

(No Model.)

O. S. GARRETSON.
SCHOOL FURNITURE.

No. 444,630.

Patented Jan. 13, 1891.

Fig. 1.

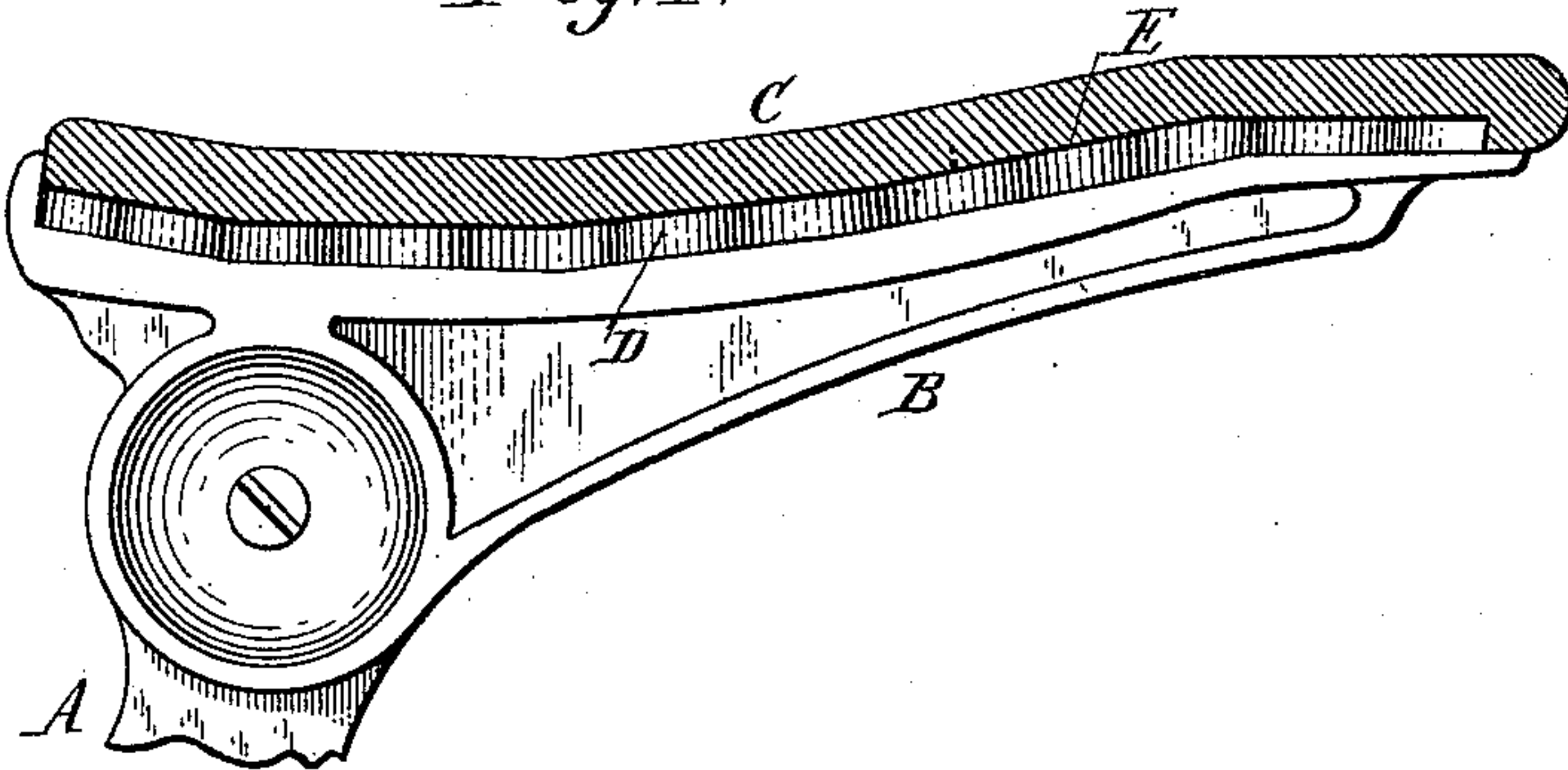


Fig. 2.

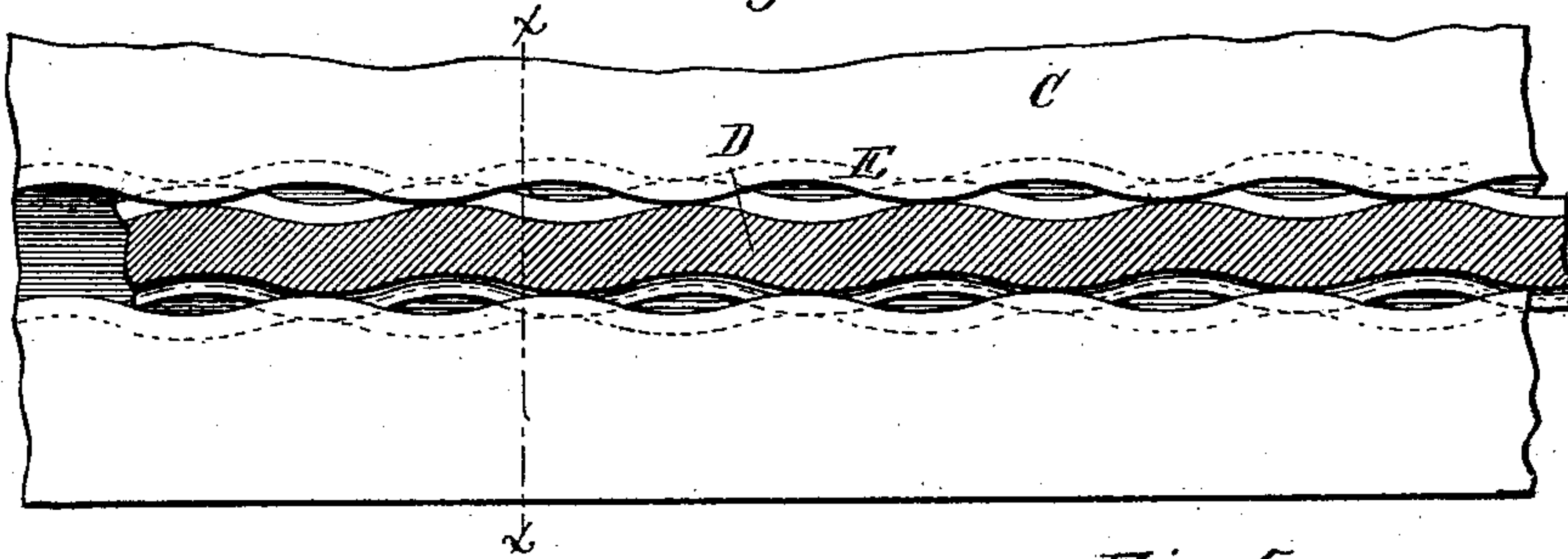


Fig. 3.

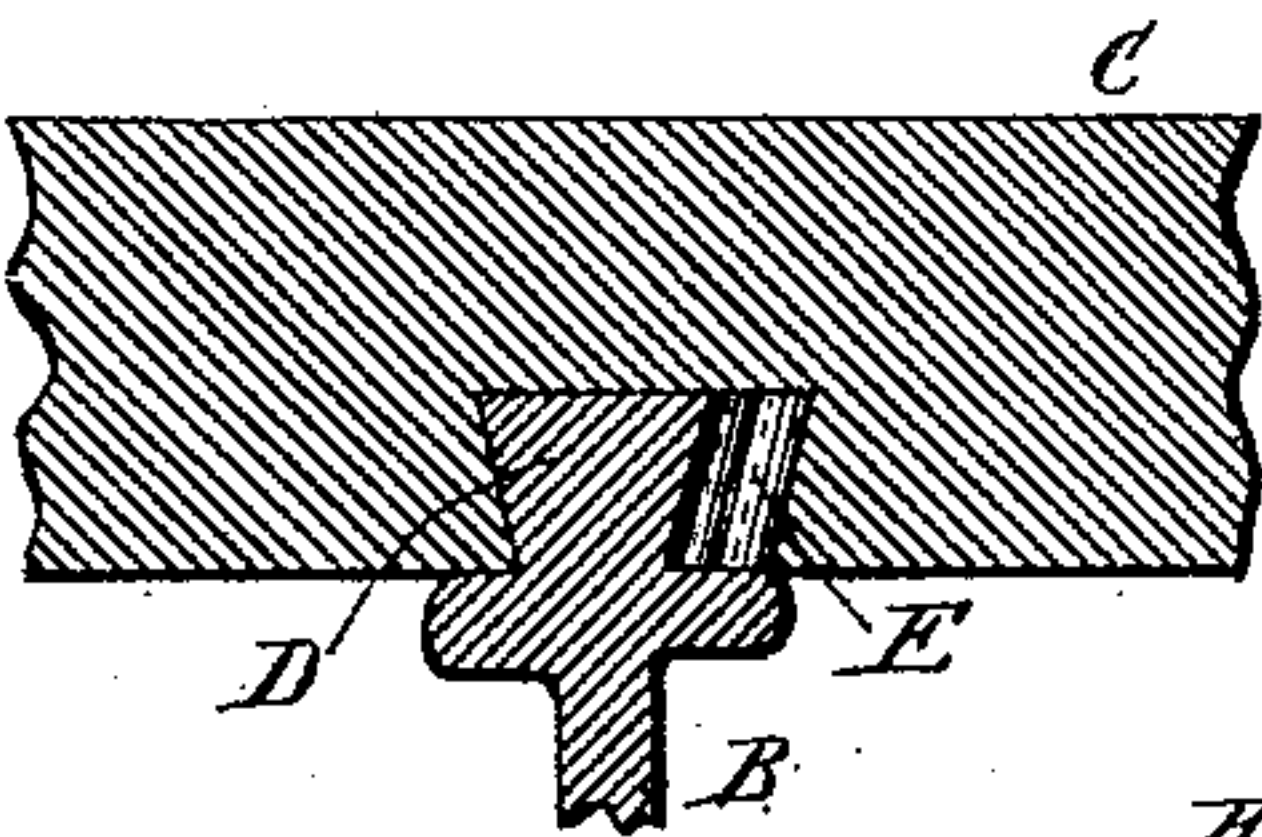


Fig. 5.

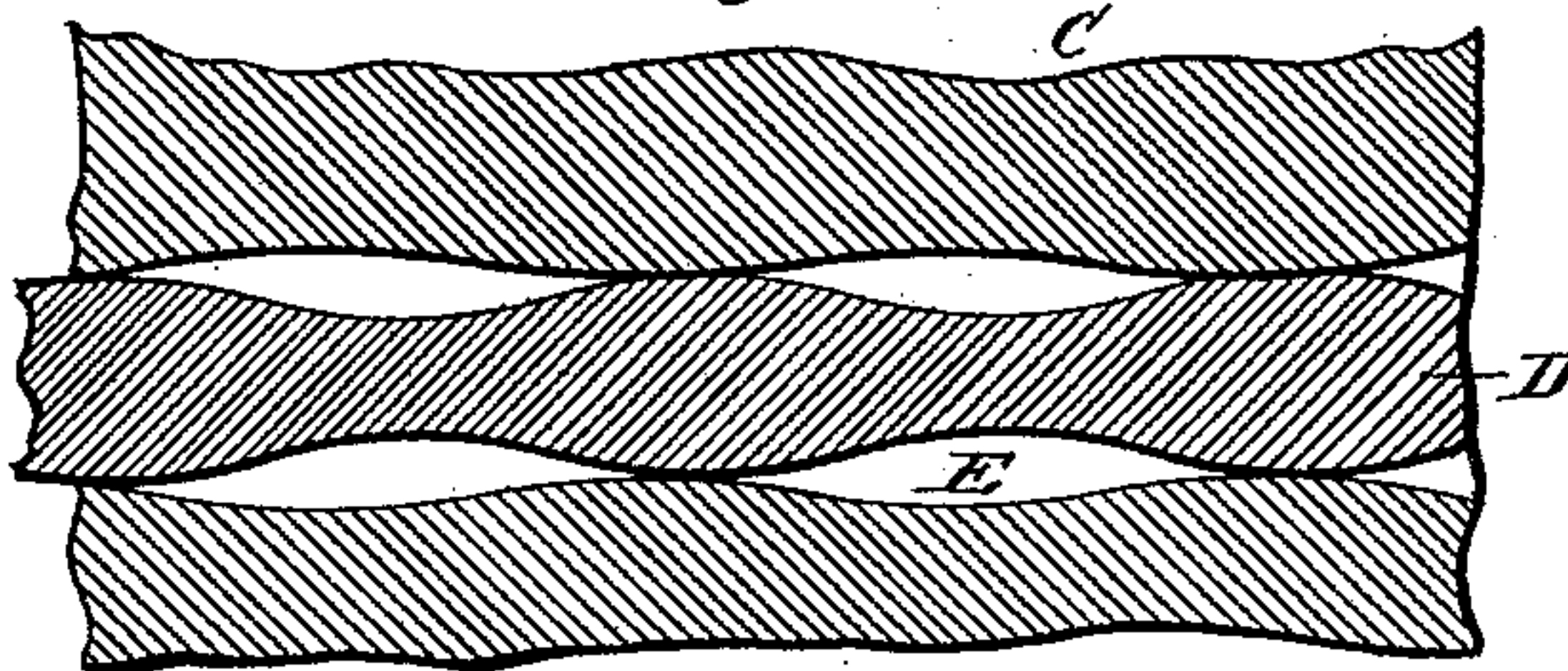
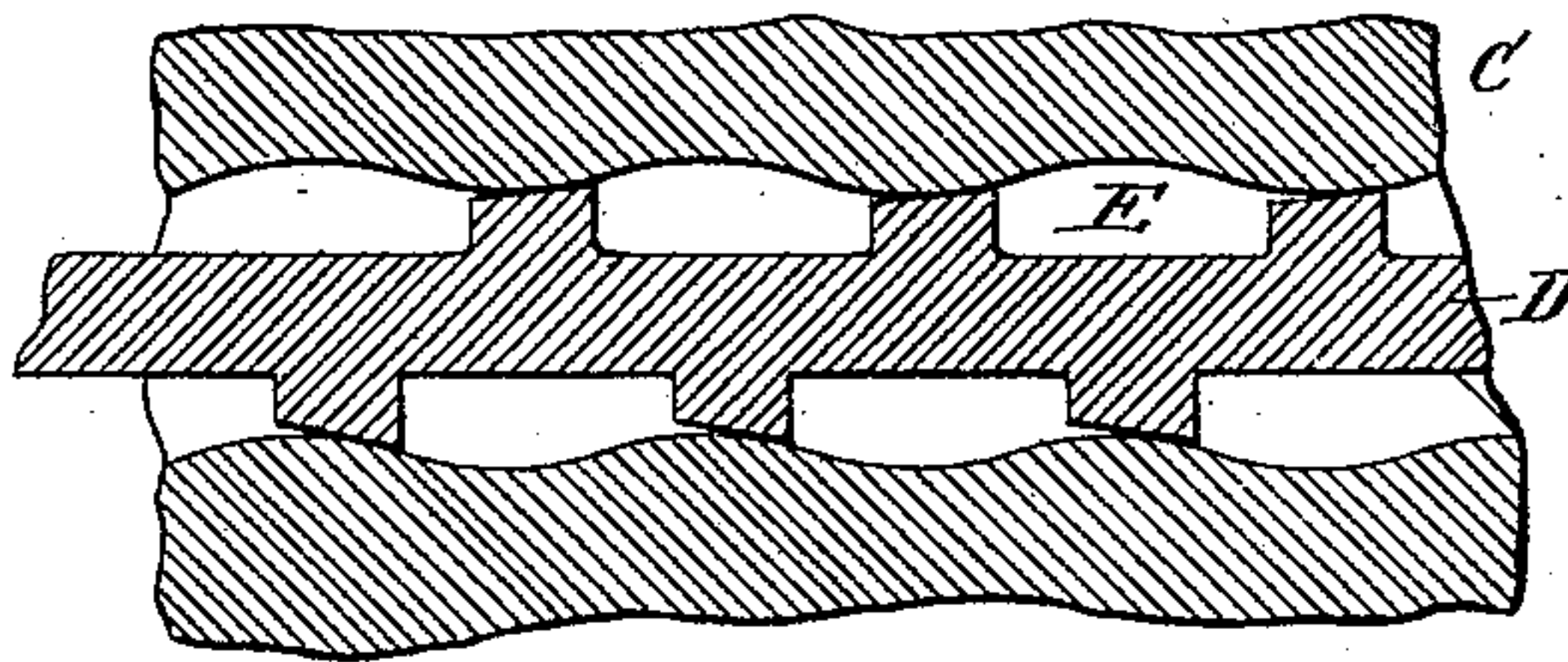


Fig. 4.



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UNITED STATES PATENT OFFICE.

OLIVER S. GARRETSON, OF BUFFALO, NEW YORK.

SCHOOL FURNITURE.

SPECIFICATION forming part of Letters Patent No. 444,630, dated January 13, 1891.

Application filed June 14, 1884. Serial No. 134,898. (No model.)

To all whom it may concern:

Be it known that I, OLIVER S. GARRETSON, of the city of Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in School Furniture, of which the following is a specification.

This invention relates more particularly to an improvement in the means whereby the wooden parts of school seats or desks and other furniture are secured to the iron frames thereof.

The object of my invention is to provide a fastening which dispenses with loose or detachable pieces for fastening the parts together, and enables a seat-back or other wooden part of the proper curvature to be easily and securely attached to the iron frame.

My invention consists to that end of the improved fastening which will be hereinafter fully set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a sectional elevation of a school-seat provided with my improvement. Fig. 2 is a fragmentary bottom plan of the seat with the tongue in section, on an enlarged scale. Fig. 3 is a cross-section in line *xx*, Fig. 2. Figs. 4 and 5 are fragmentary bottom plans of the seat, showing modified forms of my improved fastening.

Like letters of reference indicate like parts in the several figures.

A represents the standard of the frame of the school-seat, and B the seat-arm hinged thereto.

C represents the seat resting on the seat-arm.

D represents the tongue formed lengthwise on the upper side of the seat-arm, and E the groove formed in the under side of the seat C.

As represented in Figs. 1, 2, and 3, the tongue D is of dovetail form in cross-section and of serpentine form lengthwise, and the groove E is made of the same form, but slightly wider, so that the groove of the seat can be dropped over the tongue of the frame upon placing the groove in such a position with reference to the tongue that the sides of the tongue and groove are parallel with each other. This being done the seat is secured to the tongue by driving the seat lengthwise of the tongue until the out-

wardly-projecting portions of the tongue bind firmly against the inwardly-projecting portions of the side walls of the groove, as represented in Fig. 2. It will be seen that this construction of the tongue and groove furnishes numerous bearing-surfaces on diagonally-opposite sides of the grooves, whereby a secure connection of the parts is effected, while the linear movement of the parts with reference to each other, which is necessary to secure the parts together, is very small, thereby permitting the seat in applying it to the frame to be placed within a very short distance of the place which it finally occupies in the furniture, whereby the seat and tongue can be made of any desired curvature without interfering with the facility of attachment.

The tongue can be provided with lateral projections adapted to bind against the side walls of the groove, as represented in Fig. 4, or the outwardly-projecting portions can be placed directly opposite each other on the tongue and the inwardly-projecting portions can be arranged similarly on the side walls of the groove, as represented in Fig. 5, or other similar constructions that will accomplish the same result in a more or less perfect manner may be used. I prefer, however, the construction represented in Figs. 1, 2, and 3, because it is simpler and more efficient and because the groove can be cut into the wooden part at a single operation by a cutter moved in a serpentine path by a suitable guide.

It is obvious that the backs and tops of school-desks can be fastened to their frames by the same means and that this fastening can be applied to many different parts of furniture and analogous structures in which slats, boards, or other parts are secured to supporting-frames or other parts by means of tongues and grooves.

My improved fastening device enables solid curved backs and seats to be securely dovetailed to correspondingly curved arms or standards, and dispenses with all loose or detachable parts. It is cheaply manufactured and the parts can be easily and quickly driven together without the aid of skilled labor or special tools for the purpose.

I claim as my invention—

1. The combination, with a board provided

with an undercut groove having serpentine or wavy sides, of a rib or tongue having on its sides alternate projections and depressions adapted to enter said groove and be locked
5 therein by an endwise or longitudinal movement of the tongue in the groove, substantially as set forth.

2. The combination, with a supporting frame provided with a dovetail tongue of serpentine
10 form lengthwise, of a plank provided with a dovetail groove of serpentine form made

wider than the tongue, whereby the parts are secured together by dropping the plank with its groove over the tongue and moving the tongue lengthwise in the groove, substantially
15 as set forth.

Witness my hand this 12th day of June, 1884.

OLIVER S. GARRETSON.

Witnesses:

JNO. J. BONNER,
CARL F. GEYER.