G. H. GRANT.

School, Hall, and Church Seats.

No. 151,873. Patented June 9, 1874.

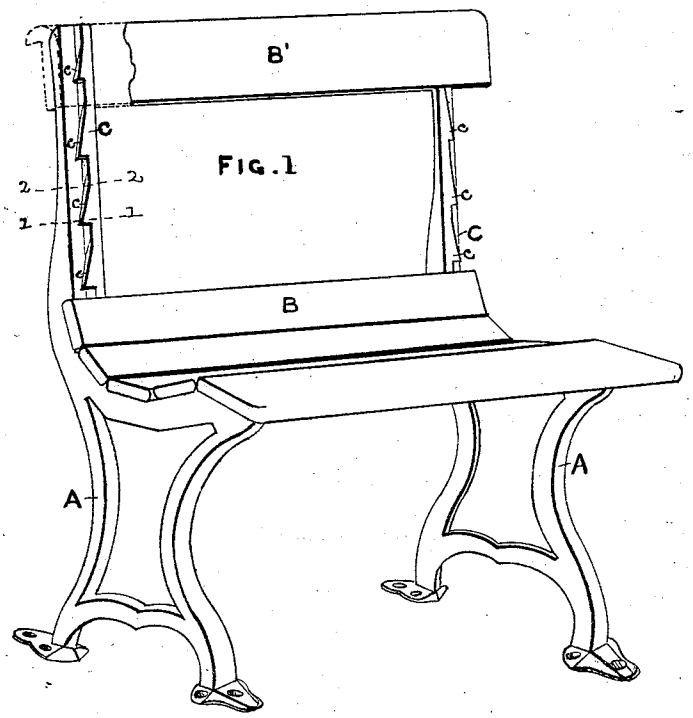


FIG. 4

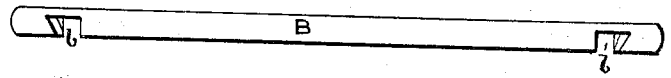


FIG. 6

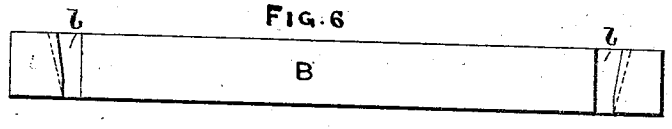
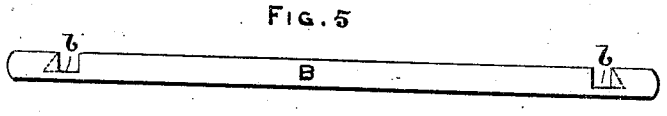


FIG. 5



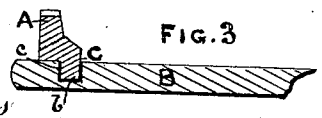


FIG. 3

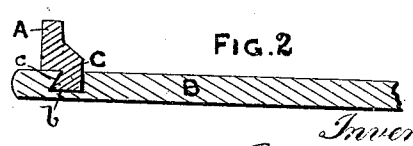


FIG. 2

Witnesses
Osborne Brookes
D. G. Stuart

Inventor
Geo. H. Grant

AM. PHOTO-LITHOGRAPHIC Co. N. Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

GEORGE H. GRANT, OF RICHMOND, INDIANA.

IMPROVEMENT IN SCHOOL, HALL, AND CHURCH SEATS.

Specification forming part of Letters Patent No. **151,873**, dated June 9, 1874; application filed March 21, 1874.

To all whom it may concern:

Be it known that I, GEORGE H. GRANT, of Richmond, in the county of Wayne and State of Indiana, have invented certain new and useful Improvements in School, Hall, Church, and other Furniture; 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 pertains to make and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in the construction of furniture, more particularly for improvements in seating for school-rooms, halls, churches, and parks or lawns. The invention consists in a new and improved method of uniting the wooden parts with the metal, or combined wood and metal, frames or standards, so as to make a strong and durable seat, the parts of which are easily and cheaply constructed, which can be closely packed for transportation, and be readily put together and taken apart without fitting or requiring skilled labor, and without the use of screws, bolts, or braces, all as hereinafter more fully set forth.

In the accompanying drawings, Figure 1 is a perspective view of a settee, with part of slats removed, to show the peculiar construction of the standards. Fig. 2 is a cross-sectional view on the line 1 1, Fig. 1. Fig. 3 is a similar view on the line 2 2, Fig. 1. Figs. 4, 5, and 6 are side and bottom views of one of the slats, showing the peculiar form of the gains.

Referring to the parts by letters, letters A A represent the standards, and B the slats, the upper one of which, B′, may have a molding or other finish, as desired. The standards A are made of cast metal, but they may be made of wood, or of wood and metal combined, as found most convenient or desirable; and they may also be of any shape or configuration suitable for the purpose to which they are applied. C is a continuous flange cast with, or attached to, one side of the standard, to receive the slats. One side of this flange is plane or at right angles to the slat, while the opposite side is formed into a series of triangular conical projections, *c*, corresponding in length with the width of the slats. They are also slightly cut under from the base of the cone upward on their inner faces, so as to form beveled tenons, as clearly shown in Figs. 2 and 3 of the drawings; and their upper portions are made straight or with sides parallel to the opposite sides of the flange. I have shown this peculiarly-shaped flange cast with, or formed on, the inner side of the standard; but it may be placed on either side of the standard, or midway between the sides, as found most convenient or desirable. It may also be made of a separate piece or pieces, attachable to the standard in any convenient manner; or the triangular conical projections may be made separate, and attachable to the standard, or to the flange of the standard, by any convenient and suitable means. The slats B are gained near their ends, laterally, or across their width, on the under side, with gains *b*, of peculiar form, one side of the mortise being at right angles to the slat, and the opposite side formed so as to correspond with and receive the peculiarly-formed beveled tenons or projections *c* of the standards when the slats are placed in position. The slats are gained alike, and are of like shape and size, except the upper one, which, if desired, may be finished with a molding, as before described.

In putting the settee together the slat is entered a little above the position in which it is to rest, the right-angular portion of the gain fitting on the corresponding portion of the projection *c*. The slat is then pushed into place, the triangular tenon entering and fitting the correspondingly-shaped portion of the gain, so as to securely unite the slat with the standards, brace them laterally, and hold them without screws or other additional fastening device.

I prefer to commence at the junction of the seat with the back, and work both ways, the projections *c* on the seat portion being arranged in the opposite direction from those on the back portion of the standard. By this arrangement no change is necessary in gaining the slats, as by simply reversing them they fit either back or seat, and are placed in position one after the other. This method of

placing the slats in position need not, however, be followed, as they may be commenced at either end, as desired, and the direction of the projections *c* permit. The front slat of the seat and the upper one of the back may be further secured by screws passed through the slats into the standards; but this is not essential, as my improved fastening device holds them securely together without screws.

I have shown my invention as applied to the construction of a settee; but it must be obvious to those skilled in the art that it can be applied with equal advantage to any description of furniture or other article the construction of which will admit of the use of this peculiar fastening.

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

The standards of a settee, or other like article of furniture, having a flange, C, straight on one side, and formed with a series of triangular projections, *c*, on the other, in combination with slats having gains *b*, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

GEO. H. GRANT.

Witnesses:
G. J. FERRISS,
D. G. STUART.