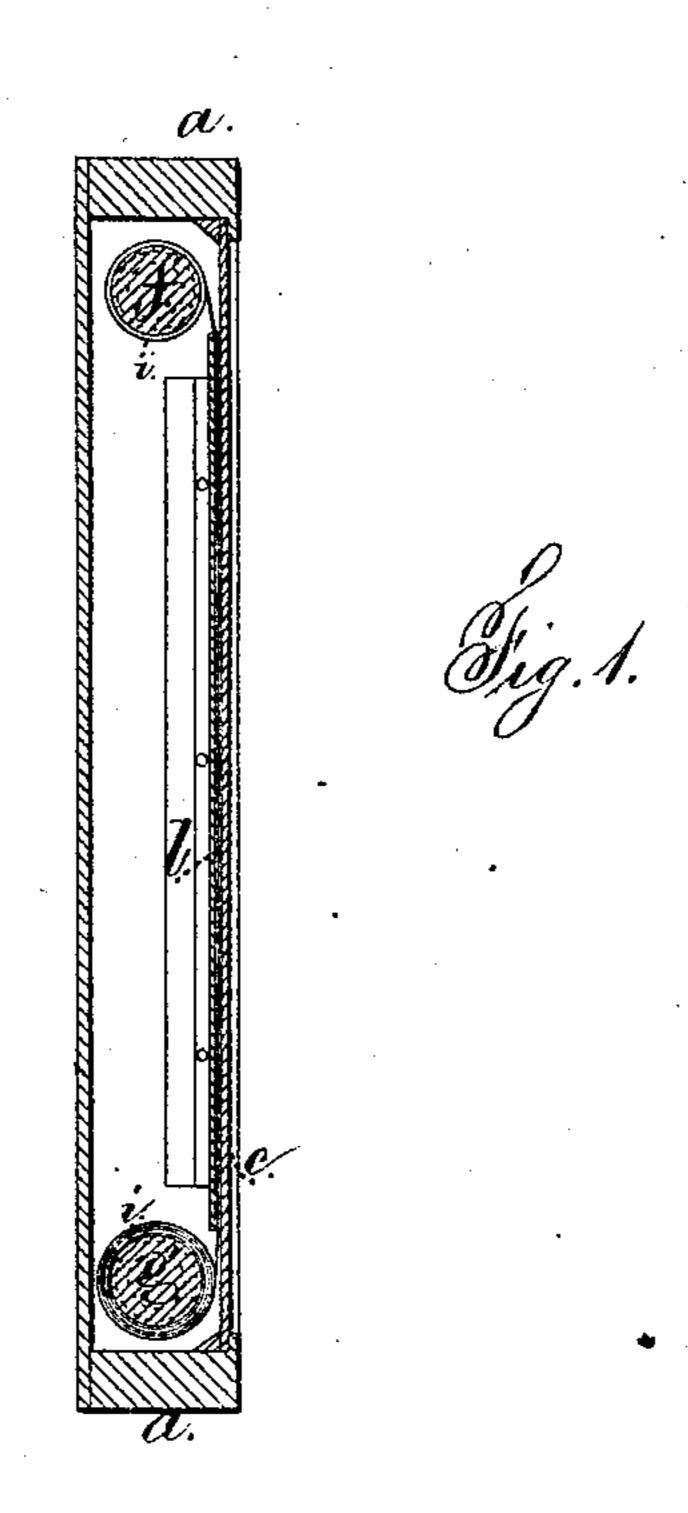
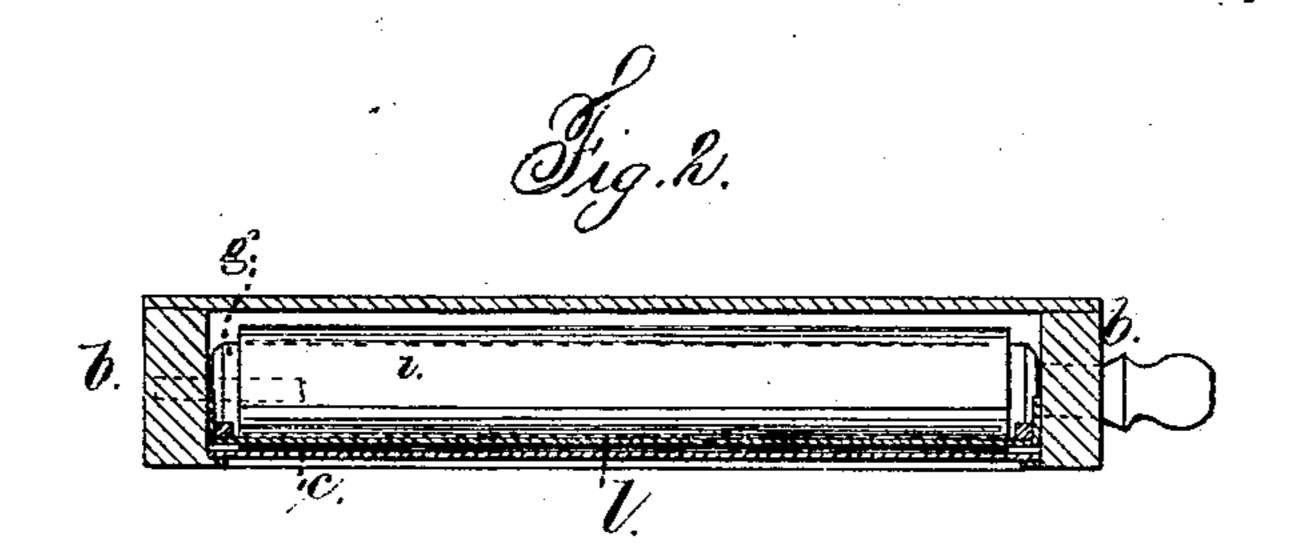
## C. C. SHEPHERD. Transparent-Slate.

No. 160,287.

Patented March 2, 1875.





Witnesses

Ges. A. Halkırı. Geo Vinckney Chaz le Shepherd.

her.

Lemnel M. Serrell

## UNITED STATES PATENT OFFICE.

CHARLES C. SHEPHERD, OF PASSAIC, NEW JERSEY.

## IMPROVEMENT IN TRANSPARENT SLATES.

Specification forming part of Letters Patent No. 160,287, dated March 2, 1875; application filed October 6, 1874.

To all whom it may concern:

Be it known that I, Charles C. Shepherd, of Passaic, in the county of Passaic and State of New Jersey, have invented an Improvement in Transparent Drawing and Writing Slates, of which the following is a specification.

Transparent slates have been made of ground glass set into a frame with a movable back and intervening pictures, and the drawing or writing is made upon the ground surface of the glass. With this character of slate the pupil cannot examine the drawing to ascertain whether all the lines have been traced, except by removing the back and the picture, and then it is difficult to replace the picture in the position it previously occupied. This is especially the case when in the hands of the inexperienced children usually employing these slates for drawing.

I make use of a ground glass in a frame with a panoramic drawing or writing copy beneath, kept to the under surface of the glass by a backing, and between which and the glass the web of paper may be moved either way and wound upon the roller at the top or bottom, so as to bring a different picture or line of writing into position, or to move the picture or copy away sufficiently to inspect the drawing and ascertain its completeness or inaccuracy.

In the drawing, Figure 1 is a vertical section, and Fig. 2 is a horizontal section, of said transparent slate.

The oblong frame a a b b is of suitable size and receives the glass c, that is ground upon

its outer surface, and it is sustained in grooves or against rabbets in the frame, and it is preferable to provide a movable piece at one end of the frame to allow of the glass being drawn out for washing. Between the side pieces b b of the frame there are rollers f and g, having end knobs that project through the frame, and by which the rollers are turned, and the web of paper i, that is attached at its ends to the rollers, respectively, is wound upon these rollers and passes in contact with the back of the glass and between the glass and a fixed support or backing at l.

The web of paper has upon it printed pictures, lines of figures or letters, or other devices to be copied by tracing the same upon the surface of the transparent slate, and I employ a web with blank spaces between one line or picture and the next, so that the picture can be inspected against the blank space by moving the said web endwise, by rolling the same upon one roller and off the other.

I claim as my invention—

The transparent slate herein described, formed of ground glass in a frame, two rollers with a web containing the pictures or letters to be copied, and a backing, *l*, to retain the web in contact with the glass, as and for the purpose set forth.

Signed by me this 2d day of October, A. D. 1874.

CHAS. C. SHEPHERD.

Witnesses:

GEO. T. PINCKNEY, GEO. D. WALKER.