(No Model.)

J. B. SHERWOOD.

FASTENING FOR SCHOOL DESKS.

No. 402,037. Patented Apr. 23, 1889.

Fig. 2.

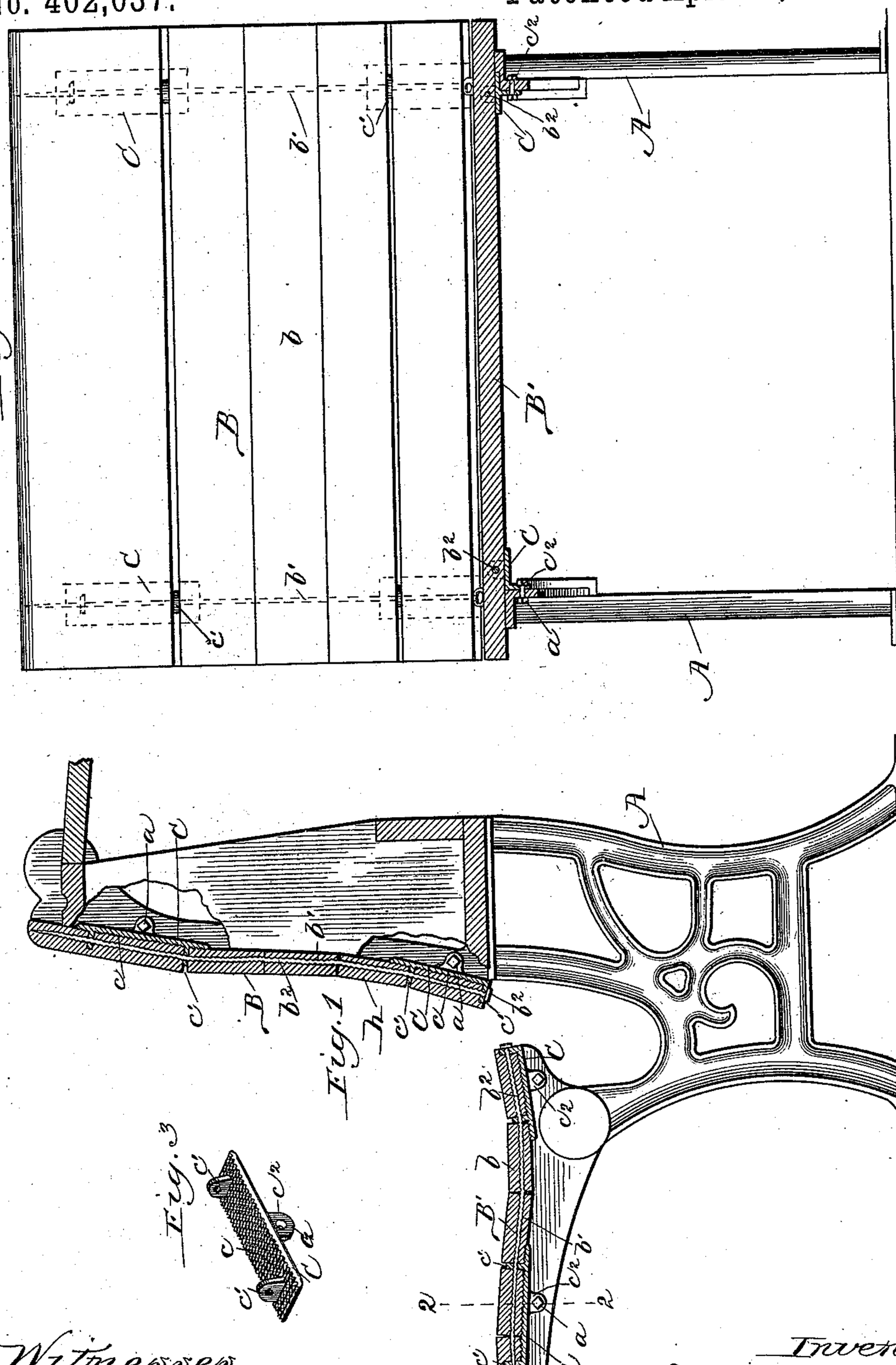

Fig. 1

Fig. 3

Witnesses,
H. Fossiter.
Jno. A. Whipple.

Inventor,
John B. Sherwood.
By Merriam & Whipple.
Attys.

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.

Application filed January 15, 1889. Serial No. 296,419. (No model.)

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 Fastenings for School-Desks, of which the following 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 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 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 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 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 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 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 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 clamp-plates 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 school-desk taken on the line of the fastening for the slats. Fig. 2 shows a front view of the desk, the seat being shown in section 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 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 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, so as to hold the parts firmly together. The 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 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 attaching-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 lug, c^2, is provided, which has a bolt-hole whereby the clamp-plate may be secured, by means 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 lug c^2. By means of the broad corrugated surface of the clamp-plates and the two lugs secured by the 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 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. If at the center said plate should be rabbeted to the rail of the frame, as illustrated at the

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 school-desks, the combination, with clamp-plates C, provided with a broad corrugated bearing-surface and two perforated lugs projecting perpendicularly therefrom, and a perforated lug projecting perpendicularly from the under side of said clamp-plates, substantially as shown, of the bored slats, the rods for connecting said slats and clamp-plates, and the desk-frame provided with bolt-holes adapted to register with the perforations of the lugs projecting from the under side of said clamp-plates, and bolts *a*, for connecting the same with the frame, as specified.

JOHN B. SHERWOOD.

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