E. YOUNG.

SLATE FRAME.

No. 14,624. *Fig. 1.* Patented Apr. 8, 1856.

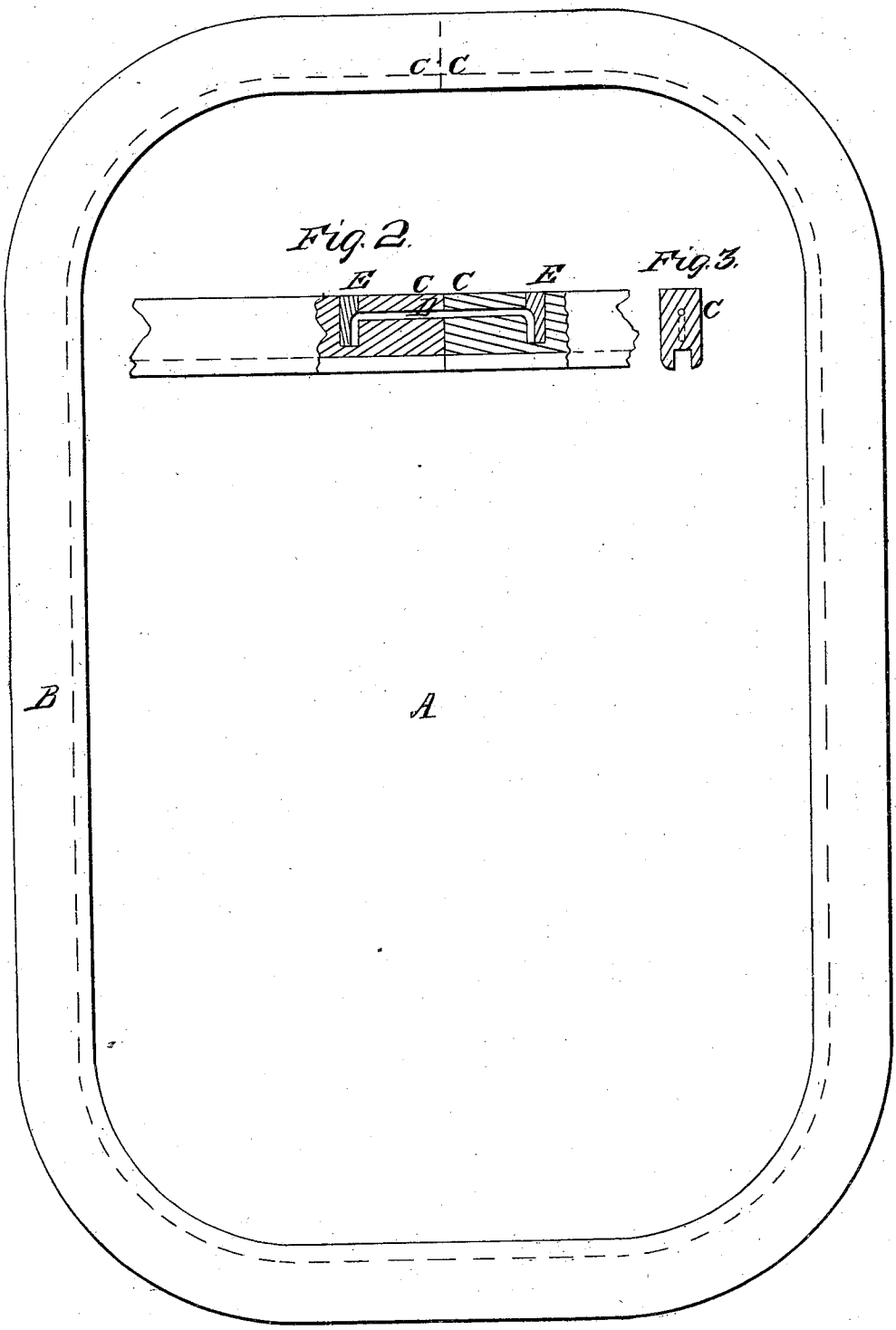


Fig. 2.

Fig. 3.

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UNITED STATES PATENT OFFICE.

EDWIN YOUNG, OF PHILADELPHIA, PENNSYLVANIA.

SLATE-FRAME.

Specification of Letters Patent No. 14,624, dated April 8, 1856.

To all whom it may concern:

Be it known that I, EDWIN YOUNG, of the city and county of Philadelphia and State of Pennsylvania, have invented a new, useful, and Improved Slate-Frame and Fastening for Uniting the Joint in the Same; and I do hereby declare that the same are described and represented in the following specifications and drawings.

To enable others skilled in the art to make and use my improved invention I will proceed to describe their construction and use, referring to the drawings in which the same letters indicate like parts in each of the figures.

Figure 1, is an elevation of a slate with my improved frame applied to it. Fig. 2, is a portion of the frame showing the joint and fastening in section.

The nature of my invention consists in making the frame of a slate of one piece of wood grooved to receive the edge of the slate, and bent in such a form as to fit it, and fastening the ends together with a metal dowel, the ends of which project into two holes in the frame at right angles to the dowel, in which its ends are clenched, and the holes plugged up to finish the joint, where the two ends of the piece of wood come together, which forms the frame.

In the above mentioned drawing A, is an oblong rectangular slate, with the corners rounded as represented in dotted lines; surrounded by a frame B, made of a single piece of wood grooved to receive the edge of the slate A, as shown in section Fig. 3, and bent to conform to the shape of the slate, and the ends C, C brought together and fastened by a metal dowel D, as shown in section Fig. 2.

In order to insert the dowel D, a hole is bored in each end of the frame, of a proper size to insert it, and two other holes E, E, are bored at right angles to the first mentioned holes, so as to intersect, or meet them a proper distance from the end, to afford sufficient strength of wood to form a strong joint: the metal dowel D, is then inserted, (which should be made just long enough to reach into and across both of the holes E, E, when the ends of the frame are brought together so as to make a close joint;) and the ends of the frame pressed and held together while a double or two pronged punch is forced into the holes E, E, so as to bend down each end of the dowel D, at the same time, and clench it, as represented in section Fig. 2, so as to hold the two ends firmly together, and fasten the frame upon the slate. After the ends of the dowel are clenched the punch may be withdrawn and the two holes E, E, filled with plugs, which should be driven in glue, when the joint and the ends of the plugs may be smoothed off and finished; making a very cheap strong and durable connection; making far the strongest and best connection in proportion to its cost of any with which I am acquainted for joining two pieces of wood which may be used for various purposes.

The above described frame may be made of green wood, or seasoned wood steamed and bent upon a block of a proper form and allowed to dry; they may be grooved either before or after they are bent as may be preferred. I think the best and cheapest way to make them will be to take a piece of rived tough wood, of a proper length, and reduce it to a proper thickness for the width of the frame, and of such a width as may be convenient and steam it and bend it to the form required. When it gets dry, it may be sawed into pieces of the right thickness for frames and grooved at the same time with a cutter arranged on the same shaft with the saw which saws it. It may be grooved before it is bent, and if it is so grooved it will bend easier than if it is not grooved. After the frame is prepared it may be sprung open so as to receive the slate and then closed and fastened as heretofore described or in some other convenient manner.

The advantages which my improved frame possesses over the common square frame fastened together with a seam and tenon at each corner may be enumerated as follows to wit. It is made of one piece of wood instead of four and joined only in one place, and that joining is made in the center of one side or end, where the frame is straight therefore it is far less liable to injury from breakage, as there is but one joining instead of four at the corners, which are always the weakest parts of the frame and most exposed to damage by falling or being broken or otherwise. By my invention greatly increased strength is secured.

My invention makes a much neater and lighter frame, besides I avoid the labor and expense of making four tenons and four scores to receive them and we use far less material in making which is accomplished with far less labor, and therefore far cheaper, besides it is much better and far more durable.

I believe I have described the construction of my improved slate frame so as to enable any person skilled in the art to make and apply the same. I will now specify what I desire to secure by Letters Patent, to wit:

I claim as new manufacture—

A slate frame made of a single piece of wood provided with a groove to receive the edge of the slate and bent so as to fit it with the ends fastened together.

EDWIN YOUNG.

Witnesses:
JOHN HENRY,
JAMES HENRY.