(No Model.)

S. SPRINGSTEEN.

CHURCH PEW.

No. 455,417. Patented July 7, 1891.

Fig. 1

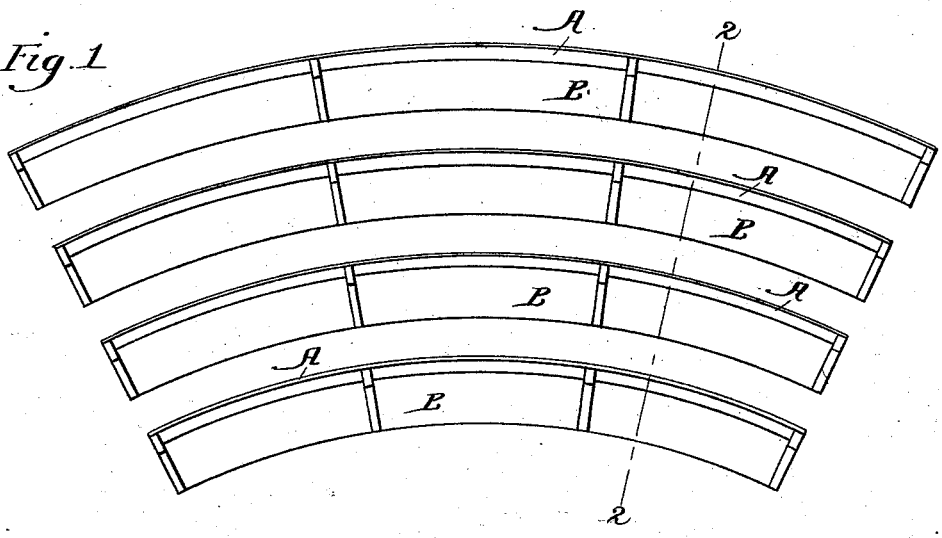
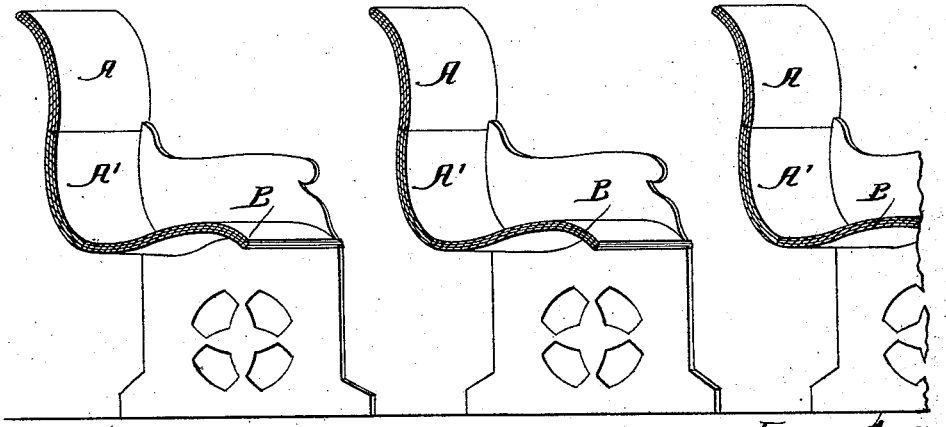


Fig. 2.



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UNITED STATES PATENT OFFICE.

SILAS SPRINGSTEEN, OF MANITOWOC, WISCONSIN.

CHURCH-PEW.

SPECIFICATION forming part of Letters Patent No. 455,417, dated July 7, 1891.

Application filed August 4, 1890. Serial No. 360,913. (No model.)

To all whom it may concern:

Be it known that I, SILAS SPRINGSTEEN, a citizen of the United States, residing at Manitowoc, county of Manitowoc, and State of Wisconsin, have invented certain new and useful Improvements in Church-Pews, which are fully set forth in the following specification, reference being had to the accompanying drawings, forming a part thereof.

In the drawings, Figure 1 is a plan of a section of an auditorium seated with pews arranged and curved about a central point, my invention relating to pews of this form. Fig. 2 is a section at the line 2 2 on Fig. 1, showing the construction of said pews according to my invention.

The purpose of this invention is to provide for pews which are curved longitudinally—that is, in a horizontal plane—a back which has a circumflex curvature vertically, such backs being made of wood in layers glued together—that is to say, of the construction commonly known as "built-up" wood.

A brief history of the art will make the scope of my invention clear. Pews curvilinear in horizontal plane—that is, longitudinally curved about a central point designed to be occupied by the speaker's desk—were first constructed with straight backs, the difficulty of curving the wood both longitudinally and transversely being supposed to make it impossible to construct such backs with the longitudinal curve otherwise than straight transversely. Subsequently, however, it was found possible to give the back a slight curvature transversely—that is, up and down—notwithstanding the longitudinal or horizontal curvature, and the second stage of development consisted of a pew-back slightly convex forward in a vertical plane and concave forward in a horizontal plane.

My invention consists in making the back, which has the horizontal curvature concave forward, convex forward in a vertical plane at the upper part, and concave forward in a vertical plane at the lower part, giving to the back the desired circumflex form shown in the drawings, which is much more comfortable than either the straight or simply convexly-curved back above mentioned. It would be manifestly very difficult, if not impossible, to bend the wood horizontally, as necessary for the longitudinal shape, and at the same time to give it the desired double or circumflex curvature in the vertical plane; and, in detail, therefore, my invention consists of making the back primarily of two pieces separately formed by the usual process of bending and building up of two or more layers, said separate pieces being horizontally bent in the same arc and vertically bent also in the same arc, but with the direction of curvature reversed, and then uniting said two pieces by their corresponding edges, which results in the circumflex form illustrated in the drawings.

It will be understood by those familiar with the art of bending and building up wood for such purposes that the same clamps serve to give form to both the parts of the back, such clamps having the vertical curvature that is common to both side parts and being arranged and fixed in a horizontal arc, which is convex in one direction for the lower piece of the back, but being fixed in an arc of equal radius convex in the opposite direction for the other piece of the back, the same clamps, therefore, or duplicates, answering for both purposes. Further description of this process will be unnecessary for those familiar with the art.

A and A′ are the upper and lower parts of the back, respectively, and B is the seat.

I claim—

A pew or seat the back of which has horizontal curvature in the same direction throughout its height and which has circumflex vertical curvature throughout its length, the back of such seat being formed of two pieces of bent wood, each curved in one direction only vertically and in one direction only horizontally, the vertical curvature of the two pieces being in opposite directions, while the horizontal curvature is in the same direction, said two pieces abutting at their corresponding horizontal edges, substantially as set forth.

In testimony whereof I have hereunto set my hand, at Chicago, Illinois, in the presence of two witnesses, this 3d day of December, A. D. 1889.

S. SPRINGSTEEN.

Witnesses:
FRED H. HALEY,
J. ELLIOTT.