

R. GÖHRING.
PERSPECTOGRAPH.
APPLICATION FILED MAR. 13, 1907.

915,426.

Patented Mar. 16, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

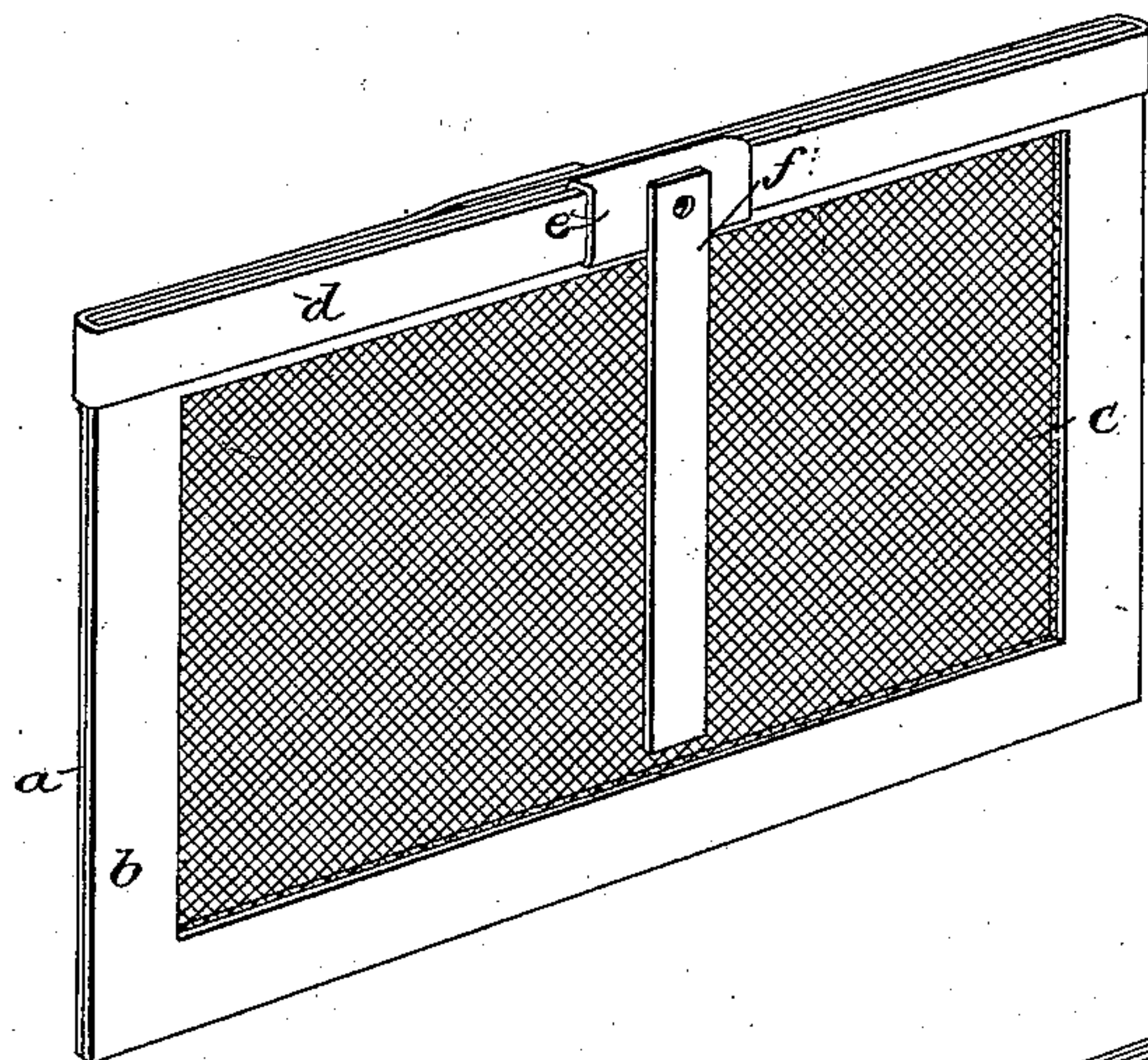


Fig. 2.

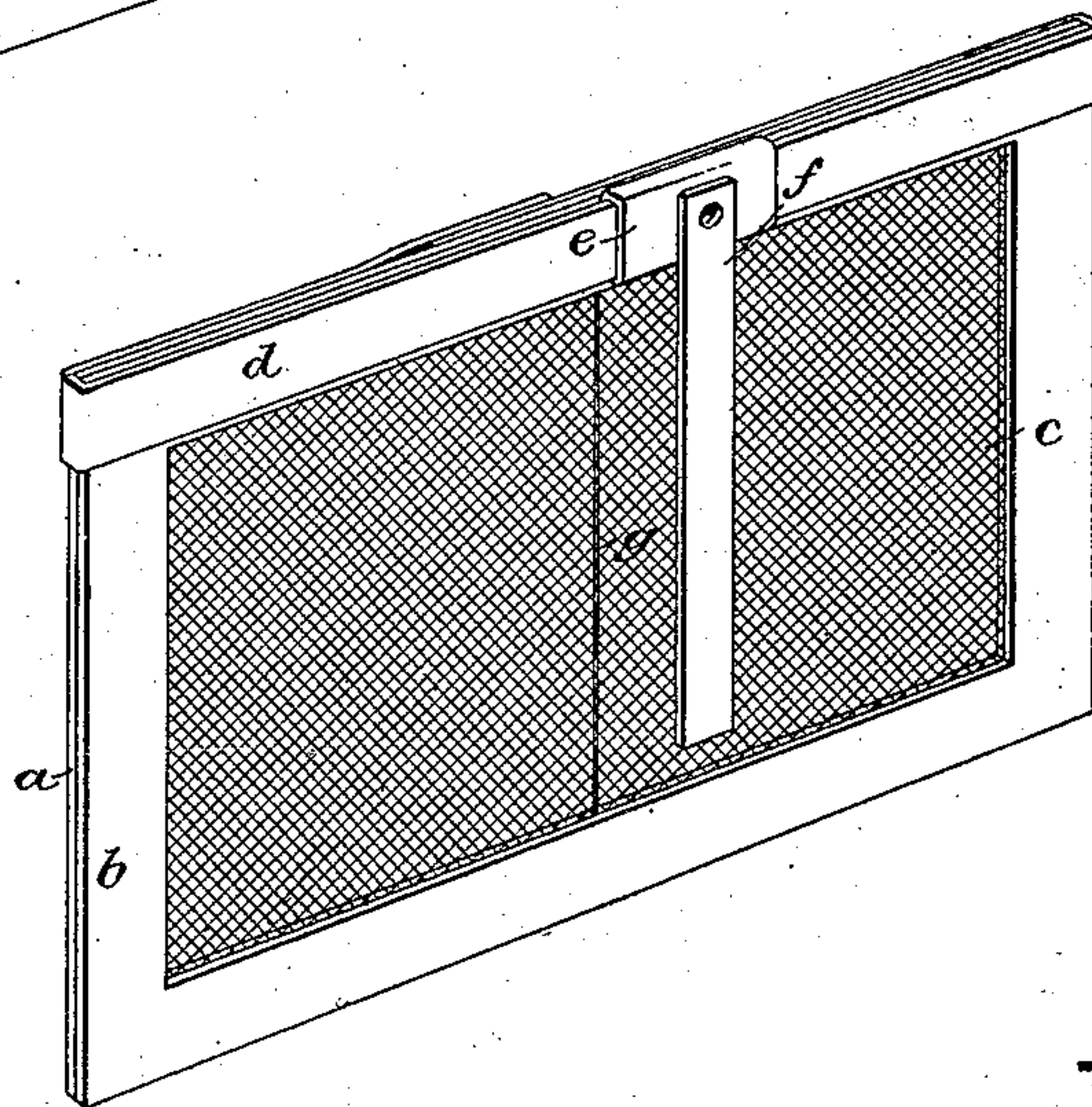


Fig. 3.

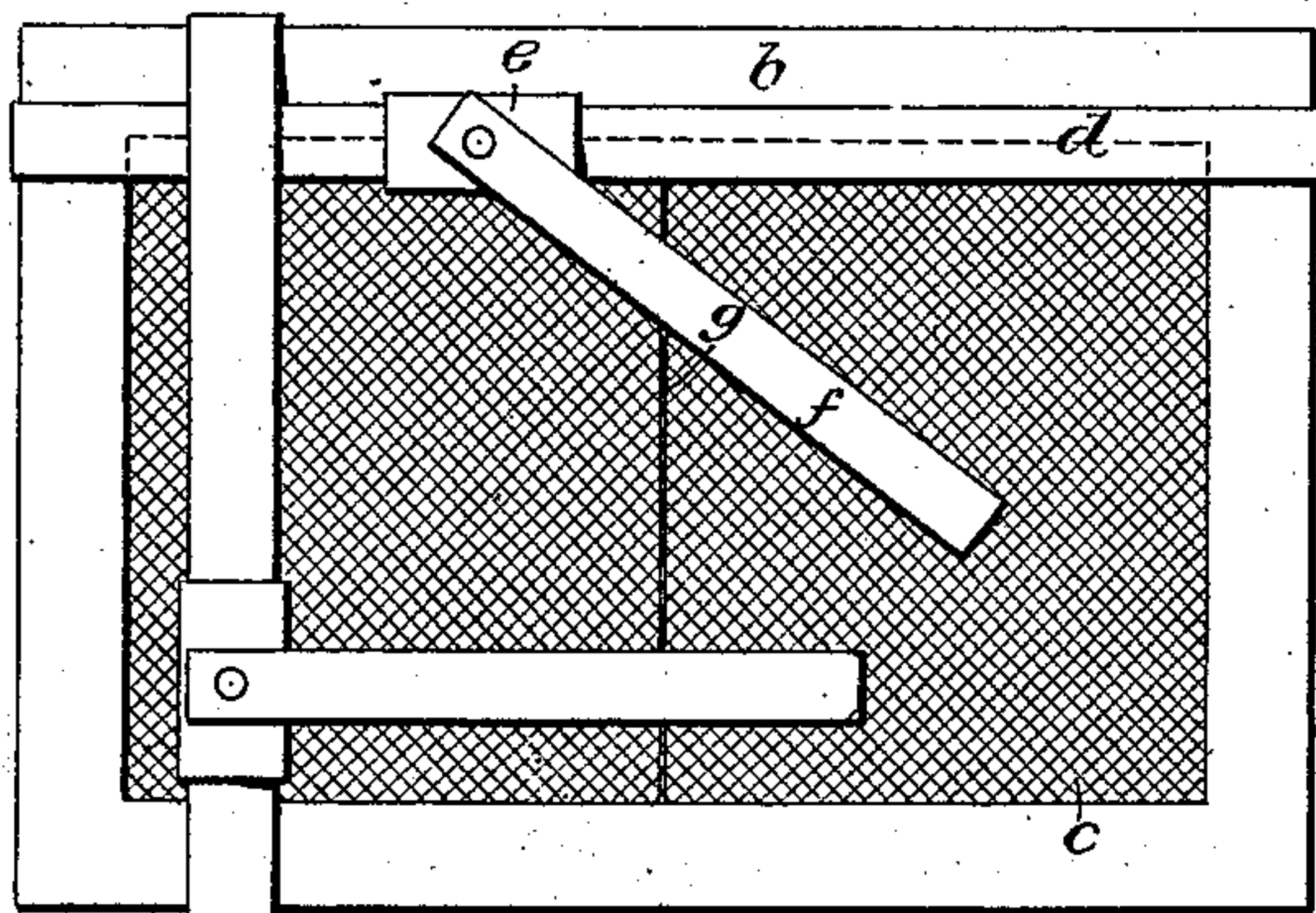
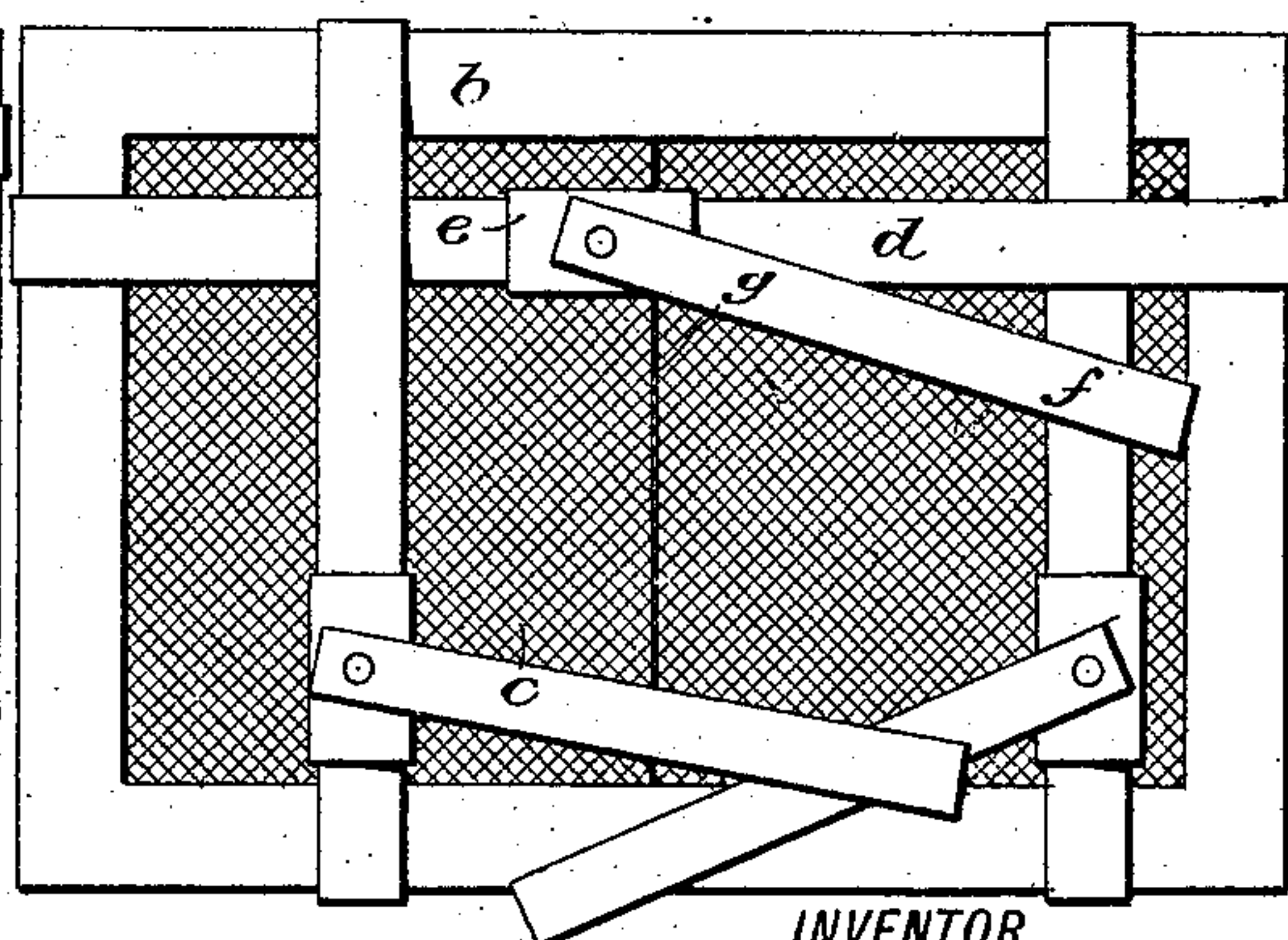


Fig. 4.



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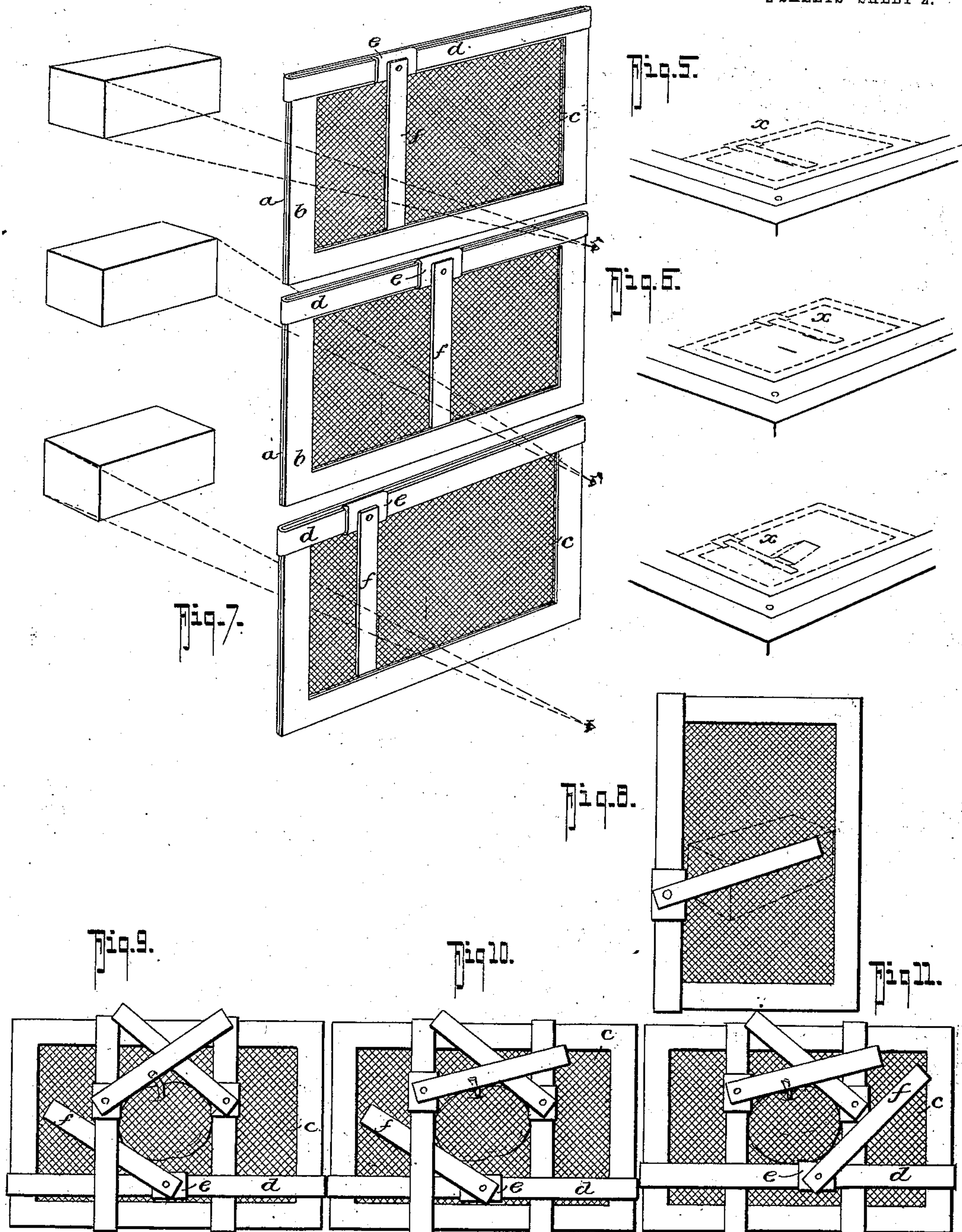
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2 SHEETS—SHEET 2.



WITNESSES:

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PERSPECTOGRAPH.

No. 915,426.

Specification of Letters Patent.

Patented March 16, 1909.

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To all whom it may concern:

Be it known that I, RUDOLF GÖHRING, residing in the city of Hamburg, Germany, have invented a new and Improved Perspectograph, of which the following is a specification.

My invention has for its object to provide a simple, inexpensive and easily manipulated appliance for obtaining in correct perspective the contour of objects, and particularly for quickly ascertaining and transferring the vertical and horizontal angle lines, so that the process of making the perspective drawing will be rendered expeditious and one of absolute correctness.

My invention also has for its object to provide a simple device or appliance for teaching the rudiments of perspective drawing and which, in its more complete form, may be readily employed by advanced students, as well as professional draftsmen or artists.

In its generic nature, my invention comprehends a screened frame and a straight edge, coöperatively connected therewith in such manner that the vertical and horizontal angles of the object may be fixedly determined on the screen and by proper manipulation of the device on the body upon which the object is to be delineated, can be quickly and accurately transferred thereto.

In its more complete nature, my invention comprehends a screened frame, a supplemental frame or way band transversely or longitudinally movable over the screened frame and a straight edge pivotally mounted upon and movable with the way band or supplemental frame.

Again, in its still more complete nature, my invention embodies a screened frame, having an arbitrarily arranged vertical line or indicator, a plurality of supplemental frame members transversely and longitudinally adjustable and independently mounted upon the frame, and straight edge members pivotally mounted on the adjustable frame sections, each having movement independent of the others, and finally in its subordinate features, my invention consists in certain details of construction and combination of parts, all of which will be hereinafter described, specifically pointed out in the appended claims and illustrated in the accompanying drawings, in which:—

Figure 1, is a perspective view, which

illustrates the simple or students' form of my appliance. Fig. 2, is a view which illustrates the same form with the fixed or plumb line guide on the screen. Fig. 3, illustrates my invention provided with a plurality of adjustable frame members carrying the pivotally mounted straight edges or tongues. Fig. 4, is a view illustrating a complete form of my invention more especially adapted for draftsmen's and artists' uses. Figs. 5, 6, 7 and 8, are diagrams illustrating the manner of evolving the perspective representation of a simple object, a box, by means of the simplest form of my invention. Figs. 9, 10 and 11 are views which represent diagrammatically the manner in which the complete form of my invention may be used for obtaining the perspective of round objects.

In its practical construction, the frame of my appliance may be made of any suitable material, metal, wood, or for the cheapest form, of pliable card board, and the said frame is of square or rectangular shape, preferably of two sections *a—b* between which the edges of a fine meshed wire screen *c* is held, and which, together with the two sections *a* and *b* are secured by any suitable means.

The screen, in practice, is colored blue, since such color will take up the various light rays and leave the object to be drawn in its characteristic colors.

In the simplest form, shown in Fig. 1, a supplemental frame or way band *d* is provided, which consists of a single strip of metal or card-board bent upon its ends, secured by an eyelet or other means whereby to form a continuous band that can be readily slipped upon and be adjusted over the screen frame in a direction parallel with its top or side edges.

On the frame or band *d* is mounted a clip *e*, slidable on and in the direction of the length of the band *d* and to this clip is pivotally connected, by an eyelet or otherwise, a tongue like member *f*, both edges of which form straight edges and act in the capacity of a draftsman's angle. By reason of the angle or straight edge being pivotally connected the said band can be adjusted laterally in either direction over the screen and the tongue *f* pivotally secured thereto set at any angle with respect to the screen and by reason thereof, the perpendicular and horizontal ends of the object to be delineated can be

readily determined, with their proportions governed by the distance that the frame is held from the eye in sighting the object to be drawn.

5 The manner in which the simplest form of my invention is utilized will be readily understood by referring to Figs. 5, 6, 7 and 8, and is explained as follows. Should a beginner in perspective drawing, wish to determine, say for instance, a box, he will first
10 move the way band up until it reaches the top of the main frame. By then holding the main frame in both hands at nearly arms' length parallel with the back ground of the object to be drawn. He then moves the
15 tongue or angle laterally until it seems to be in touch with the main or "forward" edge of the box, as seen in Fig. 5. When thus adjusted, the frame is placed on the drawing
20 board as at *x* in Fig. 5 and by penciling through the screen over the straight or angle edge of the tongue the vertical line or angle for the two facing sides of the box is made. The left and right hand edges of the box are
25 similarly sighted and fixed in the screen and transferred to the drawing board. Since the three vertical angles or edges have now been found, the horizontal lines or edges may be easily found by turning the frame on edge
30 and using the opposite vertical edges as the straight edges, the horizontal angles being formed by turning the tongue or angle member to the required position over the screen in the manner clearly understood from Fig. 8.
35 If the scholar has had sufficient practice with the simple form of my invention described, he will find it to advantage to use the modified form shown in Fig. 3, in which two adjustable way bands or supplemental
40 frames and two pivotally mounted straight or angle tongues are provided and in this form to facilitate the drawing of the picture the screen has a plumb line centrally thereof which may be produced by painting in a
45 white line on the screen or by the use of a white cord *g* as shown. This line is so placed that both vanishing points may be maintained and utilized for defining the main or near vertical line of the object to be drawn, it
50 being understood by using the two supplemental frames, arranged at right angles to each other, one tongue or angle is used for defining the vertical lines while the other can be readily adjusted for ascertaining the horizontal
55 lines or angles, the vanishing or distance points being stepped off from the central or plumb line.

In Fig. 4, I have shown a more complete form of my appliance which is more especially adapted for artists' or draftsmen's
60 uses, and can be utilized for sketching off irregular shaped natural objects. In this form is shown one longitudinally positioned and two transversely positioned supplemental
65 adjustable frames to each of which is pivot-

ally and adjustably connected a straight edge or tongue member. By reason of the plurality of frames and tongue members, the user can quickly find a plurality of angles from
70 all sides of the object to be drawn. For example, should the object be a fruit, as shown in Figs. 9-11, the frames and tongues can be conveniently set to obtain at least eight different angles relatively so positioned as to
75 encompass the entire contour of the object, which, when laid off in the drawing board, at once facilitates an accurate sketching of the object within the prescribed angles.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is:—

1. An appliance of the character described, which comprises a screened frame, a straight edge and means for adjustably and pivotally mounting said straight edge on the frame. 85

2. In an appliance of the character described, the combination with a screened frame, whose edges are at right angles to each other; of a straight edge pivotally connected at one end to the said screened frame to
90 swing over the said frame in a plane parallel with the face thereof.

3. A perspectograph, which comprises a screened frame, a straight edge mounted on the frame to move over the screen in a plane
95 parallel therewith and pivotally secured at one end, for the purposes described.

4. An appliance of the character described, which comprises a screened frame, the edges of which are at right angles to each other, a
100 straight edge and means for pivotally and adjustably mounting said straight edge on the frame to move over the screen in a plane parallel therewith.

5. An appliance of the character described, comprising a rectangular frame, a screen secured to the frame, a supplemental frame member mounted on the screen for transverse adjustment thereover and a straight
105 edge pivotally connected at one edge of the said supplemental frame. 110

6. An appliance of the character described, which comprises a screened frame whose opposing edges are at right angles to each other and a second frame detachably and slidably
115 mounted on the screen frame and a straight edge pivotally connected at one end to the second frame.

7. An appliance of the character described, comprising a frame whose opposing edges are at right angles, a screen mounted on the frame having an indicating line parallel with
120 a pair of opposing edges of the frame, and a straight edge adjustably and pivotally mounted on the frame for operating with the screened frame and the indicating line on the
125 screen for the purposes described.

8. An appliance of the character described, which comprises a frame whose opposing edges are at right angles to each other, a pair
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of supplemental frames detachably and slidably mounted on the screen frame and disposed at right angles to each other and a straight edge secured at one end to each of the supplemental frames, as set forth.

9. As a new article, a drawing appliance which comprises a rectangular frame, a screen secured thereon, having an indicating line parallel with a pair of the opposing edges of the frame, a pair of parallelly disposed supplemental frames detachably and adjustably mounted on the frame to slide in one direction thereon, supplemental frames mounted on the main frame to move in a direction at right angles to the movement of the other supplemental frames and straight edges con-

nected at one end of each of the supplemental frames, for the purposes described.

10. A drawing appliance, comprising a frame whose opposing edges are at right angles to each other, a screen held in said frame, a band detachably and slidably mounted on the frame, a clip mounted on the band and adjustable in the longitudinal direction thereof and a straight edge pivotally connected to the said clip to move over the screen in a plane parallel therewith.

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Witnesses:

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