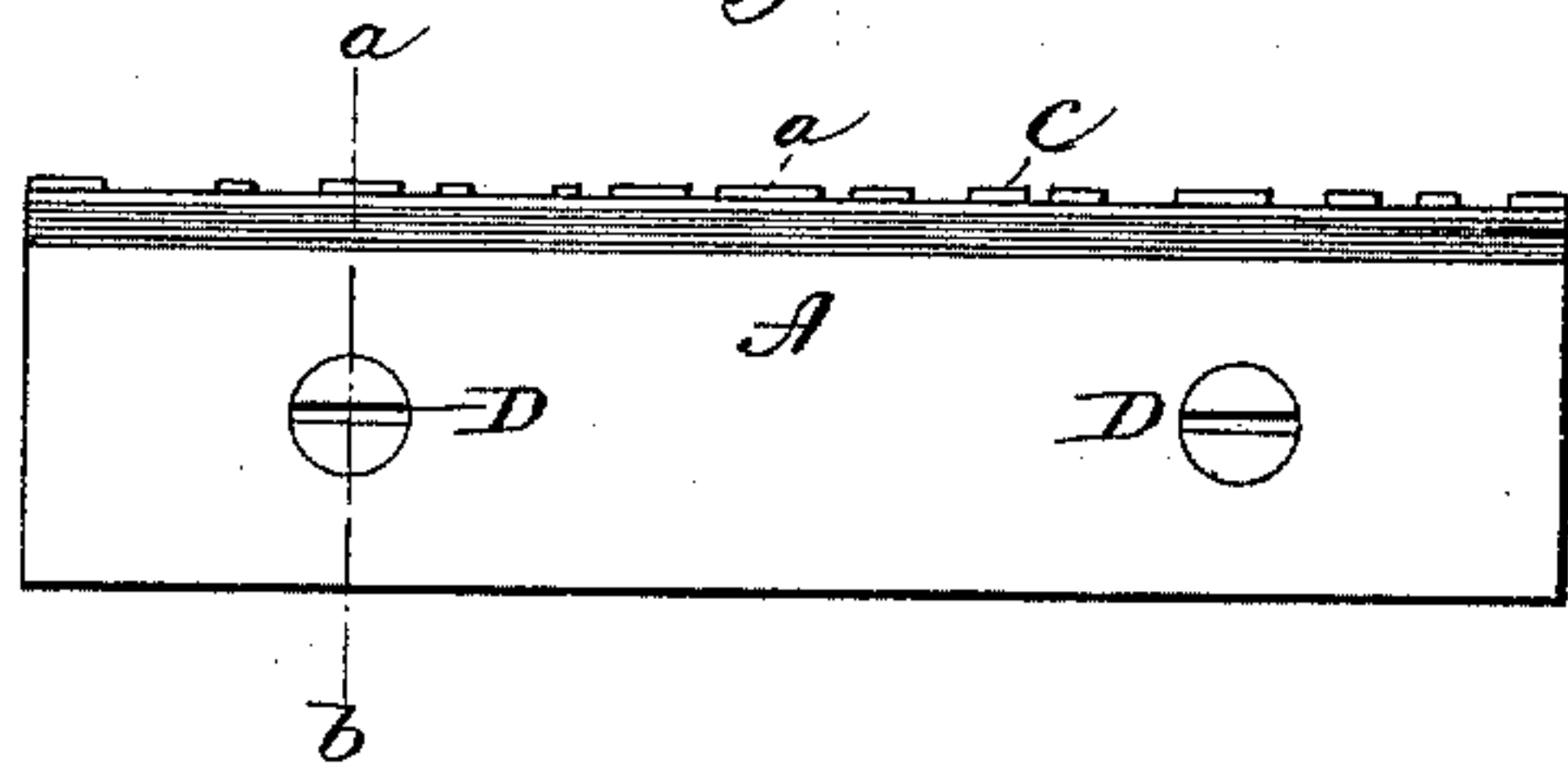


Fig. 2

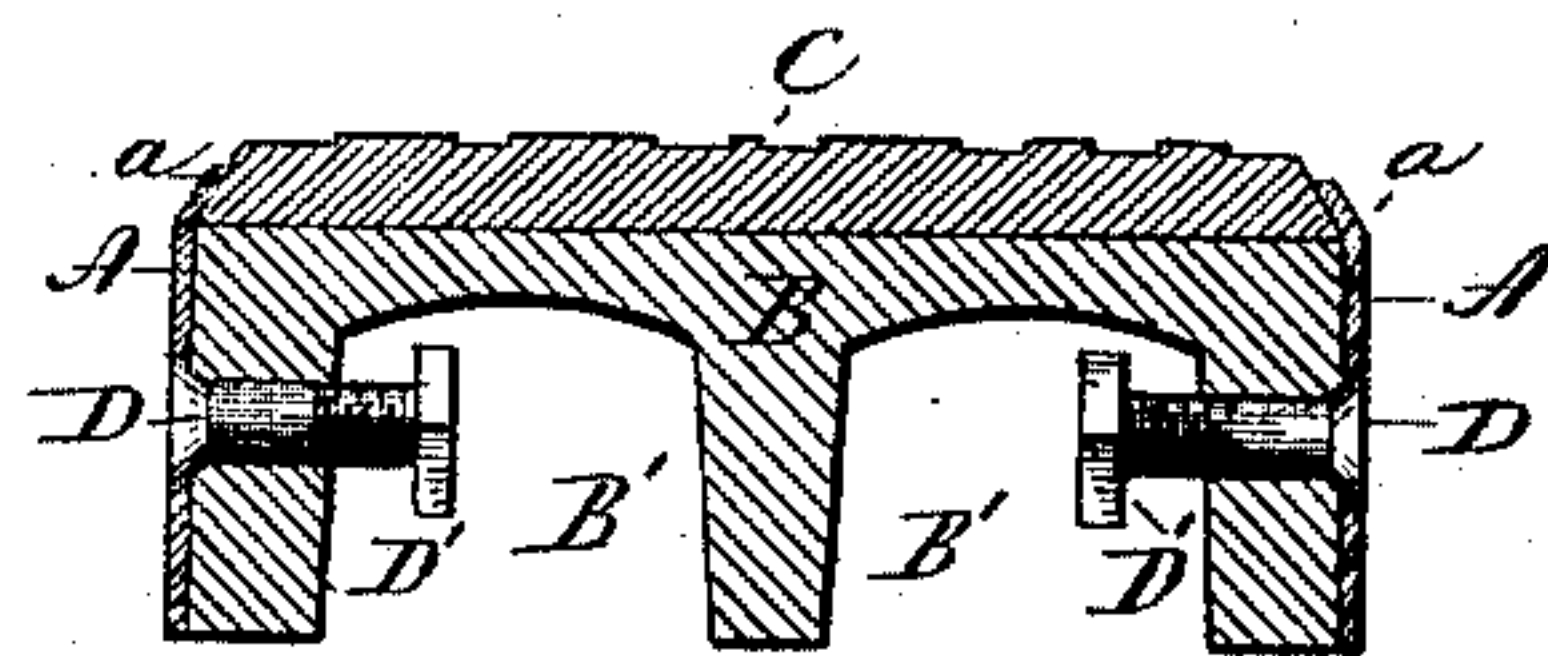


Fig. 3

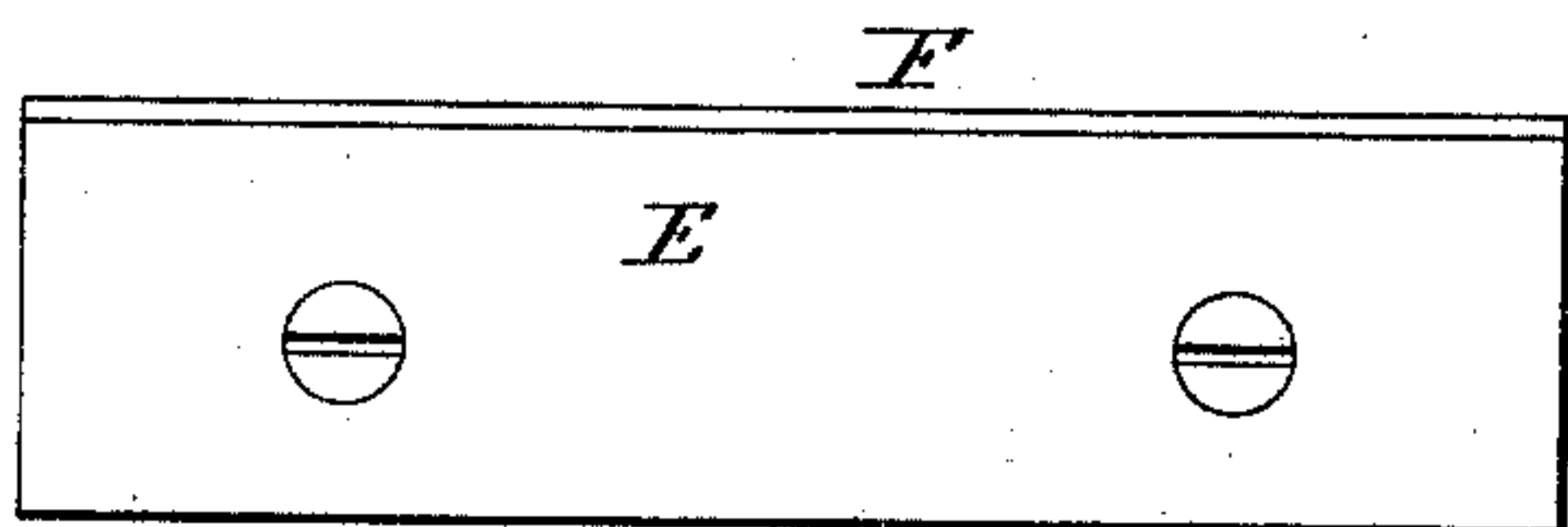


Fig. 4

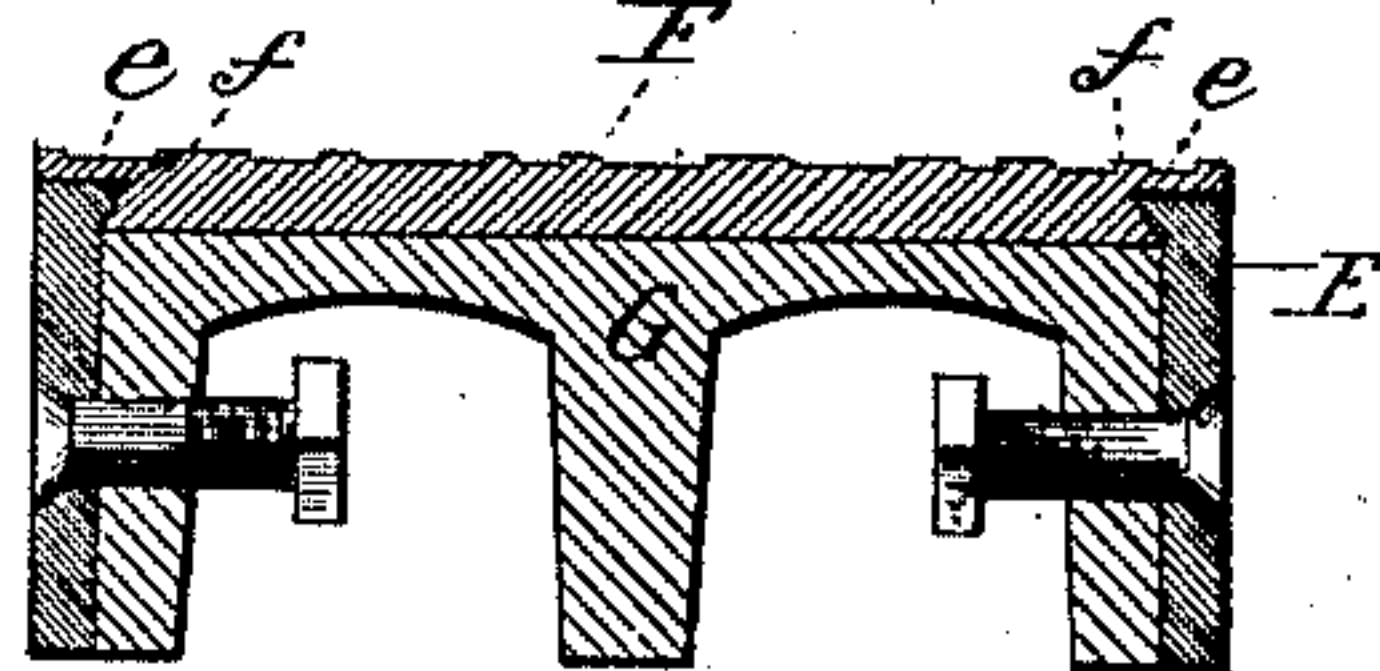


Fig. 5

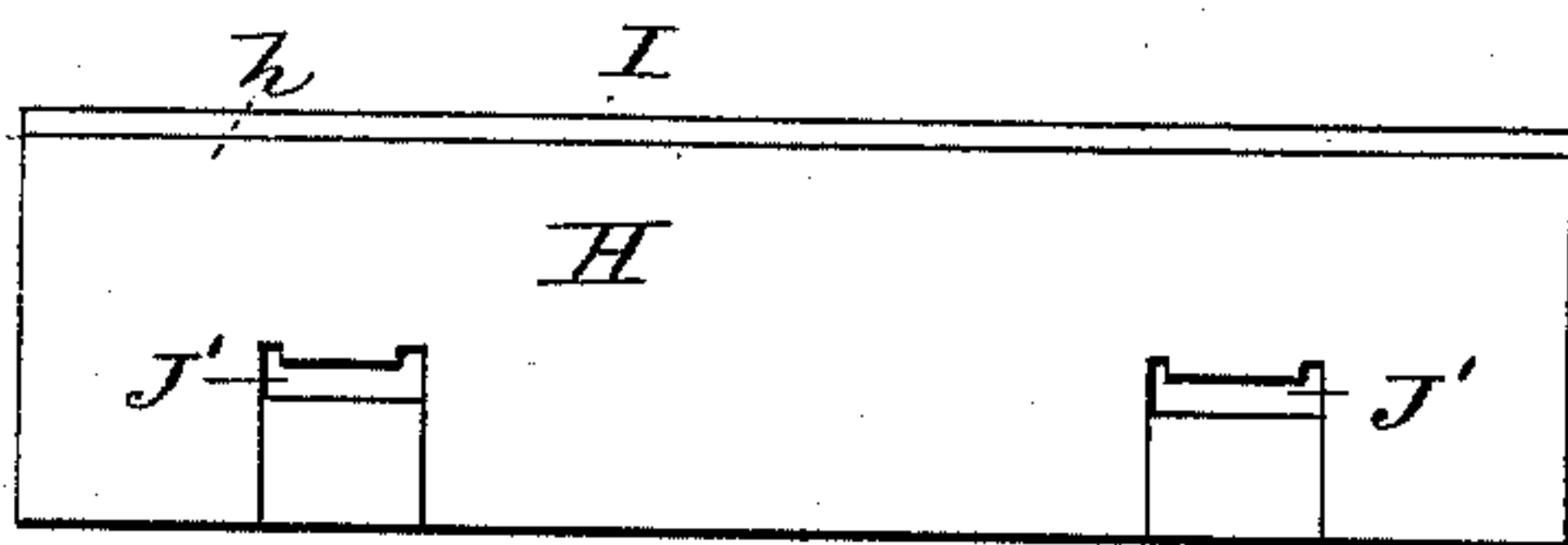


Fig. 6

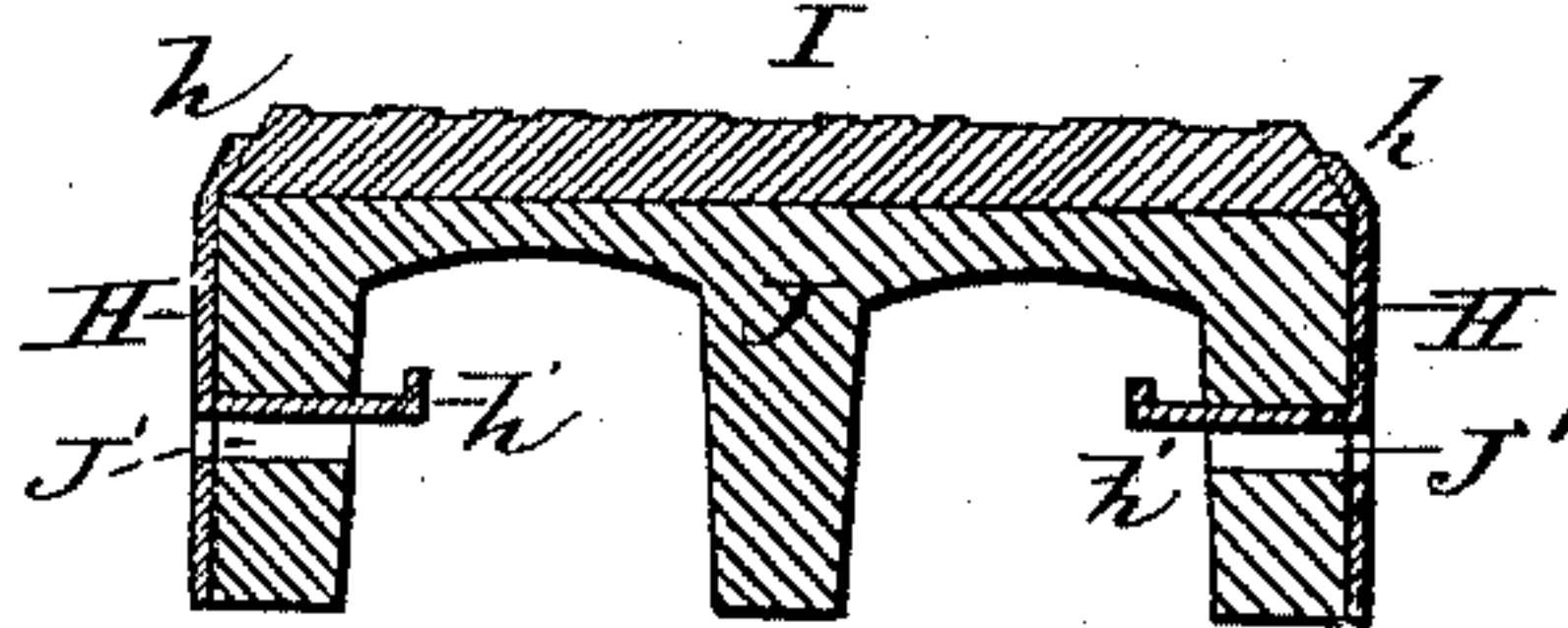


Fig. 7

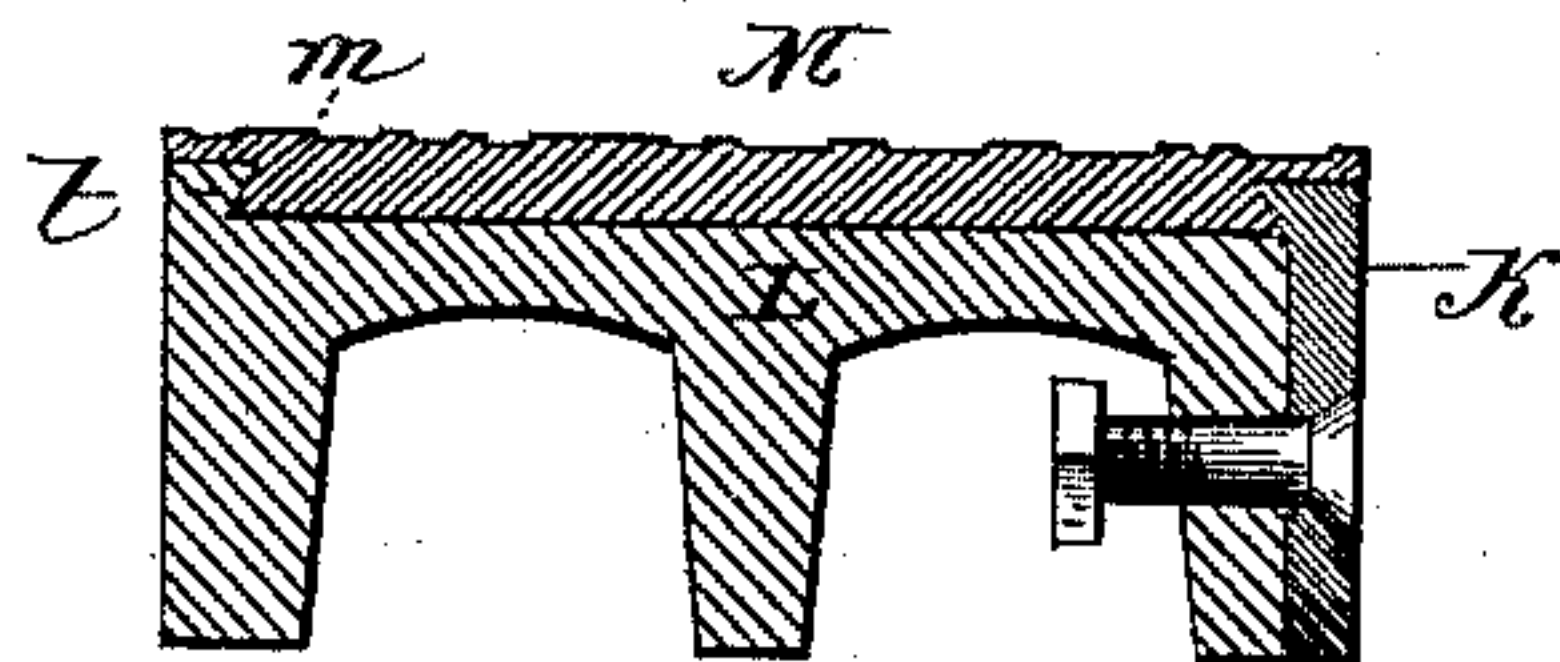
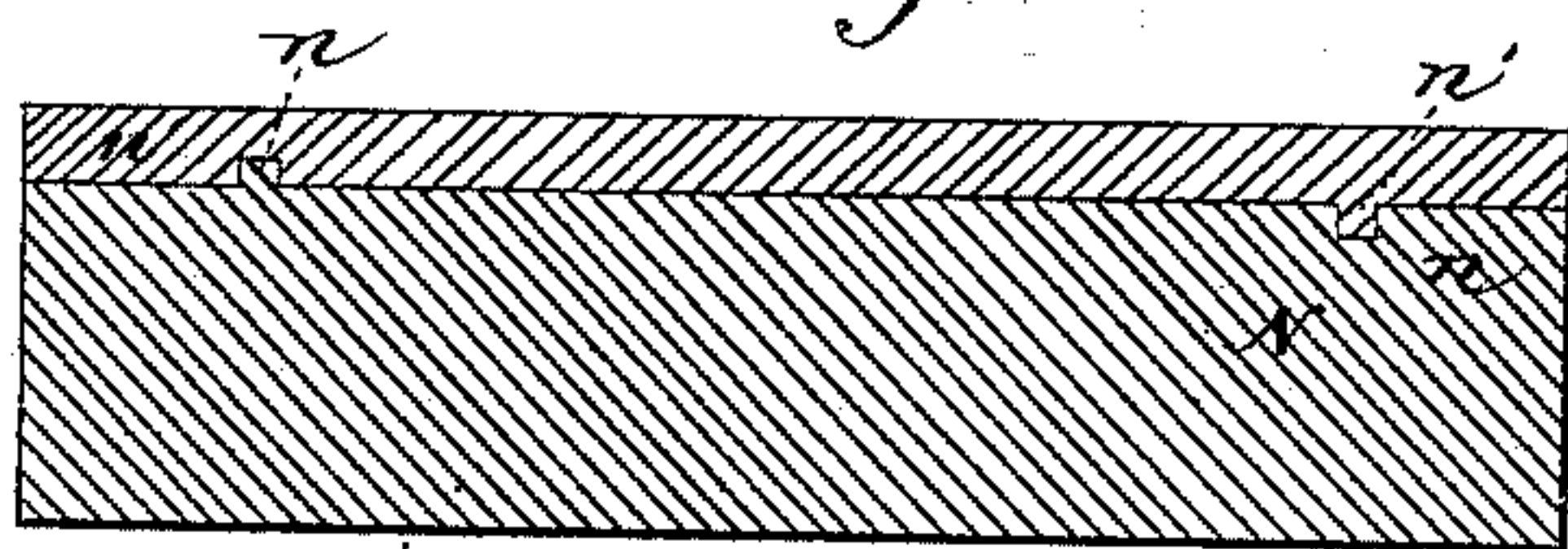


Fig. 8



Witnesses
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Lillian D. Kellogg.

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By atty
Earle Seymour

(No Model.)

2 Sheets—Sheet 2.

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Fig. 9

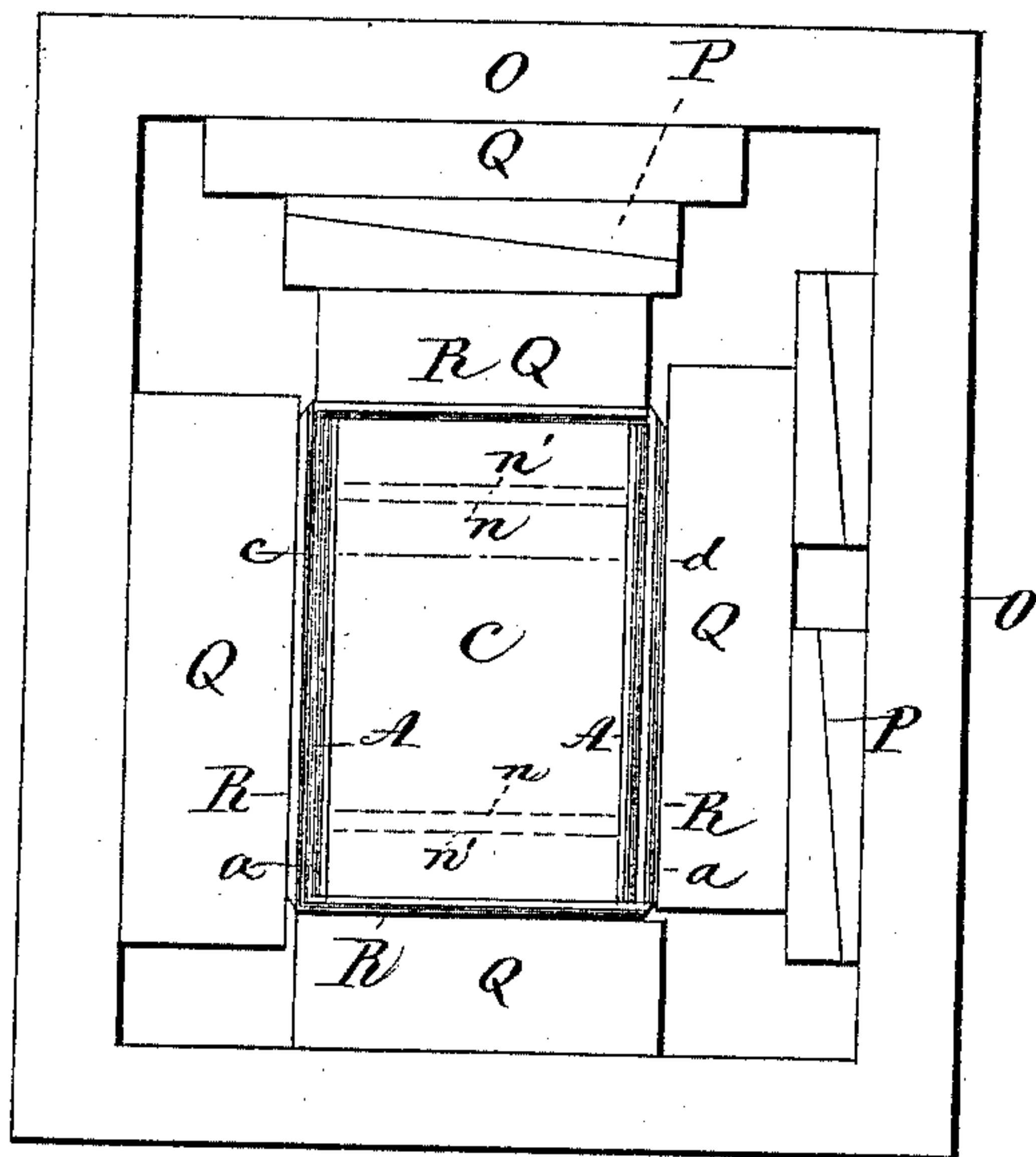
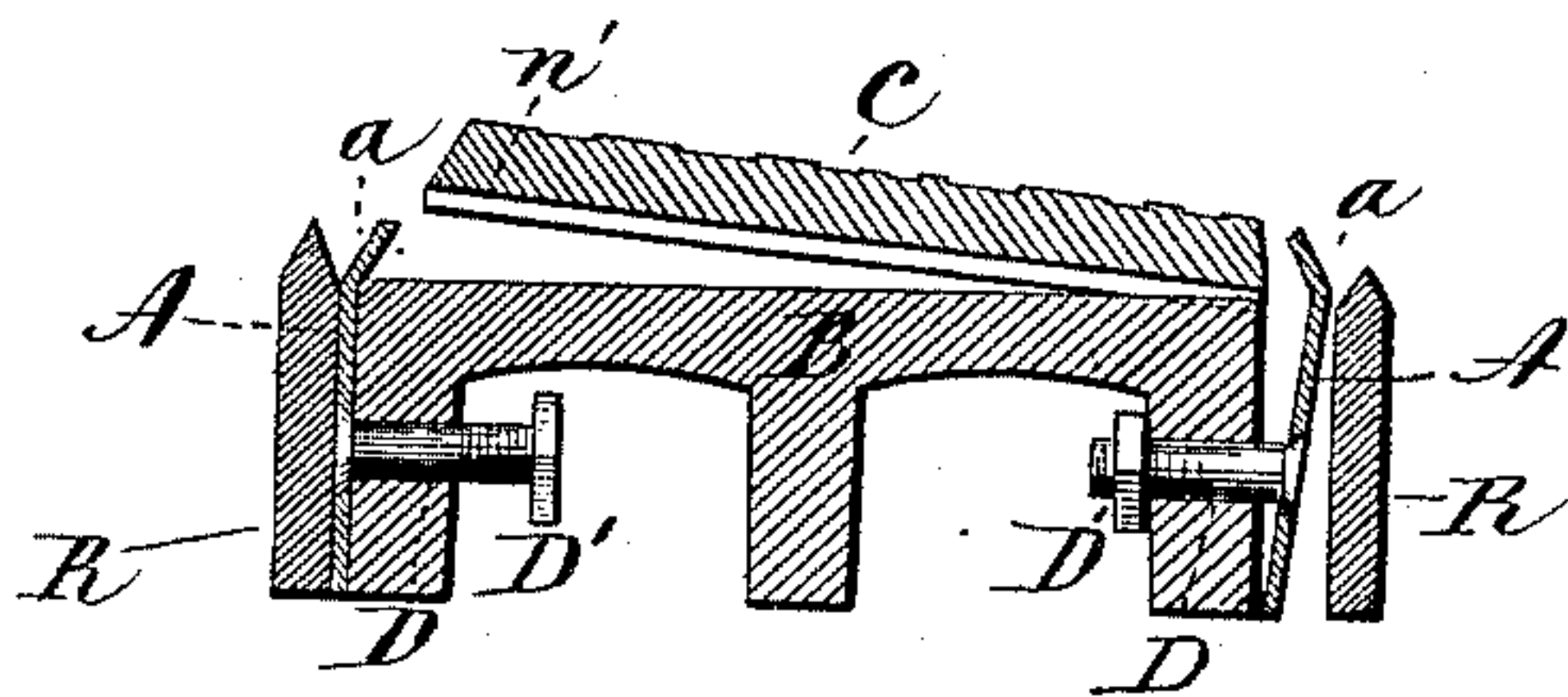


Fig 10



Witnesses

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Julius B. Sheldon
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Earle H. Seymour

UNITED STATES PATENT OFFICE.

EULIUS B. SHELDON, OF NEW HAVEN, CONNECTICUT.

BLOCK FOR PRINTERS' USE.

SPECIFICATION forming part of Letters Patent No. 483,814, dated October 4, 1892.

Application filed December 21, 1891. Serial No. 415,823. (No model.)

To all whom it may concern:

Be it known that I, EULIUS B. SHELDON, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Blocks for Printers' Use; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a view in side elevation of a block constructed in accordance with my invention; Fig. 2, a view thereof in vertical transverse section on line *a b* of Fig. 1. Figs. 3 and 4 and 5 and 6 are corresponding views of two modified forms which my invention may assume; Fig. 7, a view in vertical transverse section of a modified construction of the form shown by Figs. 3 and 4. Fig. 8 is a view in central longitudinal section of a block, showing the provisions under my invention for securing the printing-plate against endwise displacement. Fig. 9 is a plan view of the construction shown by Figs. 1 and 2 when the same is mounted for printing in an ordinary chase; Fig. 10, a view in transverse section on the line *c d* of Fig. 9, showing the block and two column-rules, one of which has been moved outward to permit the adjacent clamp to fall away by gravity from the body of the block, and thus permit the face-plate to be disengaged therefrom without disturbing the said body.

My invention relates to an improvement in blocks for printers' use, the object being to produce a simple and convenient device.

With these ends in view my invention consists in certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claim.

As shown by Figs. 1 and 2 of the drawings, two clamps *A A*, respectively applied to the opposite sides of the chambered body *B* of the block, are employed, the said clamps consisting of strips of stiff sheet metal conforming in length and width to the sides of the said body and having their upper edges slightly turned inward, as at *a a*, for engagement with the beveled edges of the printing-plate *C*, which is placed directly upon the up-

per face of the said body, and which may be an electrotypes or stereotype. The said clamps are loosely or closely connected to the body by means of screws *D*, passing transversely through them and through its side walls and furnished at their inner ends with nuts *D'*, to which access is had through the open chambers *B'*, which, as shown, enter the body from the lower face thereof. The said nuts are located upon the screws, so as not to normally engage with the contiguous faces of the side walls of the body, whereby when the clamps are freed from outside support they will, by their own gravity, tilt and fall away from the said sides, and thus permit the printing-plate *C* to be removed and replaced without disturbing the body or taking it out of its form, the said clamps being returned to and held in their closed position by moving up other pieces (of whatever character) against them. By preference two screws will be employed for thus loosely connecting each clamp with the said body.

As shown by Figs. 3 and 4 of the drawings, the clamps are similarly applied, but consist of two thicker plates *E E*, having their upper edges constructed with dovetail ribs *ee*, which fit into corresponding rabbets *ff*, formed in the opposite edges of the printing-plate *F*, which is applied directly to the upper face of the chambered body *C*. If desired, the clamps *A* and *E* may be used interchangeably on the same body, according to the requirements of setting the blocks up for printing, extra clamps of both kinds being preferably kept on hand for that purpose.

As shown by Figs. 5 and 6 of the drawings, the clamps consist of two sheet-metal plates *H H*, having their upper edges turned inwardly, as at *h h*, for engagement with the beveled opposite edges of the printing-plate *I*, which is applied to the upper face of the chambered body *J*, with which these clamps *H H* are loosely connected by means of retaining-fingers *h' h'*, formed by slitting them transversely from their lower edges and turning the metal between the slits inward, the fingers so formed being passed through transverse openings *J' J'*, formed in the side walls of the body, and the extreme inner ends of the fingers being bent up to form hooks nor-

mally clearing the contiguous inner faces of the said side walls, but engaging therewith when the clamps are relieved and allowed to fall away from the same.

5 As shown by Fig. 7 of the drawings, only one clamp K is used, that corresponding in construction and operation to the clamps E. (Shown by Figs. 3 and 4 of the drawings.) Its place on the opposite side of the chambered
10 body L is taken by a dovetail rib *l*, formed integral therewith on its upper opposite edge and constructed to co-operate with a corresponding rabbet *m*, formed in the adjacent edge of the printing-plate M. By following
15 this construction one clamp is sufficient. If desired, also, I might apply clamps to the ends of the body by constructions analogous to those shown. Nor do I limit myself to the use of screws or fingers as retaining devices
20 for loosely connecting the clamps with the body, which in every case is chambered for access to the retaining devices of the clamps, as other means may obviously be substituted for them; but however the device may be con-
25 structed under my improvement the clamp or clamps will be adapted to slightly fall away at their upper edges from the body by gravity, and hence automatically, when relieved of outside pressure.

30 In Fig. 9 of the drawings I have shown my improved block (constructed in accordance with Figs. 1 and 2) as locked in a chase O of ordinary construction preparatory to print-
35 ing from it. As shown in the said figure of the drawings, the block has column-rules R placed against its sides and ends, and is held in place by furniture Q and quoins P, inter-
40 posed between the said columns and the chase. As shown in Fig. 10 of the drawings, one of the columns against the side of the block is moved outward to permit one of the clamps A to tilt by gravity and fall away from the
45 face-plate C, and thus permit the same to be removed from the block without disturbing the same.

The second part of my invention is illustrated by Fig. 8 of the drawings, and relates to provision for preventing the plate from slipping endwise on the body. To this end the

plate and body are interlocked by forming 50 the upper face of the body and the lower face of the plate with appropriate facial configurations, which interlock when the plate is in place. As herein shown, the body N is con-
55 structed at one end of its upper face with a rib *n*, while the plate has a groove *n'* formed in its corresponding end, whereby the body and plate are interlocked and the latter pre-
60 vented from endwise displacement when it is in place. If desired, this construction may be reversed, as shown at the opposite ends of the body and plate, the rib *n'* being formed
65 on the plate and the groove in the block. I have shown two ribs and grooves; but one rib and one groove will do. I do not, however, limit myself to grooves and ribs, as corruga-
70 tions or some other facial configurations securing interlocking will answer the same purpose. I would therefore have it understood that I do not limit myself to the exact con-
75 struction shown and described, but hold myself at liberty to make such changes and alterations therein as fairly fall within the spirit and scope of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a block for printers' use, the combination, with a chambered body, of one or more clamps loosely connected therewith, substantially as
80 set forth, to fall slightly away from the said body when relieved of outside pressure, and a printing or face plate adapted to be applied to the said body and clamped thereto by the
85 said clamps, which hold it against lateral movement thereon, the upper face of the body and the lower face of the plate being facially configured transversely to interlock and
90 hold the plate against endwise movement on the body, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

EULIUS B. SHELDON.

Witnesses:

JOHN E. EARLE,
GEORGE D. SEYMOUR.