

(No Model.)

D. L. GREGORY.  
SEPARABLE SQUARE.

No. 459,361.

Patented Sept. 8, 1891.

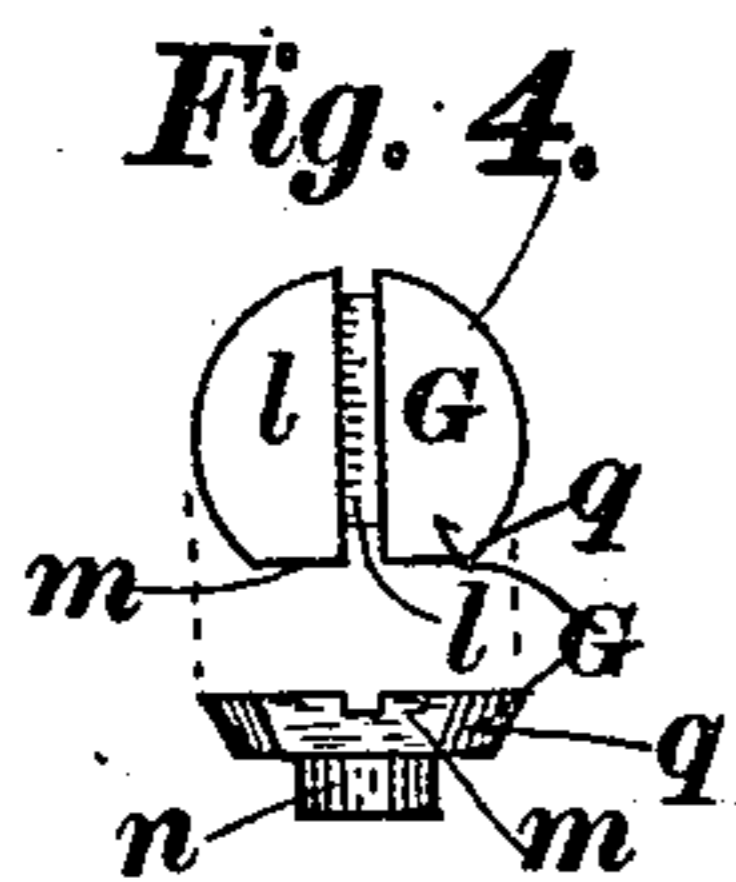
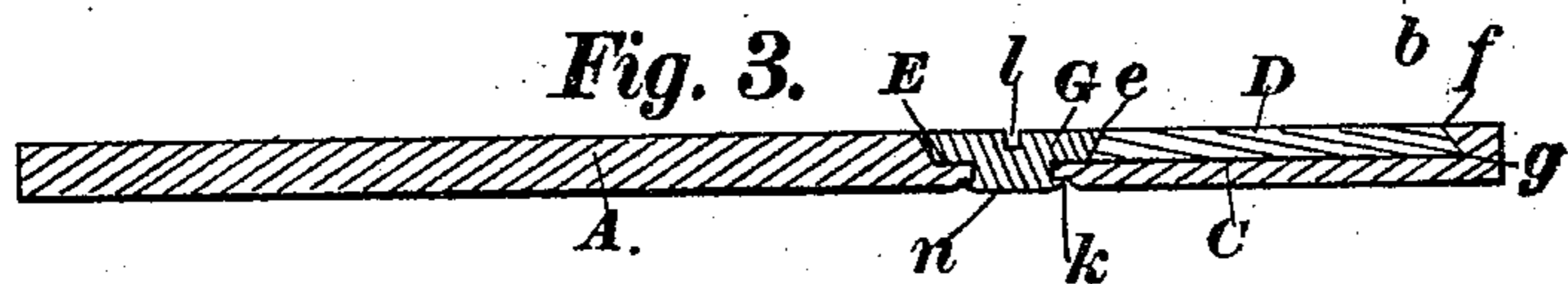
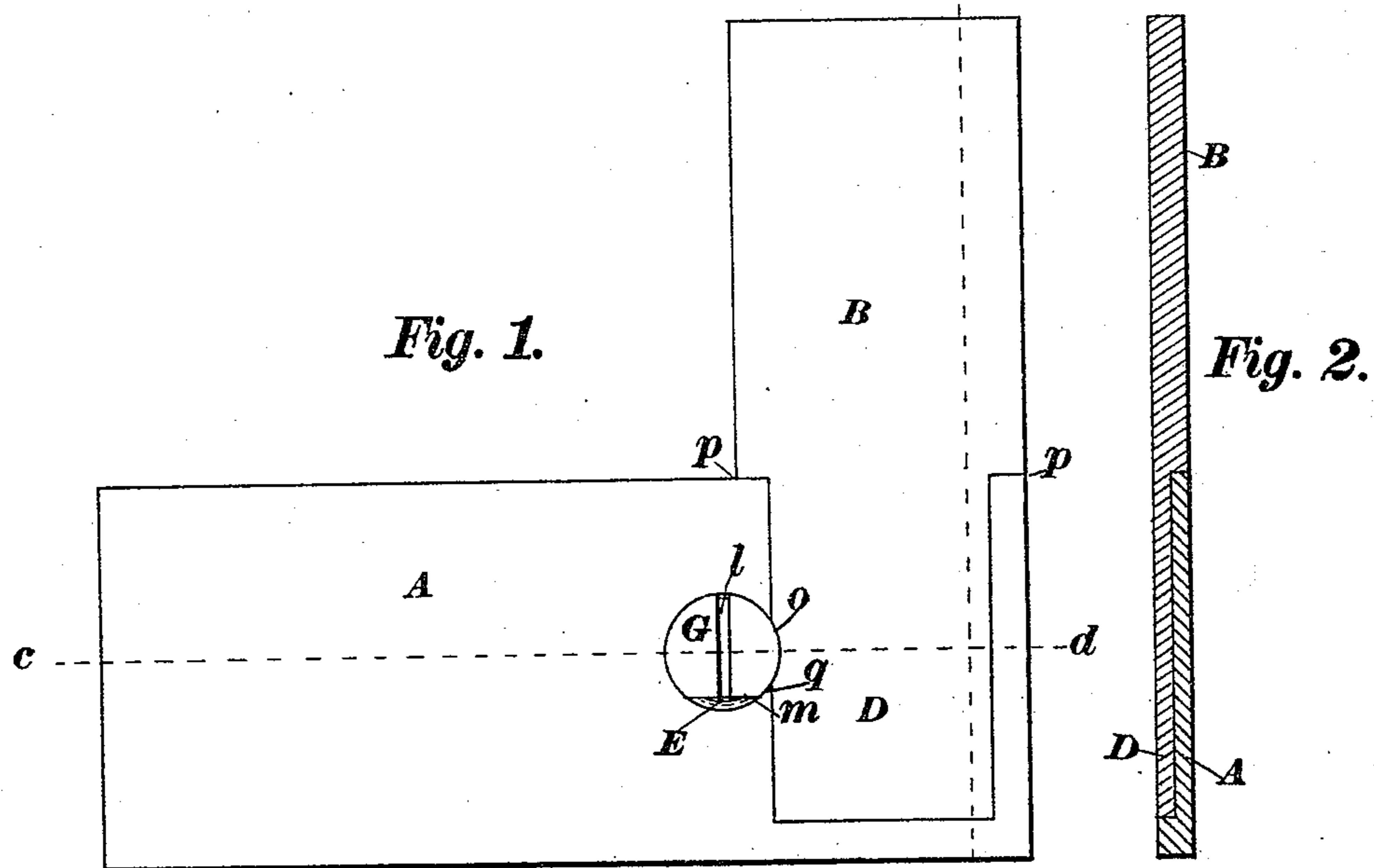


Fig. 5.

Fig. 6.

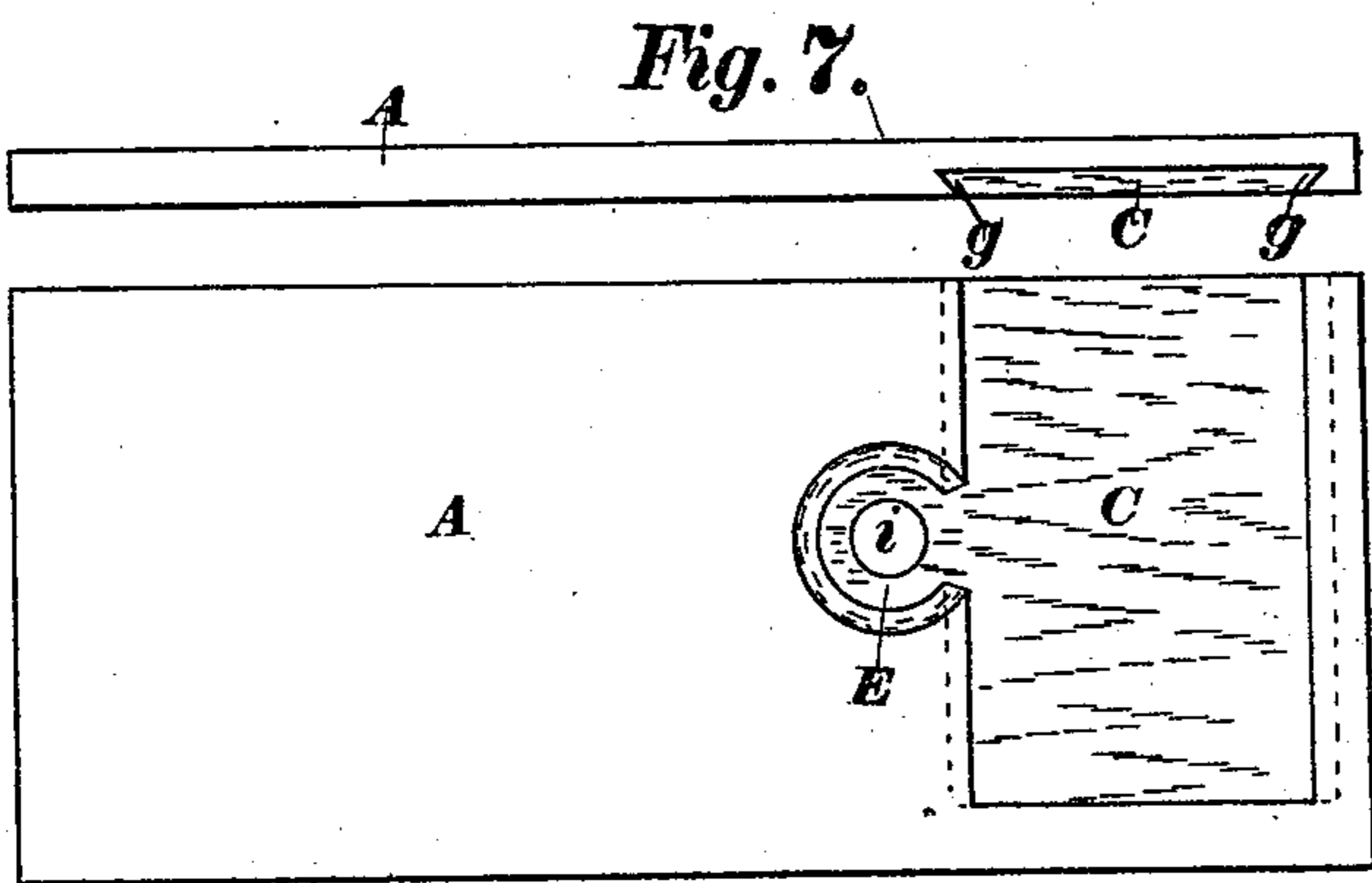
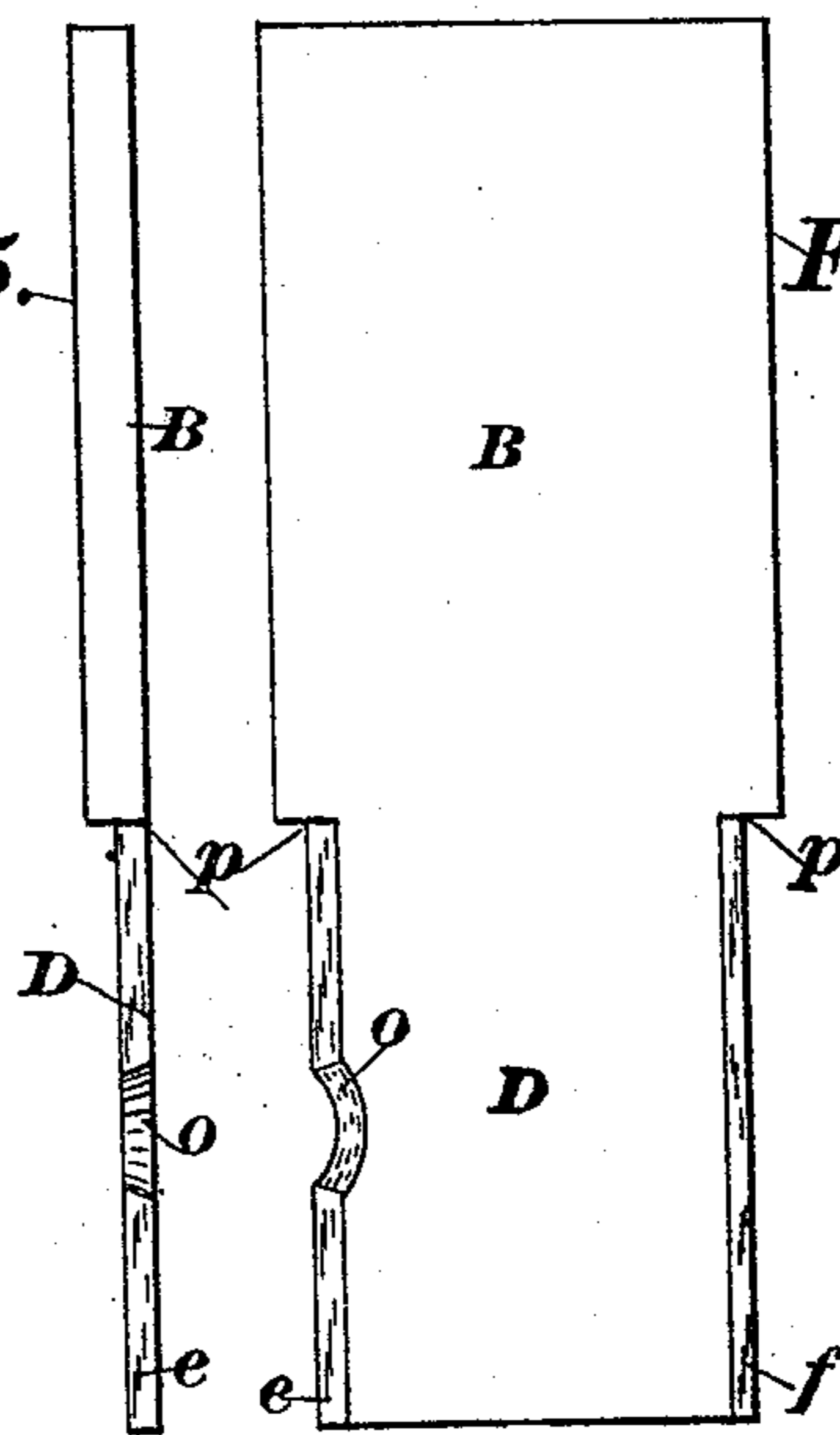


Fig. 8.

Witnesses

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# UNITED STATES PATENT OFFICE.

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## SEPARABLE SQUARE.

SPECIFICATION forming part of Letters Patent No. 459,361, dated September 8, 1891.

Application filed February 26, 1891. Serial No. 382,929. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL L. GREGORY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Separable Squares, of which the following is a specification.

My invention relates to that class of instruments termed "squares," and which are intended for making right angles in laying out work or for proving angles which are intended to be right angles.

My object is to so join or attach the two limbs of a square that they can be quickly and easily separated, and when again assembled in position for use as a square will remain in this condition as perfectly as if the two limbs were made of one piece of metal. I attain these objects by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a side view; Fig. 2, a sectional view on dotted line *a b*; Fig. 3, a sectional view on line *c d*. Fig. 4 is respectively a top and side view of the lock-bolt; Fig. 5, an edge and Fig. 6 a side view of the minor limb of the square; and Figs. 7 and 8, respectively, edge and side views of the major limb of the square.

Similar letters refer to like parts throughout the several views.

In Fig. 1, A is the major and B the minor limbs of the square in position for use.

Figs. 7 and 8 show a dovetail groove C cut across limb A, which has a depth equal to about half the thickness of limb A.

Figs. 5 and 6 show minor limb B to have a tenon D, which has beveled edges at *e* and *f*, the thickness of the tenon D being equal to the depth of the dovetail groove C, and its width being such that it will snugly fit the dovetail groove C of limb A. Major limb B has also a circular depression E, which has a depth equal to that of the dovetail groove C. The sides *g* of this depression E are beveled to about the same angle as the sides of the dovetail groove C, which gives the depression a conical shape, Figs. 3 and 8.

In the center of depression E is a round hole *i* through the plate composing limb A,

and around the margin of this hole the metal is countersunk, as shown in Fig. 3 at *k*.

The lock is shown in Fig. 4 and consists of a short bolt having a head G and a groove *l* for turning it with a screw-driver. Head G is conical in shape to fit the conical-shaped depression C both in width and depth. One side of head G is cut away at *m*. There is a short cylindrical projection *n* from the central part of the under side of head G, which acts as an axis upon which head G turns. When the lock is in position shown in Fig. 1, the lower end of projection *n* is riveted over, occupying the greater portion of the bottom of the countersunk portion *k* around hole *i*, Fig. 3.

In separating the two limbs a screw-driver is inserted in the groove *l* of head G of the lock, and it is turned to the left until the cut-away part *m* stands opposite to the tenon D of minor limb B, so that head G has no bearing upon the circular cut-out portion *o* of tenon D, Figs. 5 and 6. The minor limb B may now be slid out of the dovetail groove C of major limb A, and to reassemble the parts the tenon D is again inserted in groove C, pushed in until shoulders *p* contact with the major limb A, when the head G is turned to the position shown in Fig. 1, the circular part of head G engaging tenon D in the cut-out portion *o* of tenon D and effectually locking the tenon in its proper position. The head G can be filed away slightly at the point *q*, which gives it an eccentric shape and insures an easy entrance into the cut-out portion *o* of tenon D.

This invention is intended for the large squares used by carpenters and others for measuring and laying out work, but can be applied to ordinary try-squares, if necessary. Since it is separable, the two limbs, when taken apart, can be placed parallel together and occupy a very small space in comparison to that which is required when assembled in the form of a square, and thus adapt it to be placed with other tools in the limited space of an ordinary tool-box.

I claim as my invention—

In a separable square, limbs A and B, held together by dovetail tenon D of limb B, occupying dovetail groove C of limb A, said

tenon provided with the described cut-out or depressed portion *o* at one of its dovetailed edges, lock G, secured to operate in a rotary direction in a depression E of limb A, in combination with and against the surface of cut-out or depressed portion *o* of tenon D for the purpose of locking said tenon in said dovetail groove C, said lock G having one side *m* of its periphery flattened for the purpose, and all operating in the manner substantially as described.

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Witnesses:

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