

E. ECKART.
STAIN INDICATOR.
APPLICATION FILED JUNE 8, 1909.

935,474.

Patented Sept. 28, 1909.

Fig. 1.

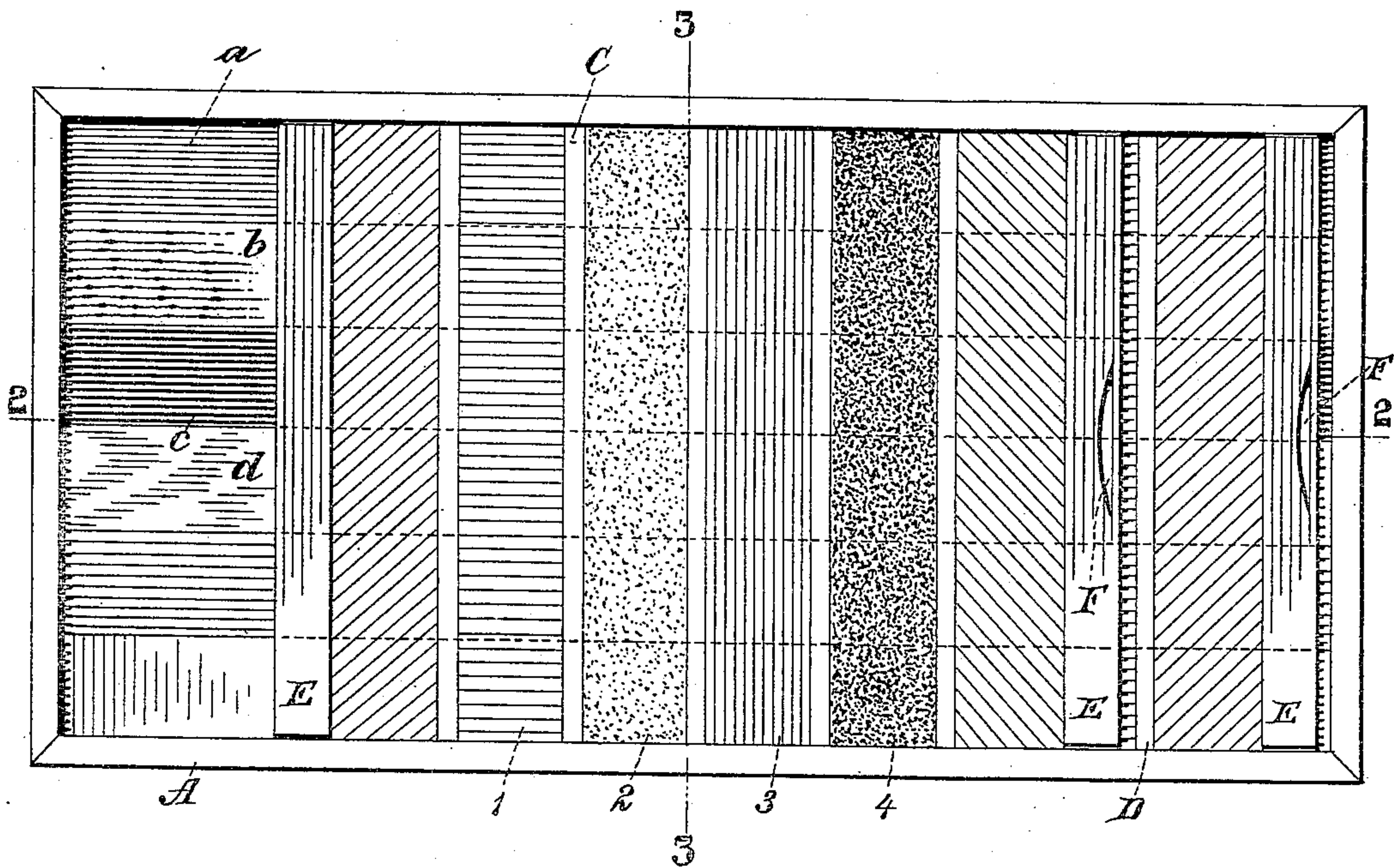


Fig. 2.

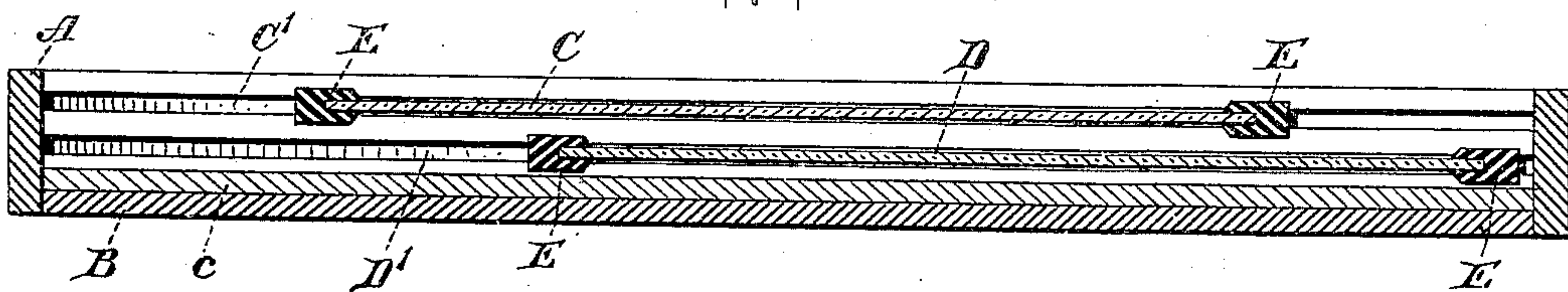


Fig. 3.

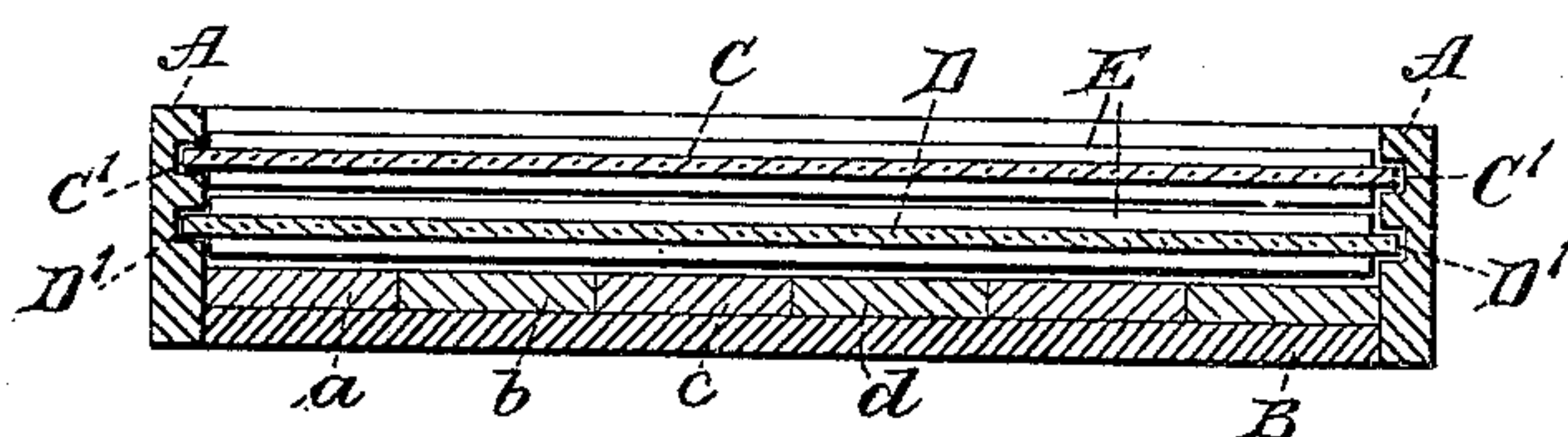
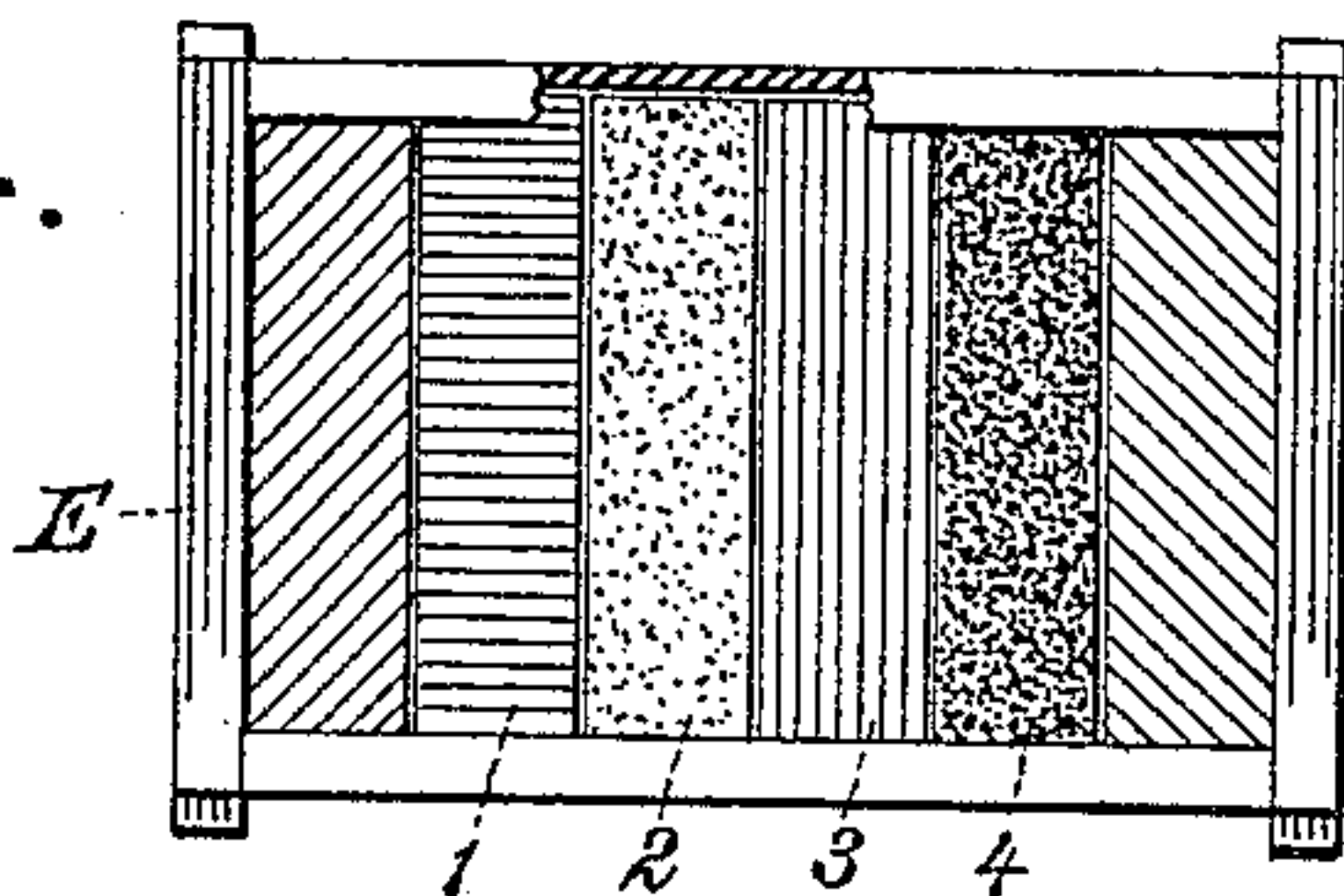


Fig. 4.



WITNESSES

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STAIN-INDICATOR.

935,474.

Specification of Letters Patent. Patented Sept. 28, 1909.

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To all whom it may concern:

Be it known that I, EDMUND ECKART, a citizen of the United States, and a resident of New Rochelle, county of Westchester, and State of New York, have invented certain new and useful Improvements in Stain-Indicators, of which the following is a specification.

My invention relates to an indicator for showing absolutely or comparatively the effect of one or more coats of any one of a number of different colored stains as applied to any one of a number of different woods.

The object of my invention is to construct a device, as aforesaid, in convenient and compact form and so arranged that the desired combination of any wood and coat or coats of any desired color may be quickly and conveniently obtained.

A further object of my invention is to enable the above combinations to be effectively made without requiring any particular judgment or training on the part of the user.

Other objects will appear as the specification proceeds.

I accomplish the object of my invention substantially by painting upon two or more similar glass plates parallel stripes of any desired variety and number of colors, said stripes being of uniform width and arranged preferably in the same sequence on each plate. These plates I then arrange to slide over one another as well as over a composite plate comprising any desired number and variety of woods arranged in strips side by side and preferably of the same width; said woods should of course be smoothed but should not be stained or colored, the object being that they should retain their natural appearance.

In making the above arrangement I place the length of the wood strips at right angles to the length of the color stripes. In this way I may slide one glass plate free of the others and, considering any one color stripe, run down said stripe with the eye and observe the effect of the particular color upon any one of the different woods over which the color stripe passes. To observe the effect of two coats of any color I slide one color plate over the other until the given color is superposed upon the same color of the other plate, the underlying woods then being observable through two thicknesses, the result representing the effect of two coats of the chosen

color. In the same way by using additional plates I may obtain the effect of any desired number of color coats as applied to the woods.

In the drawings annexed, which form part of this specification, Figure 1 represents a plan of a preferred form of my improved indicator; Fig. 2 represents a vertical section along the line 2—2 of Fig. 1; Fig. 3 a similar section along the line 3—3 of Fig. 1; and Fig. 4 is a plan, on a reduced scale of a modified mode of forming the color stripes.

Referring to the drawing, A is a shallow box, the bottom B of which is constituted of a number of strips *a, b, c, d*, etc., preferably of the same width and of such different woods as it is desired to study with reference to the various colors. Thus woods may be, for example, white wood, North Carolina pine, oak, ash, maple and cherry; or any other desired woods may be chosen. As drawn, I have shown six different woods, but by making the box wider or the strips narrower I may, of course, extend the number of woods indefinitely.

C and D are the glass plates arranged to slide in opposite grooves C', D', each plate having painted thereon parallel stripes of color 1, 2, 3, 4, etc. These colors may, of course, be of any chosen shade, and as many different colors may be used as may be desired. Such colors may be for example, red, green, imitation rose wood, imitation mahogany, imitation cherry, etc. I prefer to have these colors arranged in the same sequence on each plate and where there are only two plates, the series of colors run in opposite directions for said plates, although this is not imperative. Each glass plate is provided with a binding or border strip E at each end, partly to finish the raw edge of the glass and partly to take hold of in sliding the plates, and each of the binding strips may have a depression F in which to catch the fingers and aid in sliding the plates. Best results are to be obtained with my indicator when the plates and the wood strip box bottom are all placed close together.

My invention will be found a convenient device even where it is desired to note the effect of one color upon different woods, and for such embodiment I may omit all but one of the striped glass plates.

I have described my device as applicable to tests of stains; instead of stains, paints

may be employed but in such case the coats must be very thin as otherwise so much light will be absorbed in passing through said coats that the grain and structure of the wood will be completely hidden.

It is, of course, obvious that besides being useful for the purpose of observing the effect of successive coats of the same color upon the wood my invention may also be employed to observe the effect of combinations or mixtures of different colors. And by using pure spectral colors varying in a standard and known manner, and suitably indicated, any desired tint could be produced upon the wood according to a formula, or quantitatively analyzed into the constituents necessary to reproduce it thereon.

In describing my invention I have specified glass as the vehicle or medium upon which the color stripes should be placed but I wish it understood that other substances may be used for such vehicle without departing from the spirit of the invention; transparent celluloid or clear mica would be equally suitable and, in some respects, better as being less brittle and, hence, less liable to damage. Indeed, any material may be used as such vehicle, provided only it may be formed in thin plates, is substantially transparent, and is durable.

Throughout the specification I have spoken of wood as constituting the back ground upon which the color effect is to be observed and wood is, indeed, the chief material upon which it is usual to place such colors as are pertinent to my invention. But any substitute for wood in most of the many purposes for which wood is employed may be used for said back-ground without departing from the spirit of my invention; thus iron as used in the trim of fire-proof buildings and in fire-proof railway coaches, papier mâché, and many manufactured products are among such substitutes.

In the embodiment of my invention just described I have referred to the wood strips as being smoothed but unstained, *i. e.* having their natural finish. There may arise, however, special circumstances where it may be desired to observe the effect of one or more coats of color upon wood already treated with one or more coats of the same or an-

other color. The use of woods thus colored lies within the spirit of my invention. Also I may substitute for the parallel stripes of color on a given pane of glass, parallel strips of glass of different colors suitably placed in one frame, without departing from the spirit of my invention; this is shown in Fig. 4.

Other modifications of detail may be made within the domain of my invention, which having now described, I have embodied in the following claims:

1. A stain indicator comprising a plurality of parallel laterally adjacent strip backgrounds and an independent plurality of parallel laterally neighboring color stripes the direction of the color stripes being at right angles to that of the background strips and each of said color stripes being adapted to be superposed at one end and the same time upon all the background strips, substantially as and for the purpose described.

2. A stain indicator comprising in combination, a plurality of laterally adjacent strip backgrounds and a plurality of sets of color stripes adapted to be independently placed thereover the color stripes being at right angles to the background strips, substantially as and for the purpose described.

3. A stain indicator comprising in combination, a plurality of laterally adjacent lengthwise strip backgrounds and a pair of glass plates each carrying a plurality of crosswise color stripes and independently slidable over the background strips, substantially as and for the purpose described.

4. A stain indicator comprising in combination a box provided with a bottom whose inner face shows a plurality of lengthwise strips of differing materials and with sides containing grooves; and a pair of glass plates adapted to slide in said grooves each of said plates carrying a plurality of crosswise color stripes, substantially as and for the purpose described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

EDMUND ECKART.

Witnesses:

JOHN M. LYNCH,
JOHN RAABE.