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UNITED STATES PATENT OFFICE.

JOEL PRATT, 3D, OF HARTFORD, CONNECTICUT.

SOFA-BEDSTEAD.

Specification of Letters Patent No. 2,530, dated April 1, 1842.

To all whom it may concern:

Be it known that I, JOEL PRATT, 3d, of Hartford, in the county of Hartford and State of Connecticut, have invented a new and useful Improvement in the Construction of Sofas, called "Pratt's Portable Sofa-Bedstead," which is described as follows, reference being had to the annexed drawings of the same making part of this specification.

Figure 1 is a perspective view of the sofa having its ends folded and back raised forming a sofa ready for use. Fig. 2 is a perspective view of the sofa the ends being opened and the back let down forming a bed. Fig. 3 is a perspective view of the sofa folded for transportation. Fig. 4 inside of one of the stationary ends A showing the rib thereon, hinge, box and spring catch. Fig. 5 plan showing the inner side of the front rail-tongue or projection on ditto, rollers, ratchet wheels, pawls and cords, segment, catches, cogs, rack slide, back, and hinges.

Similar letters refer to corresponding parts.

The nature of my invention consists in its being so constructed as to be easily extended or opened and let down making a convenient sofa or bed as comfort or convenience may require and capable of being easily taken to pieces and packed for transportation.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

The sofa is so constructed as to be easily taken to pieces and packed in a convenient and portable form. It is also capable of being converted into a bed.

It consists in double or folding ends A A A² A², (which may be made of various forms) one half of each end A A being stationary while the other half A² A² being connected to the stationary half by means of common butt hinges applied to the back edges of the ends, can be separated from the stationary part and turned half around forming complete head and foot boards for the bed as represented in Fig. 2. These folding ends are fastened together when in the sofa form by means of spring catches which pass through the stationary half ends and enter mortises in the folding parts.

The back B of the sofa is attached to the

seat at the point where the seat and back connect in common sofas by means of hinges D so that the back can be turned down backward to form a bed as represented in Fig. 2. The back when let down is supported by a small projection or bracket, E on the folding ends, which bracket when the end is turned around or back comes directly under the end of the back of the sofa as it is turned down. The back is made fast when raised in the sofa form by revolving segment catches F let into mortises in the back B² of the sofa having shafts or gudgeons G passing through them with cogs or teeth upon their peripheries. These catches are applied to the ends A, being acted upon by a rack or slide I having cogs or teeth J upon each end so as to move the revolving segment catches either way or causing them to enter mortises K in the stationary ends A. These catches and slide are applied to the back part of the top rail the slide and catches being placed in mortises therein. The catches are turned and thrown out of the mortises in the top rail and into mortises K in the stationary ends A by means of the aforesaid slide I. The back however may be secured by any of the kinds of sliding or other catches in use, or in any convenient manner.

The seat and back cushions are supported by cords passing through apertures in the inner part of the front rail L under the seat and up behind the back B when the back is raised and under it when let down being attached to a roller M immediately under the back rail B². These cords also support the cushions when the sofa is in a bed form being lengthened or shortened by the aforesaid roller, said roller being made fast by what is commonly called a ragwheel and pawl of the usual form at each end.

The front rail L is made movable on pivot R inserted into or secured to a tongue l on the inside of the post rail and turning in boxes or slots in plates secured to ribs on the permanent ends A so as to be turned out and up, bringing the front of said front rail into a horizontal position and corresponding with the back or top rail when in the bed form. The said front rail is turned by means of the cords before described and as the rail is turned it comes in contact with the spring catches P which hold the folding ends A A² together and presses them

down so that the ends A² can be separated and turned half way around as represented in Fig. 2.

In Fig. 1 is represented the front of a drawer of sufficient dimensions to hold bedding &c. Only a part of the drawer can be represented in this figure as the front rail L turns down and prevents it being seen; its full depth is represented in Fig. 2 showing one of the ends of the drawer.

Fig. 3 represents the sofa in its portable form it being taken to pieces by taking out the front rail L from the boxes V which rail is described as movable, the gudgeons R upon which the rail turns having double shoulders the reduced part of the gudgeons between the shoulders turning in the boxes or plates V in such a manner as not to slip out except when the rail is raised obliquely when the gudgeons will leave said boxes V.

The rail S at the back below the level of the seat which holds the sofa together at the bottom passing from one of the back feet T to the other is put in by means of a dove tail tenon formed on the inner sides of the back feet fitting corresponding mortises in the ends of the rail, which tenons when the the sofa is to be taken down can be separated from the mortises in the rail and this being done and the movable front rail L before described taken out of the boxes—the ends of the sofa can be separated and the whole may be folded and packed as in Fig. 3. The dove tailed grooves may be formed in the inner sides of the back feet T of the sofa and the dovetailed tenons on the ends of the aforesaid connecting rail which tenons being inserted into the grooves will connect the ends of the sofa in a permanent manner.

The ribs U fastened on the inner sides of the ends A of the sofa to which the back B and seat of the sofa are hinged are also grooved on the under sides with longitudinal dovetailed grooves into which are inserted dovetailed tongues formed on the upper edges of the ends of a drawer Q to hold the bed clothes &c. This drawer Q is also made so that it can be folded for packing by having one end of each end piece hinged to the front of the drawer while the other end is united by dovetailed mortises and tenons, the back and front of the drawer are hinged to the bottom by canvas or metal or other

hinges. This draw when inserted into its proper place in the grooves in the rails of the end assists in strengthening the connection of the parts of the sofa.

The gudgeons R having the double shoulders and round necks between them are fastened to the front rail L and turning in the hooks or openings in the plates V fastened to the ribs U of the ends A of the sofa and secured to the under side of the projection b on the inside of the front rail L at the ends thereof; but they may be secured in any suitable place and in any convenient manner.

The hinges D by which the back is hinged to the side ribs aforesaid are secured to the back ends of the said ribs and on the underside thereof; or in any convenient situation. The hinge which attaches the frame of the bottom to the frame of the back is composed of cloth or any suitable material and extends the whole length of the back of the sofa.

The spring catches P which holds the folding parts of the ends of the sofa in connection with the stationary parts are attached to the ends of springs fastened to the ribs of the ends of the sofa and extend at right angles therefrom through mortises in their stationary ends A and into corresponding mortises in the folding ends A. These springs and catches are pressed down and the catches disengaged from the folding ends by the front rail L striking upon the springs in turning on its gudgeons.

What I claim as my invention and which I desire to secure by Letters Patent is—

1. In constructing the sofa with folding ends so as to admit of being opened to form a support and head and foot board for the back when let down to form a bed as described.

2. The falling back in combination with the turning rail as described.

3. The mode of attaching the turning front rail to the permanent ends in combination with the dovetailed connection of the back rail as described by means of which combination the sofa can be put together and taken to pieces so as to render it portable as before described.

JOEL PRATT, 3d.

Witnesses:

THOS. H. SEYMOUR,
FREDK. PORTER.