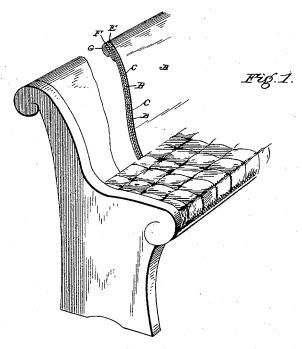
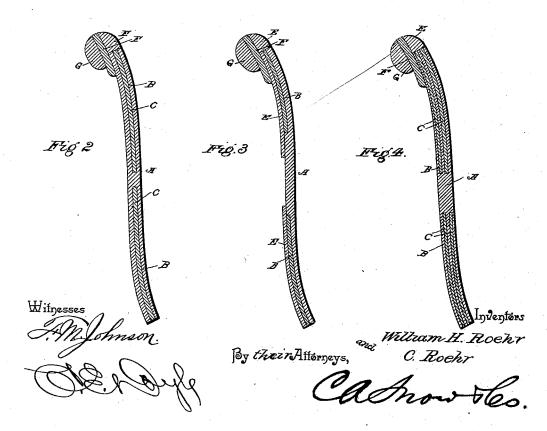
W. H. & C. ROEHR. PEW BACK, &c.

No. 491,190.

Patented Feb. 7, 1893.





UNITED STATES PATENT OFFICE.

WILLIAM H. ROEHR AND CHARLES ROEHR, OF BUCYRUS, OHIO.

PEW-BACK, &c.

SPECIFICATION forming part of Letters Patent No. 491,190, dated February 7, 1893.

Application filed June 29, 1892. Serial No. 438,422. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM H. ROEHR and CHARLES ROEHR, citizens of the United States, residing at Bucyrus, in the county of 5 Crawford and State of Ohio, have invented a new and useful Improvement in Pew-Backs, School-Desks, &c., of which the following is a specification.

Our invention relates to an improvement in 10 pew backs, school desks, &c., and has especial reference to the means for forming, maintaining the form, and strengthening the backs

of pews, &c.
The invention consists, essentially, in pro-15 viding the back with kerfs or grooves, extending inward, or toward each other from opposite edges of the back, said kerfs being parallel with the surfaces of the back and terminating at points varying from one to three 20 or more inches from the center thereof, and thin veneers or cores, fitting snugly in the kerfs or grooves and secured therein by means of glue or other adhesive material.

In constructing a pew back in accordance 25 with our invention, the operation is as follows: A solid back, after being planed and sanded, is slitted in opposite directions, beginning at its side edges and extending to within a short distance of its center and in a plane, or planes, 30 parallel with its surfaces, the kerfs or grooves thus formed being from one-eighth to onequarter of an inch in width or sufficient to receive veneers or cores of that thickness. The veneers or cores, after being coated upon 35 both sides with glue, are inserted in the kerfs or grooves, (a separate veneer or core for each kerf or groove), and forced firmly to place, after which pressure is applied to force the material of the back to the desired shape 40 or form and cause the glue to unite the parts. The back is slitted while straight or flat, by means of a saw or saws.

Our invention is more fully described in connection with the drawings, wherein:

Figure 1 is a perspective view of a pew back constructed in accordance with our invention. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a similar view of a slightly modified form of back, in which the 50 kerfs or grooves are flush with one side of the back, and an additional shield is applied to

break the joint between the veneer or core and the back, as is fully explained hereinafter. Fig. 4 is a similar view of a back show-

ing two sets of veneers or cores.

A represents the solid back of a pew, provided with kerfs or grooves B B extending inward from its top and bottom edges and terminating near the center of the back, said kerfs or grooves being parallel with the oppo- 60 site faces of the back, and in these kerfs or grooves are fitted the veneers or cores C C. equal in thickness to the channels and fitted snugly therein. The veneers or cores are held in place in the kerfs or grooves by means 65 of glue or other adhesive substance.

In the modification shown in Fig. 3, the back illustrated is of less thickness, being only two-thirds the thickness of the back shown in Figs. 1 and 2, and the kerfs or 70 grooves, although formed in the same manner, are flush with one surface of the back. The veneers or cores are arranged in the kerfs or grooves as above described in connection with Figs. 1 and 2, an additional shield, E, be- 75 ing applied to the exposed surface of the veneer or core, the width thereof being sufficient to overlap and break the joint between the end of the kerf or groove in the back and the adjacent edge of the veneer or core.

From the above description it will be obvious that the object of the veneer or core is the same in both forms shown, the advantage gained by the use of the kerfs and the inserted veneers or cores being simplicity of 85 construction, owing to the number of operations (namely, slitting the back and inserting the cores) being minimized as compared with the operations necessary in forming backs of a series of layers or parallel sections, and 90 freedom from warping or twisting, owing to the solid portion of material at the center of the back.

Any desired number of parallel veneers or cores may be employed, Fig. 4 showing a back 95 provided with four, arranged in two parallel planes. A greater number than four may be employed, but good results have been attained by the use of two, as shown in Figs. 1 and 2. The advantage gained by the use of a greater 100 number of veneers lies in the fact that the material of the back which lies between ad-

jacent kerfs is reduced in thickness, thus causing it to conform more easily and perfectly to the shape of the former.

Obviously, a greater number of veneers than shown in Figs. 1 and 2 are required when the back is of greater thickness than about

one inch.

The bead or molding which is shown in connection with our improved pew back, and 10 which forms a part thereof, comprises the angular strip E, having a flat lower edge to fit snugly upon the upper edge of the back proper and having a rounded front surface which is flush with the front surface of the back, the 15 rear side being parallel and flush with the rear surface of the back; the flat strip F, which lies in contact with the rear surfaces of the back and said angular strip to break the joint between said members, and is flush at its up-20 per edge with the upper edge of the angular strip; and a half-round ornamental strip G which is attached to the rear side of the flat strip. Thus the bead or molding comprises, essentially, a covering-strip to conceal the up-25 per edge of the back, a break-joint strip to cover the joint between the back and said covering strip, and an ornamental strip secured to the intermediate strip.

It will be understood that what has been considered in reference to pew backs applies equally to school desks, backs, seats, tops, and to furniture generally where the parts thereof may be bent or formed in the manner de-

scribed.

35 We have described our invention in connection with pew backs, but this is only a

matter of convenience in description, and we reserve the right to apply our improvement to all branches of cabinet-making.

When used for a desk top the curve will 40 not be formed, in-as-much as a desk-top must be flat, but the same construction may be followed, the use of the veneer or core preventing the splitting of the top.

Having thus described our invention, what 45 we claim and desire to secure by Letters Pat-

ent of the United States, is:

1. A device of the class described, provided with kerfs parallel with its surfaces and terminating short of its center to form a web of 50 solid material, and veneers or cores fitting in said kerfs, substantially as specified.

2. A device of the class described, provided in its opposite edges with inward-extending kerfs or grooves which terminate near the center thereof, and curved veneers or cores fitting in said kerfs or grooves, substantially as

specified.

3. A pew-back, provided in its opposite edges with kerfs or grooves, veneers or cores 60 fitting in said kerfs, and a bead or molding comprising a covering strip E, an intermediate or break-joint strip F, and an ornamental strip G, substantially as specified.

In testimony that we claim the foregoing as 65 our own we have hereto affixed our signatures

in the presence of two witnesses.

WILLIAM H. ROEHR. CHARLES ROEHR.

Witnesses:

C. F. ROEHR, ED. C. ROEHR.