

(No Model.)

D. B. BENEDICT.
DRAWING BOARD.

No. 572,739.

Patented Dec. 8, 1896.

Fig. 1.

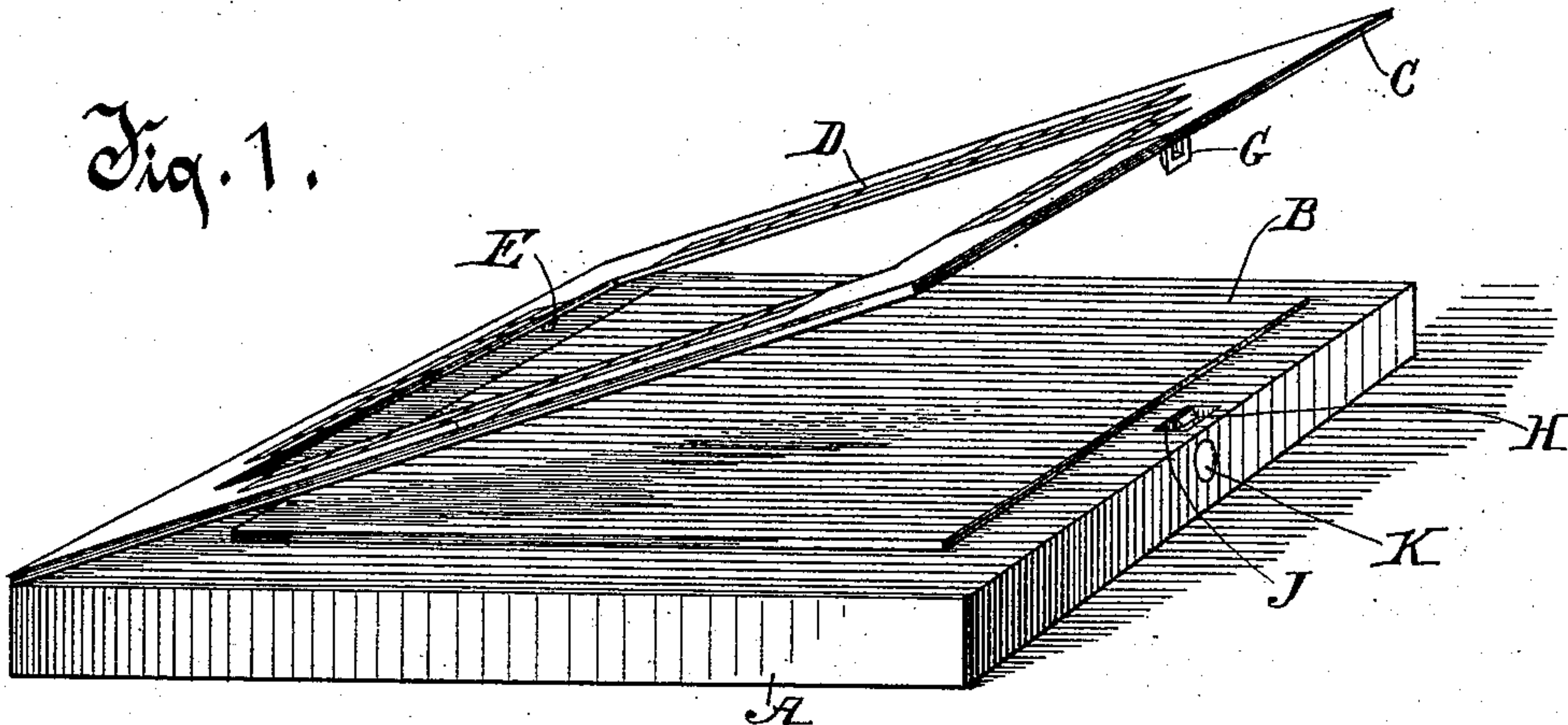


Fig. 2.

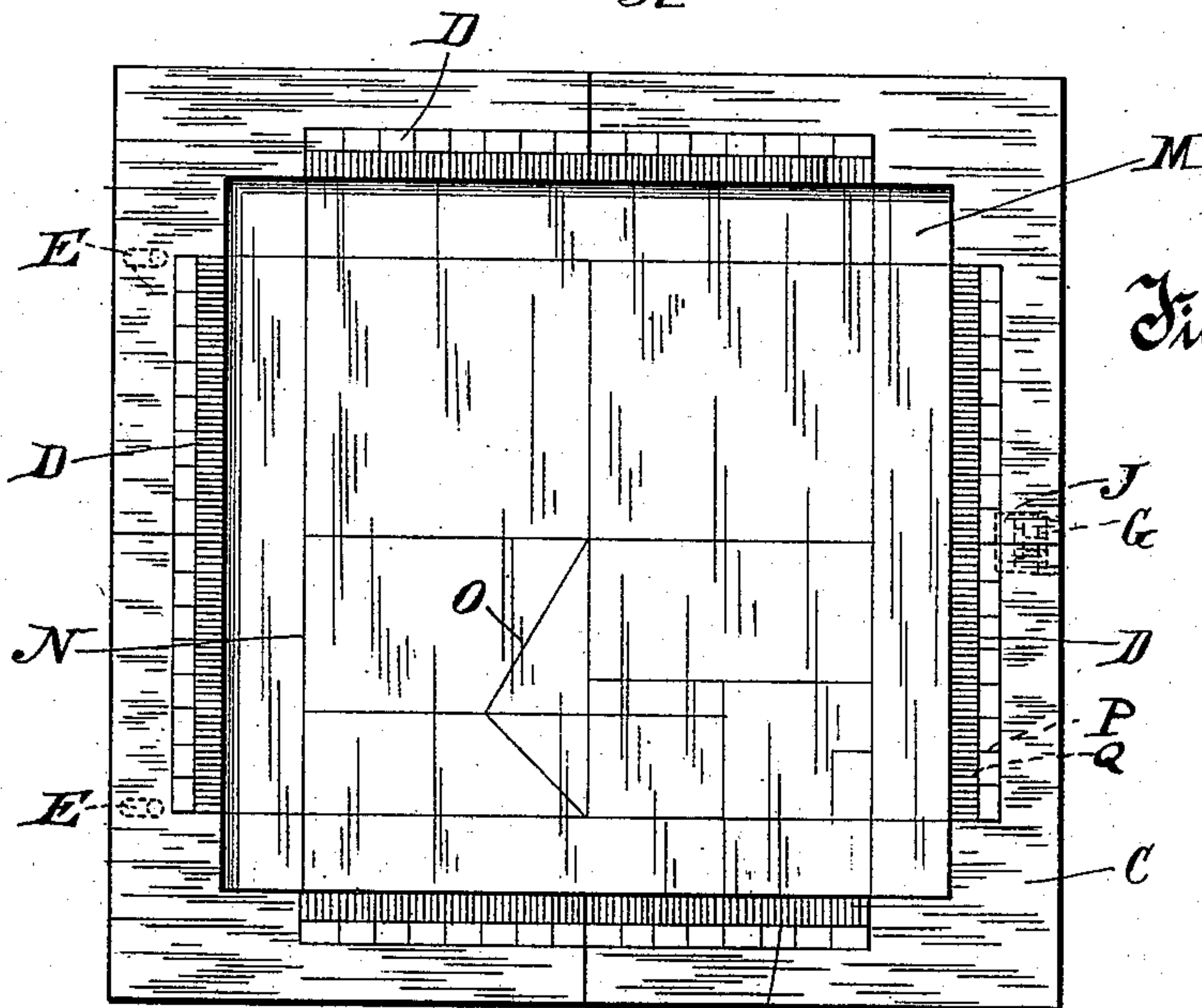
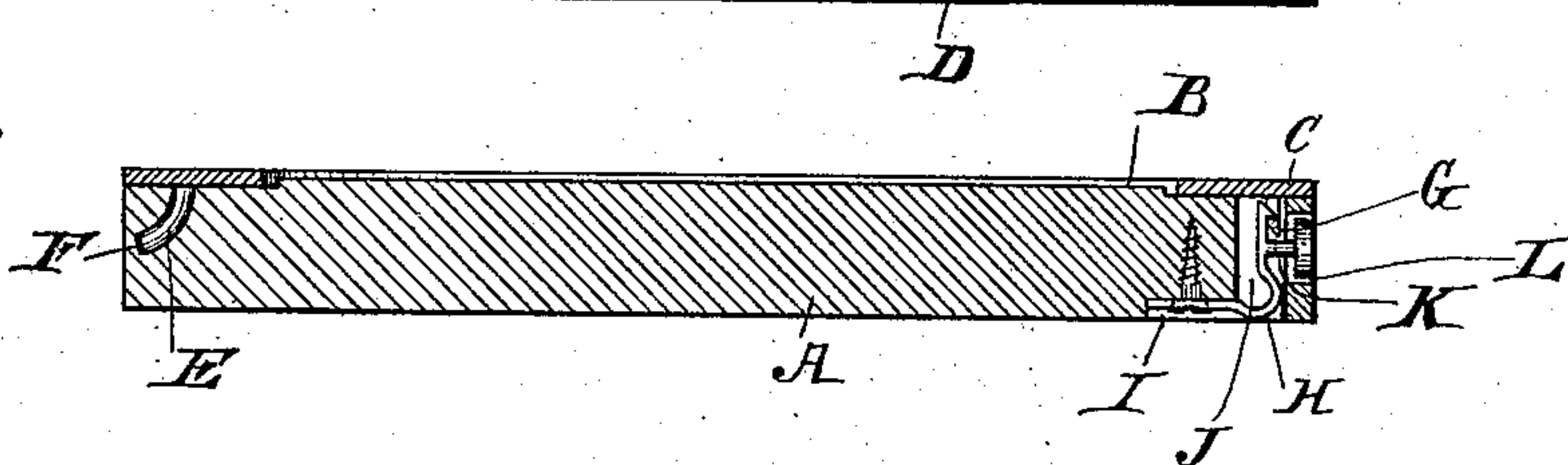


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

DANIEL B. BENEDICT, OF KENOSHA, WISCONSIN, ASSIGNOR OF ONE-HALF
TO CHARLES A. TARBELL, OF SAME PLACE.

DRAWING-BOARD.

SPECIFICATION forming part of Letters Patent No. 572,739, dated December 8, 1896.

Application filed January 27, 1896. Serial No. 576,965. (No model.)

To all whom it may concern:

Be it known that I, DANIEL B. BENEDICT, of Kenosha, in the county of Kenosha and State of Wisconsin, have invented a new and useful Improvement in Measuring Instruments, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

My invention has relation to improvements in measuring instruments.

The object is to provide a convenient and simple device to be used for the purpose of making plats of real estate or drafting of any character where scale-measurements are used, and the device is so constructed and arranged as to enable the preparation of an absolutely correct plat or drawing with the least possible trouble and loss of time and with the necessity of but little, if any, mental calculation. The graduations of course may be adapted to the particular kind of drawings required.

With the above primary object in view the invention consists of the devices and parts, or their equivalents, as hereinafter more fully set forth.

In the accompanying drawings, Figure 1 is a perspective view of the complete device, showing the open square frame as thrown upward upon its hinges. Fig. 2 is a plan view of the device with the plat in position therein; and Fig. 3 is a transverse central sectional view of Fig. 2, the plat being omitted.

Referring to the drawings, A indicates a base-piece advisably square or rectangular in shape and preferably of wood. Upon the upper side of this base-piece is provided a square or rectangular raised portion B.

The letter C indicates an open square or rectangular frame, preferably constructed of metal. The square or rectangular opening of this frame is of a size somewhat greater than the size of the raised portion B, so as to fit snugly around said raised portion when the frame is thrown down upon its hinges. Upon the margins of all four sides of this frame are delineated scales of measurements, such scales being indicated by the letters D. Depending from the under side of one of the side pieces of the frame are outwardly-curved

fingers E E, which fingers fit in correspondingly-shaped recesses F in the base-piece and form a hinge for the frame. The side piece of the frame opposite the hinge-joint is provided with a depending catch G. This catch is adapted to be engaged by an angular spring-catch H, the horizontal portion of said spring-catch being disposed in an under recess I of the base and the vertical portion thereof extending up into a vertical recess J of said base, into which recess the depending catch G also depends, the engaging ends of the two catches being so located as to readily engage each other when the frame is turned down upon its hinge. The vertical portion of the spring-catch H is formed with an outwardly-extending finger K, which extends into a recess L and is provided at its extremity with a finger-piece. It is apparent that when it is desired to release the frame all that is necessary to be done is to press inwardly on the finger-piece until the spring-catch H is released from the spring-catch G, when of course the frame is free to be thrown upwardly on its hinge. The form of catch is not material, and any other suitable catch for the purpose may be used, if desired.

In the use of the device the frame is raised and the paper M upon which the plat is to be made is placed upon the raised portion B of the base-piece. The frame is then brought down until the catches engage. The projecting edges of the paper are of course securely clamped by the frame to the base-piece. An ordinary T-square is now employed and a square figure N delineated on the paper by drawing lines across the plat from end to end of the respective scales. If now it is assumed that this square represents a quarter-section of land comprising one hundred and sixty acres, then each small division P of each scale will represent ten rods, or each fractional subdivision Q of each division will represent two rods. It can be readily seen that with such a scale of measurement as a basis no difficulty will be experienced in obtaining exact measurement. Now if this square N be subdivided into four quarters, as shown, and each quarter supposed to represent a quarter-section of land of one hundred and sixty acres,

then each division P of each scale will represent twenty rods and each subdivision four rods, and so on, indefinitely.

5 In Fig. 2 the square is shown as divided up into four quarters, and several of these quarter-sections again divided.

10 In case it is desired to measure so many degrees from a given point this can be readily accomplished by the use of a protractor. For instance, if it is desired to locate a point at a certain distance and at an angle of, say, sixty degrees from the center of the large square of the plat shown in Fig. 2 said central point is taken as a basis and a dot placed at the sixty
15 degrees marked on the scale. The T-square is then placed in line with the base-point and the dot and a line drawn the required distance. A line corresponding to the explanation just given is shown in Fig. 2 of the drawings and is indicated by the letter O.
20

While an ordinary form of hinge could be used for uniting the open frame to the base-piece, yet the form illustrated in the accompanying drawings is much preferable, inas-
25 much as it leaves a flush surface on all sides of the device, so that the head of the T-square can fit snugly thereto, whereas in case an ordinary form of hinge was employed protruding parts would be left at the side where
30 the hinge-joint would be, which protruding

parts would interfere with the even adjustment of the head of the T-square to that side of the device.

It will be seen from the above explanation that my invention is exceedingly simple in construction, and accomplishes with absolute accuracy what has heretofore been accomplished only with exhaustive work. 35

What I claim as my invention, and desire to secure by Letters Patent, is— 40

In a measuring instrument, the combination, of a square or rectangular base-piece, provided near one side edge with a downwardly-extending outwardly-curved recess, or with downwardly-extending oppositely-curved recesses, a square or rectangular open frame provided on its under side, near one side edge, with a downwardly-extending outwardly-curved finger, or with downwardly-extending outwardly-curved fingers, said finger or fingers adapted to fit the corresponding recess or recesses of the base-piece, and opposite side scales, substantially as described. 45 50

In testimony whereof I affix my signature in presence of two witnesses.

DANIEL B. BENEDICT.

Witnesses:

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