

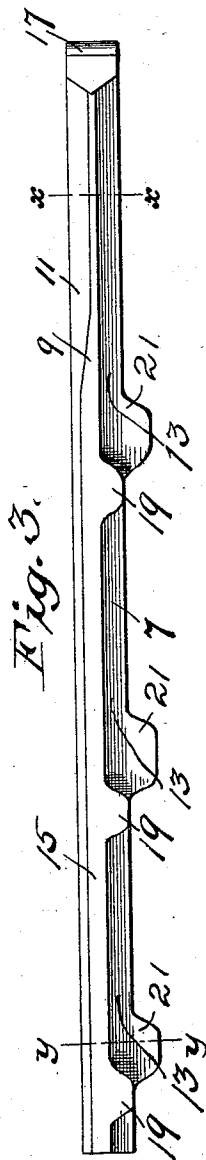
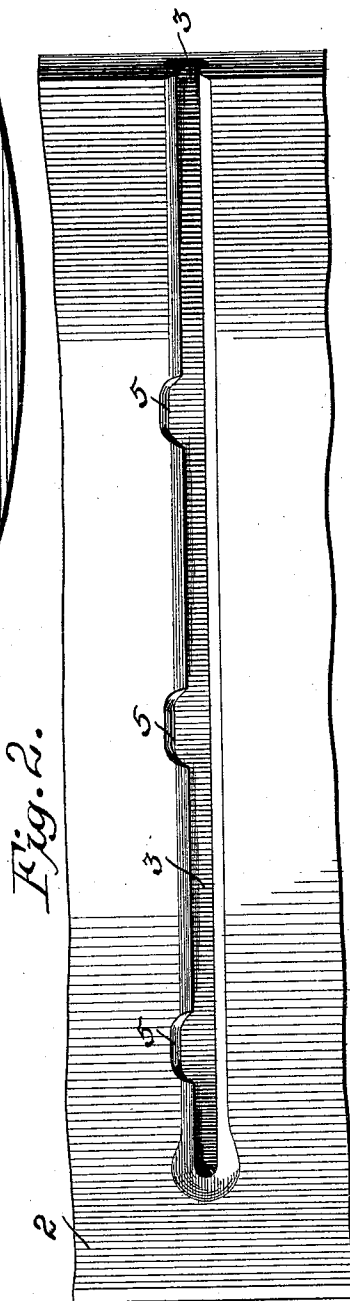
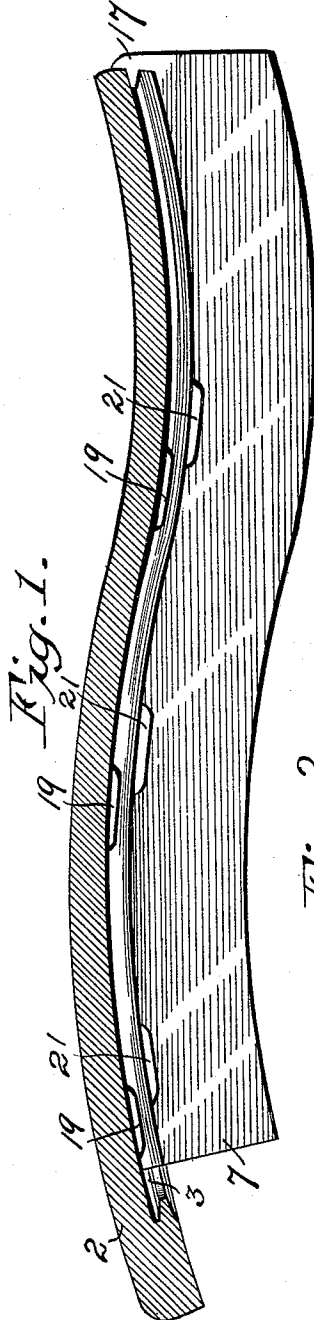
(No Model.)

3 Sheets—Sheet 1.

W. B. COGGER.
SCHOOL FURNITURE.

No. 478,786.

Patented July 12, 1892.



Witnesses.
C. E. Van Dorn,
J. H. Lyon

Inventor.
William B. Cogger.
By Paul Merwin Attys.

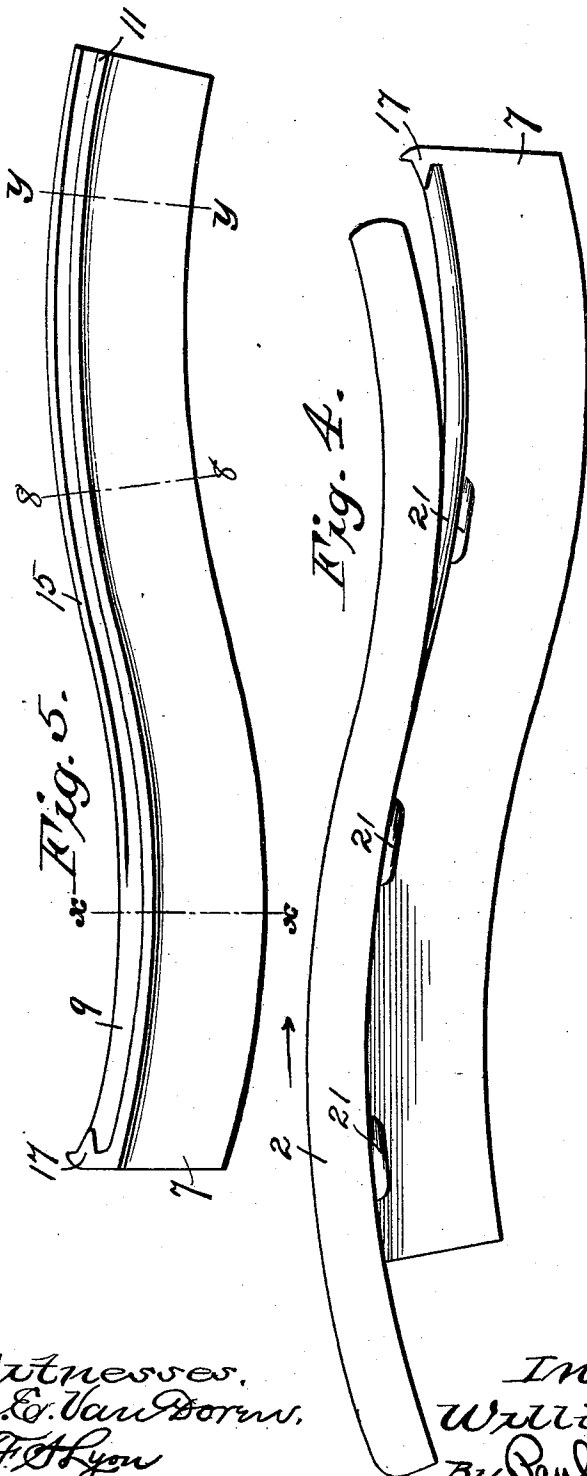
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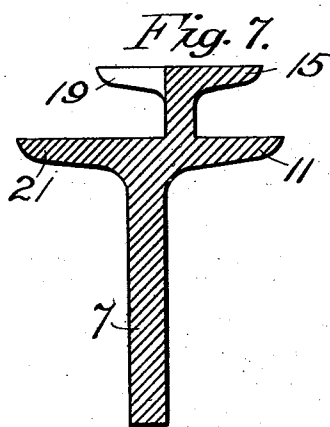
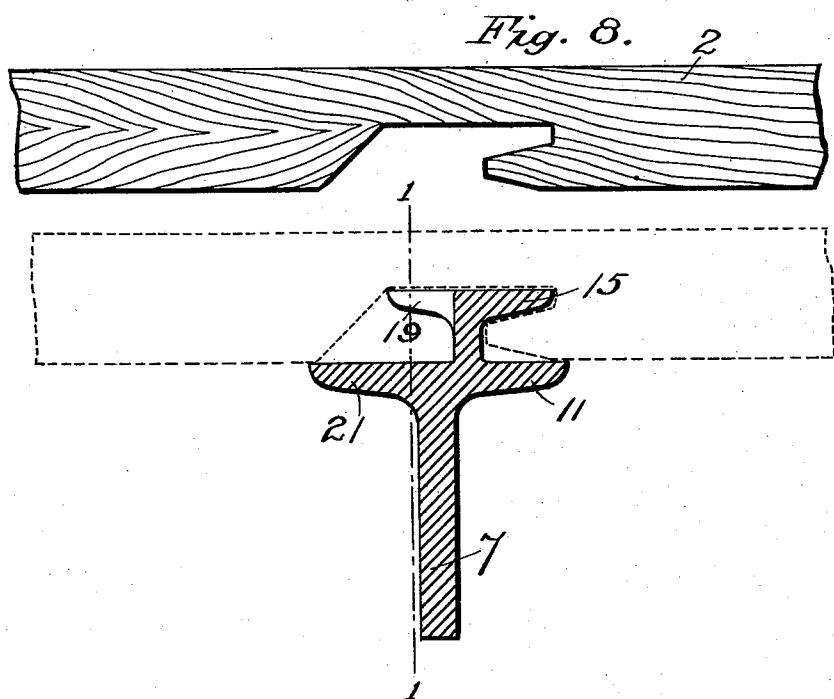
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UNITED STATES PATENT OFFICE.

WILLIAM B. COGGER, OF SPRINGFIELD, ILLINOIS.

SCHOOL FURNITURE.

SPECIFICATION forming part of Letters Patent No. 478,786, dated July 12, 1892.

Application filed October 8, 1891. Serial No. 408,102. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM B. COGGER, of Springfield, in the county of Sangamon, State of Illinois, have invented certain Improvements in School Furniture, of which the following is a specification.

This invention relates to improvements in devices for fastening together school-seats or any kind of seat made of wood and iron; and its objects are to provide means whereby the wooden seat or back may be firmly secured to the metallic support without the use of screws or nails and at the same time will provide a firm fastening for securing the seat at all points, thereby preventing any loosening of the seat or any splitting of the wood either when the seat is in use or while it is being put together.

The invention consists generally in providing the wood or seat portion with a continuous groove that is dovetailed or undercut upon both sides and is provided upon one side with a series of notches and in providing the metallic support with the continuous rib having upon one side a projecting flange and upon the other a series of lugs that are arranged to enter the notches at the side of the groove near the seat portion, whereby upon putting the parts together and giving a slight forward movement to the seat portion upon the metallic support the seat will be given a sidewise movement upon the iron, thereby carrying the continuous flange upon the iron under the continuous undercut portion of one side of the groove in the seat portion and also carrying the locking-lugs on the iron under the undercut portion of the other side of the groove, and thereby forming a continuous support and lock for the seat upon the supporting-iron for substantially the full length of the iron or for the full length of the continuous flange.

In the accompanying drawings, forming a part of this specification, Figure 1 is a section through the seat, taken on a line close to the supporting-iron, as indicated by line 1 1, Fig. 8, and showing the wooden or seat portion in section and the supporting-iron in elevation. Fig. 2 is an under side plan view of a portion of the seat. Fig. 3 is a plan view of the supporting-iron, looking toward the side that is brought next to the wood when the device is in use. Fig. 4 is an end elevation of the seat

and supporting-iron, showing the position of the parts before the seat is given a longitudinal movement on the supporting-iron for the purpose of locking it thereto. Fig. 5 is a side elevation of a supporting-iron, looking toward the side that is provided with a continuous flange. Figs. 6 and 7 are detail sections on line *xx* and *yy* of Fig. 5. Fig. 8 is a detail cross-section of a portion of the seat and supporting-iron, the parts being shown in dotted lines in the position that they occupy when the device is together and the wooden or seat portion being shown in full lines separated from the iron, the section upon which this figure is taken being indicated by the dotted line 8 8 in Fig. 5.

In the drawings, 2 represents the wooden seat portion of ordinary school-furniture, or this may represent the back of the seat. This wooden portion 2 is preferably of a curved form in cross-section, substantially as shown in the drawings. The wooden portion 2 is provided upon the under or back side with the transverse groove 3. This groove is undercut upon both sides, substantially as shown in Fig. 8, and one side of said groove is continuous, while the other side is provided with a series of notches 5, that extend to the bottom of the groove and meet the bottom of the groove preferably at the outer edge of the undercut. The walls of these notches are preferably inclined or sloping, as shown in Fig. 2. The supporting-iron 7 has the surface that comes against the wooden seat formed with a similar curve to that of the seat, and this iron is provided with a rib 9, extending the full length thereof, and with the flanges 11 and 13 on the opposite sides of the iron at the base of the rib 9. The rib is provided at one side with a continuous flange 15, which extends nearly the full length of the rib, there being preferably a short portion at the end of the rib toward the stop 17, that has no flange 15. At its opposite side the rib is provided with a series of lugs 19, which project therefrom in the same plane as the flange 15. The iron is also provided with the lugs 21, projecting from the flange 13 and in the same plane therewith and located just a short distance back of the lugs 19, or, in other words, each of the lugs 21 is slightly nearer the stop 17 than the corresponding lug 19, as shown in Fig. 3.

The groove 3 is of sufficient width at its narrowest or throat portion to admit the rib 9 and the flange 15 to pass through this portion of the groove.

5 In putting the seat or wooden portion upon the iron the seat is placed so that the lugs 19 enter the notches 5 and the rib 9, with the flange 15, enters the narrow or throat portion of the groove 3, and then the wooden or seat
10 portion is pushed down over the rib 9. The lugs 19 ride down the inclined wall of the notches 5, and thereby the flange 15 is forced under the continuous undercut wall of the groove 3, the flanges 11 and 13 being brought
15 against the wood at each side of the groove. The parts will now be in the position shown in Fig. 4. By giving the seat a slight movement in the direction of the arrow in Fig. 4 the parts will be brought into the position
20 shown in Fig. 1, with the stop 17 against the edge of the wood or seat portion. The lugs 19 will pass out from the notches 5 along the groove 3, so as to come under a portion of the undercut wall of the groove 3, thereby securely
25 locking the seat upon the supporting-iron, the lugs 21 covering the notches 5 and forming a bearing for the seat outside and around said notches. I thus provide means for locking the wood or seat portion upon the iron and at the
30 same time requiring only a slight movement of the seat to bring the parts into their final position and when they are in this position having the wood supported at all points by the iron throughout its entire length.

35 While I have described the invention as particularly applicable for securing the wooden seat to its support, it will be understood that the invention is not limited to a device of this kind, but is clearly applicable
40 to securing the backs of the seats to their supporting-irons or for securing any curved wooden surface to its support.

I claim as my invention—

1. The combination, with the seat or wooden

portion provided with an undercut groove hav- 45
ing upon one side a series of notches with walls inclined from the top to the bottom and toward the center of said groove, of a support-
ing-iron provided with a rib having a continu- 50
ous flange at one side of said rib and a series of lugs at the other adapted to engage said
notches and force said flange under the wall of said groove as the rib is inserted in said
groove, substantially as described.

2. The combination, with the wooden or seat 55
portion with the dovetailed or undercut groove having a continuous wall upon one side and having upon the other side a series of notches with walls inclined from the top to the bottom and toward the center of the 60
groove, of a supporting-iron provided with a rib having a continuous flange upon one side and a series of lugs upon the other adapted to enter the notches in said groove and to force the flange under the wall of the groove as the 65
rib is inserted in said groove, whereby the wooden portion may be locked upon the supporting-iron and be held and supported for the full length of the iron.

3. The combination, with the wooden or seat 70
portion provided with the undercut groove having a series of inclined notches 5 in one side, said notches being inclined toward the center of the groove, of the supporting-iron provided with a rib 9, the flange 15 upon one 75
side of said rib and the lugs 19 upon the other, and with the flanges 11 and 13 and lugs 21, projecting from opposite sides of the base of the rib, said lugs 19 being adapted to engage said notches and force said flange 15 under 80
the wall of the groove as the rib is inserted in the groove, substantially as described.

In testimony whereof I have hereunto set my hand this 29th day of September, 1891.

WILLIAM B. COGGER.

In presence of—

EDWIN A. WILSON,
GERRIT SNYDER.