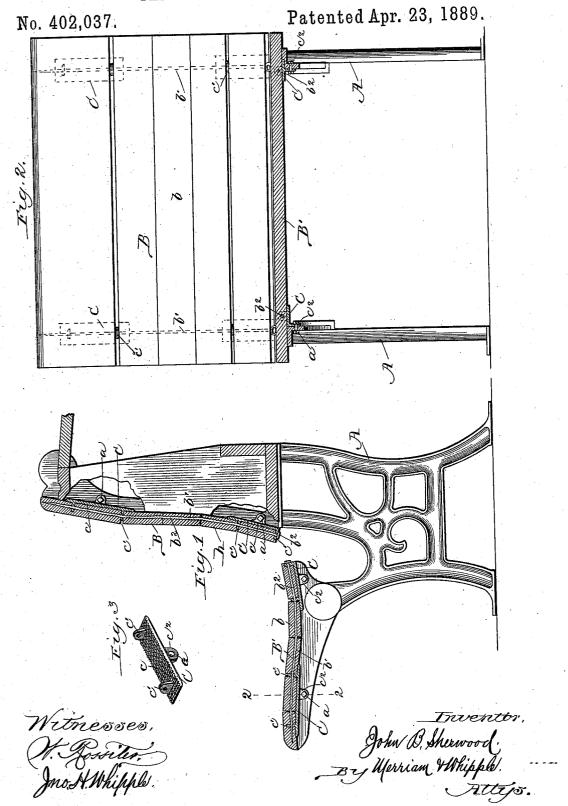
J. B. SHERWOOD. FASTENING FOR SCHOOL DESKS.



UNITED STATES PATENT OFFICE.

JOHN B. SHERWOOD, OF CHICAGO, ILLINOIS.

FASTENING FOR SCHOOL-DESKS.

SPECIFICATION forming part of Letters Patent No. 402,037, dated April 23, 1889.

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To all whom it may concern:

Be it known that I, John B. Sherwood, of Chicago, in the State of Illinois, have invented certain new and useful Improvements in Fast-5 enings for School-Desks, of which the follow-

ing is a specification.

My invention relates to means for attaching together the slats to form the seat and back, and for attaching the seat and back to 10 the desk-frame; and the object of my improvements is to provide a clamp-plate adapted to be secured to both the back or seat and the desk-frame in such manner as to prevent looseness or liability to become loose at either 15 of these points from racking or lateral strain, the form of the clamp-plate and the means of attaching the same to both the slats and the desk-frame being such as to enable the seat, back, and frame to be made and shipped as 20 separate parts, which may be set up at the place required for use.

Heretofore it has been customary in making desks of this general character to connect the slats by means of a rod or rods inserted 25 edgewise through them and through eyebolts let into or between the slats from the under face thereof, the lower ends of the bolts being in some instances provided with screws and nuts, whereby they could be secured to flanges 30 of the frame adapted to come against the under side of the slats, and provided with holes for the bolts, and in other instances having heads adapted to fit as a dovetail in grooves of the frame for securing the seat and back to 35 the frame. The bolts so connected with the slats have no provision for protecting them against lateral strain, and the consequence is that their connection with the slats is insufficient to support the frame without auxiliary 40 braces to prevent racking, and the desk in use soon becomes so loose and shaky at this point as to render it worthless. I have obviated this difficulty by providing clampplates to be used instead of eyebolts, in combination with the slats and desk-frame, in the manner illustrated in the accompanying drawings, in which-

Figure 1 is a vertical section of a schooldesk taken on the line of the fastening for 50 the slats. Fig. 2 shows a front view of the desk, the seat being shown in section at the to the rail of the frame, as illustrated at the

line 2 2 of Fig. 1. Fig. 3 is a perspective view

of the clamp-plate detached.

A designates the desk-frame, B the back, and B' the seat. The back and seat are made 55 of wooden slats b, which are bored at b', so that a rod or long nail, b^2 , closely fitting the bore, and preferably corrugated, may be driven in when the slats are placed in a plane, so as to bind them firmly together.

C is the clamp-plate, which is provided with corrugations on the surface c, which comes against the slats, and two lugs, c' c', having holes corresponding with the bore in the slats. The lugs are let into or come between the 65 slats, so as to meet the bore therein when the corrugated surface is fitted by compression firmly against the under surface of the slats. The rods are then driven into the bore of the slats and pass through the holes in the lugs, 70 so as to hold the parts firmly together. clamp-plates are thus applied at the shop or factory, where the necessary machinery is provided to hold the bored slats in a plane and firmly compress the clamp-plates on them 75 while the connection is being made. The clamp-plates are of sufficient length to extend over the slats embraced by the lugs c', and lap onto the adjoining ones and are extended at the sides considerably beyond the attach- 80 ing-point at said lugs, so as to give them a

wide lateral bearing on the slats.

On the bottom side of each clamp-plate a \log, c^2 , is provided, which has a bolt-hole whereby the clamp-plate may be secured, by means 85 of a screw-bolt, a, to the side of the desk-frame provided with a corresponding bolt-hole adapted to meet the holes in said $\log c^2$. By means of the broad corrugated surface of the clamp-plates and the two lugs secured by the 90 rods running through the bore of the slats the connection of said plates with the seat and back is made rigid and unyielding and not liable to become loose, and the bolts a, applied in the bottom lugs, c^2 , and the desk-frames, are 95 thus enabled to clamp the seat, back, and frame together in such manner as to secure them against any liability of becoming loose in use. The lug c^2 may be attached either at the center or at one side of the clamp-plate. 100 If at the center said plate should be rabbeted

right side of Fig. 2, and if at the side the lug and edge of said plate will fit on the plain surface of the rail, as seen at the left side of said Fig. 2.
What I claim is—

As an improvement in fastenings for schooldesks, the combination, with clamp-plates C, provided with a broad corrugated bearingsurface and two perforated lugs projecting perpendicularly therefrom, and a perforated lug projecting perpendicularly from the un-der side of said clamp-plates, substantially as

shown, of the bored slats, the rods for connecting said slats and clamp-plates, and the deskframe provided with bolt-holes adapted to 15 register with the perforations of the lugs projecting from the under side of said clampplates, and bolts a, for connecting the same with the frame, as specified.

JOHN B. SHERWOOD.

Witnesses: JNO. H. WHIPPLE, J. W. MERRIAM.