

(No Model.)

G. GRAY.

MUFFLED FRAME FOR SCHOOL SLATES.

No. 381,363.

Patented Apr. 17, 1888.

Fig. 1.

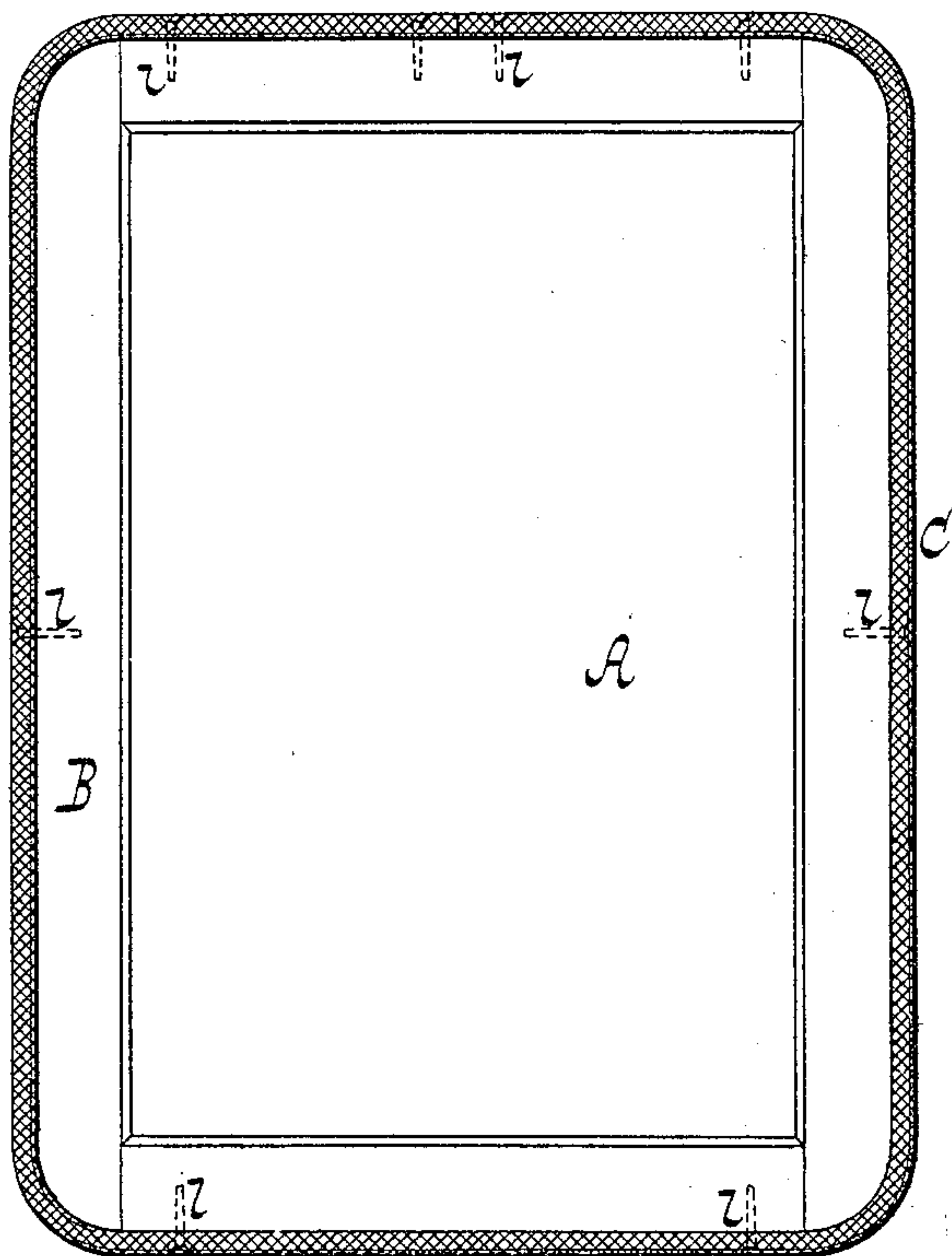


Fig. 2.

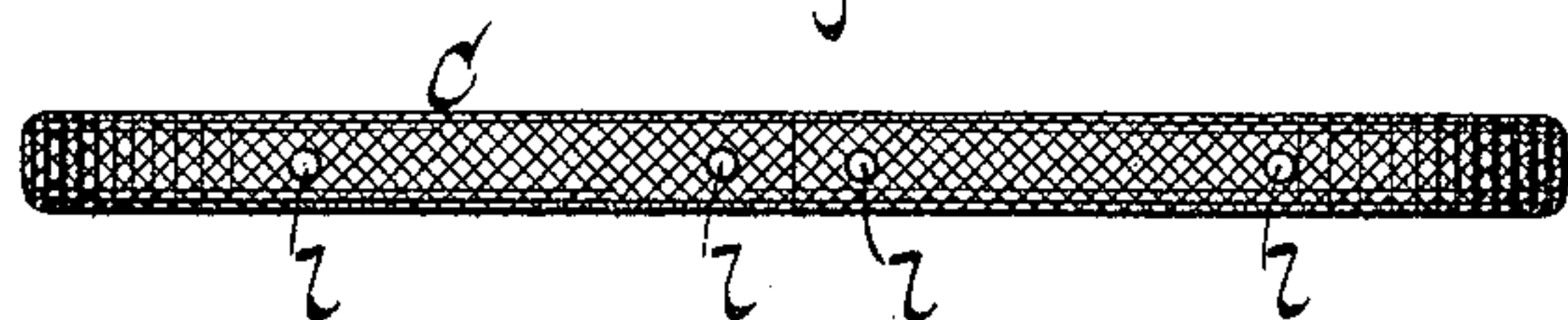


Fig. 3.

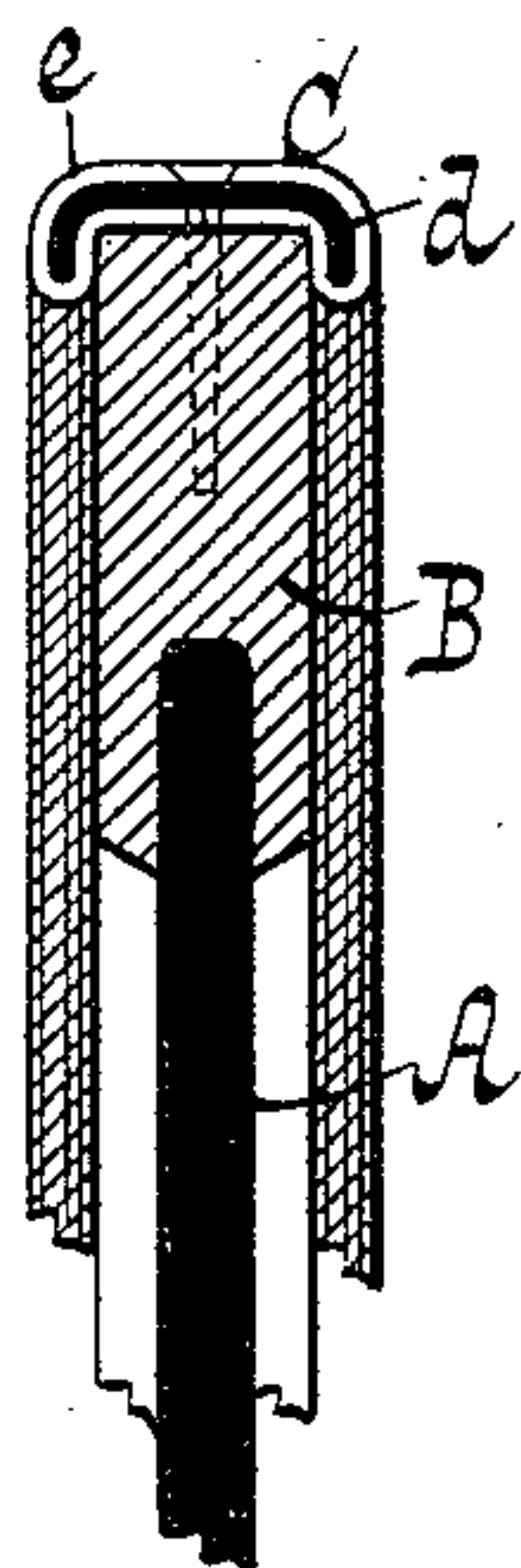
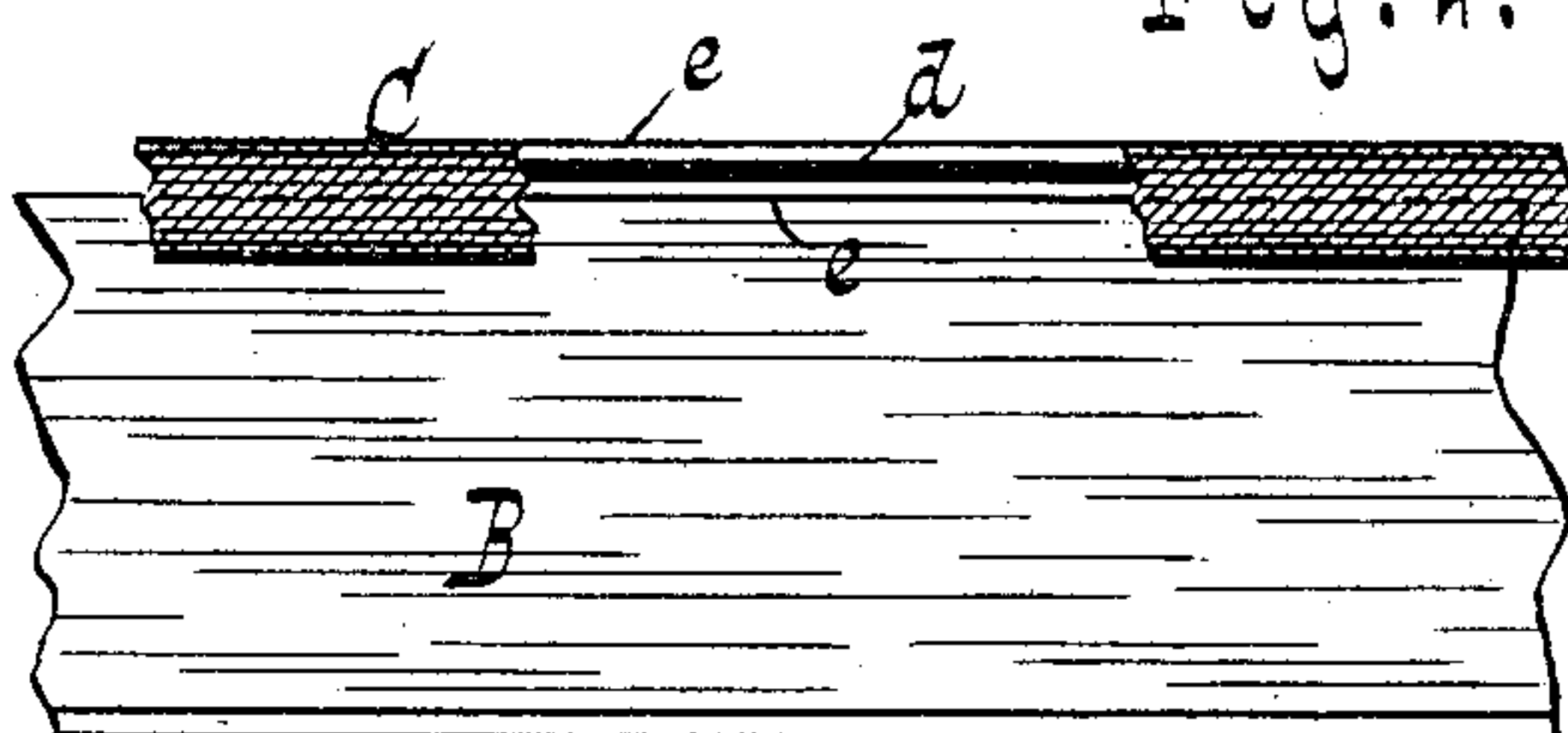


Fig. 4.



WITNESSES:

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MUFFLED FRAME FOR SCHOOL-SLATES.

SPECIFICATION forming part of Letters Patent No. 381,363, dated April 17, 1888.

Application filed January 17, 1887. Serial No. 224,624. (No model.)

To all whom it may concern:

Be it known that I, GEORGE GRAY, a subject of the Queen of Great Britain, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in School-Slates, of which the following is a specification.

My invention relates to the construction of school-slates with a noiseless binding, and especially a binding of the character shown and described in my Letters Patent of the United States No. 286,196, dated October 9, 1883.

The essential feature of my present invention consists in the arrangement of the noiseless binding on the edges of the ordinary wooden slate-frame instead of upon the edges of the slate proper, thereby increasing the utility of the binding and reducing the cost of its manufacture, as hereinafter more fully explained.

In the accompanying drawings, Figure 1 represents a side view of a slate embodying my invention. Fig. 2 represents an end view thereof. Fig. 3 represents a cross-section of a portion thereof on a larger scale than in the preceding figures. Fig. 4 represents a side view of a portion thereof corresponding to Fig. 3.

Similar letters of reference indicate similar parts.

The letter A indicates the slate, and B the wooden slate-frame, constructed of the usual sides and ends and with rounded corners.

C indicates the noiseless binding upon the edges of the wooden frame. This binding C is constructed of an inner or stiffening strip, *d*, (see Figs. 3 and 4) of sheet metal, having an approximately U shape in section, and of an outer or muffling strip, *e*, of a soft fabric, which is tubular in section, and which entirely incloses the stiffening-strip, so that when the binding is put in place a portion of the muffling-strip is interposed between the stiffening-strip and slate-frame, the remaining portion of the muffling-strip forming an outer covering for the stiffening-strip.

The U-shaped stiffening-strip *d*, together with the muffling-strip *e*, overlaps both surfaces of the frame B, and the stiffening-strip is bent in the direction of its length to conform with the outline of the frame, while both strips are secured to the frame by nails *l*, or

other similar fastenings, which are driven through the binding into the edges of the frame at divers points.

The muffling-strip *e* may be of braid or of cloth—such as flannel or felt—or of leather, and it may be made tubular in the process of its manufacture, or by uniting the longitudinal edges thereof, as by stitching, in which event the seam should be brought within the stiffening-strip.

The muffling-strip *e* is a very effective medium for preventing noise in the general use of the slate, while the stiffening-strip *d* not only keeps the muffling-strip in proper position, but also re-enforces the joints of the wooden frame, due to the employment of sheet metal, thereby materially increasing the strength of the frame. The sheet metal, moreover, favors the retention of the nails used for securing the binding to the wooden frame, and, due to the fact that the binding is firmly held to the frame throughout its length, the U-shaped stiffening-strip may be comparatively shallow, so that it can be more readily bent to the outline of the frame, and, consequently, be made in one piece without difficulty.

The stiffening-strip *d* may be left flat instead of being U-shaped, and in that event the longitudinal edges thereof may be beaded to overlap the surfaces of the frame.

What I claim as new, and desire to secure by Letters Patent, is—

The combination, with a frame of a slate, of a tubular binding of soft fabric and a sheet-metal concave stiffening-strip, said strip being inclosed in the tubular binding and attached with the binding to the periphery of the frame by overlapping its inclosed edge upon each side of the frame and by nails driven through both the fabric and strip into the periphery thereof, thereby muffling the periphery and sides of the frame by a single piece of fabric, substantially as shown and described.

Signed at New York, in the county of New York and State of New York, this 8th day of January, A. D. 1887.

GEORGE GRAY.

Witnesses:

CHAS. WAHLERS,
FRANK LAVALLI.