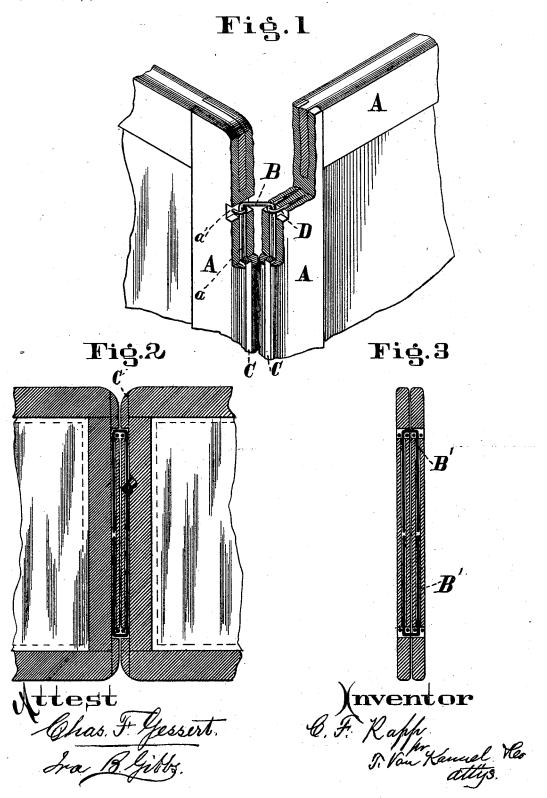
## C. F. RAPP.

SLATE.

No. 186,621.

Patented Jan. 23, 1877.



## UNITED STATES PATENT OFFICE.

CHRISTIAN F. RAPP, OF CINCINNATI, OHIO.

## IMPROVEMENT IN SLATES.

Specification forming part of Letters Patent No. 186,621, dated January 23, 1877; application filed January 8, 1877.

To all whom it may concern:

Be it known that I, CHRISTIAN F. RAPP, of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Reversible Hinged Slates; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

Figure 1 is a perspective view of a part of the slates. Fig. 2 is a longitudinal section, showing the slates open; and Fig. 3 is a section through the hinge, showing the slates

The nature of my invention relates to a pair of slates, so hinged or connected that they may be folded from back to back, presenting, when folded either way or when open on the desk, an even and uniform appearance.

In construction my invention is as follows:
A A is the frame, being broken away in the drawing to show the internal view of the hinge and its surroundings. The frame is grooved at a, from end to end, and a recess of equal depth is cut transversely at a'. The link B is then placed in the groove a and recess a', as shown. The tongue C is glued in position over the links, making the form and appearance of the frame substantially as

The part of the groove a at the corner of the slate has a tongue, C', Fig. 2, deeper than that marked C, Fig. 1, which fills that part of the groove entirely. The frame of the slate may also be grooved at the side or back, extending from one recess, a', to the other, at the opposite end of the slate, in which case the insertion of the tongue C' would be dispensed with. The advantage of embedding the link B, as shown in the drawings, and joining the long members of the link within the recesses, is to avoid weakening the frame, as would be the case where the corners of the slate are cut away to take the place of the recesses a'.

At D is seen a staple having barbed points or legs, which is driven over the long members of the link B, and within the recess a'; or the link may extend to the corner of the slate, avoiding the recess a', and be fastened in a similar manner with tongue C and staples D.

The object of said staples is to strengthen the link in its attachment to the frame, as a wire link pulling on the frame alone may become loose eventually, and be drawn out of

place.

The barbed or screw eyebolt may be used as an equivalent of, or substitute for, the staple. It may also be found necessary to drive staples at other points over the tongue, to hold it in place, should the glue lose its hold by being moistened, from washing of the slates and other causes. For this reason. also, the tongue should be fastened by means of shellac, as well as covered thereby. Other material that resists moisture may be used.

In case the labor of gluing in the tongue is too expensive, it may be sufficient to fasten

the strips by means of staples alone.

It may be found advantageous, in some cases, to divide link B in two parts, as seen at B' B' in Fig. 3, and embed and attach them in the same manner as the single link B. These links may be held with or without

staples, as in the single link B.

I do not confine myself to the method of grooving the frame, and afterward filling it with the tongue, for the frame may be bored longitudinally from both ends to receive the long members of links B' B'; or a part of the groove that is made to receive the slate proper may be utilized to hold the links B' B', the main object being to place the long members of the links B or B' B' in the center of motion of the frame.

The advantages of my improvement consist in the neat and convenient form, in its strength and durability, as well as simplicity

and consequent cheapness.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is-

1. In combination with the links B or B', the frames A A, having a portion overhanging the recess a', as described.

2. In combination with the frames A A,

the links B or B' and the barbed or other staples D, as described.

3. In combination with the frame A, having the overhanging portion, the links B or B' and the staples D, as described.

CHRISTIAN F. RAPP.

Attest: T. VAN KANNEL, C. VAN LENNEN.