(No Model.) 2 Sheets—Sheet 1.

S. N. HISER.

STRETCHER.

No. 524,824. Patented Aug. 21, 1894.

Fig. 2

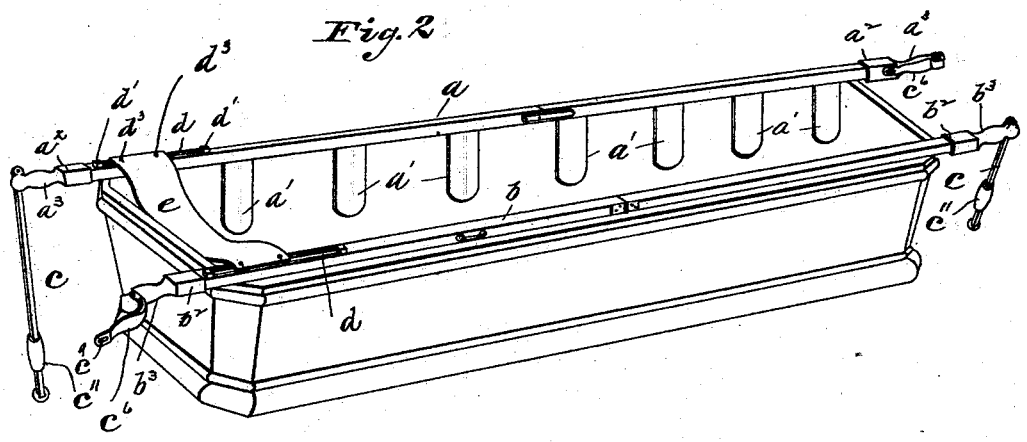


Fig. 1

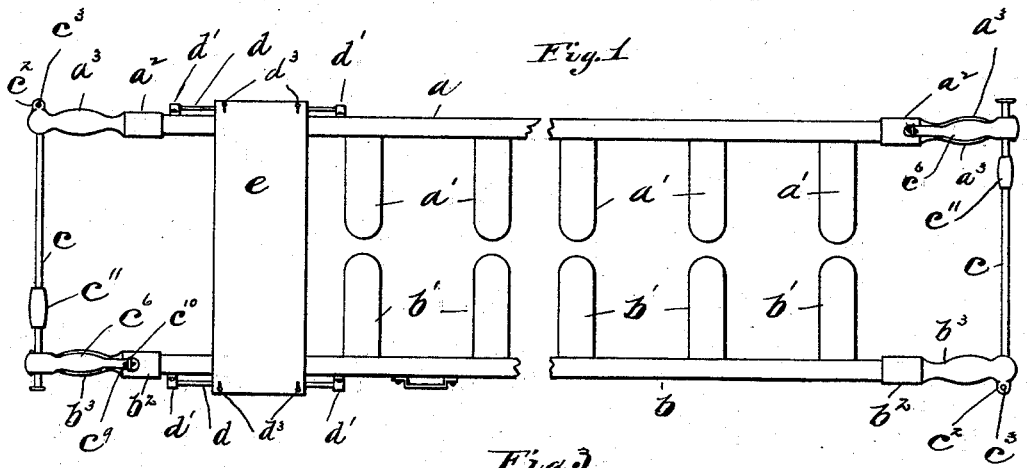


Fig. 3

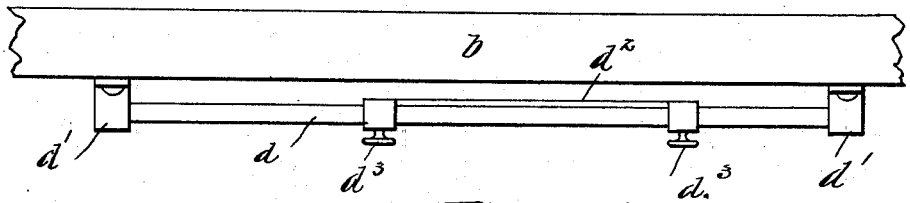
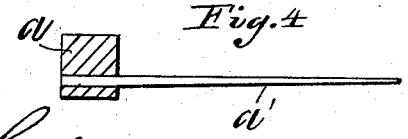


Fig. 4



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(No Model.) 2 Sheets—Sheet 2.

S. N. HISER.

STRETCHER.

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Fig. 8

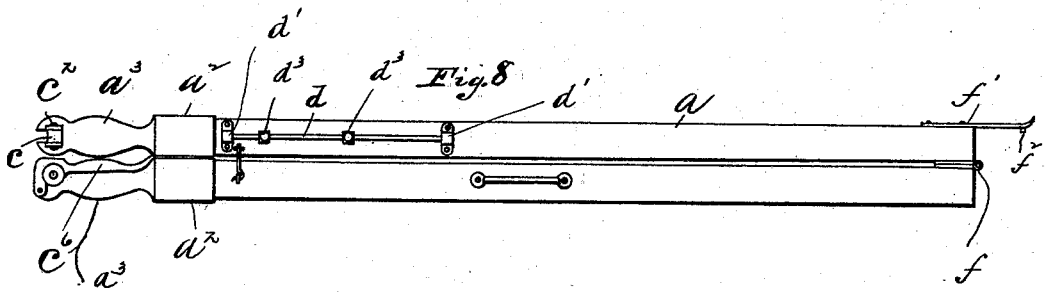


Fig. 5

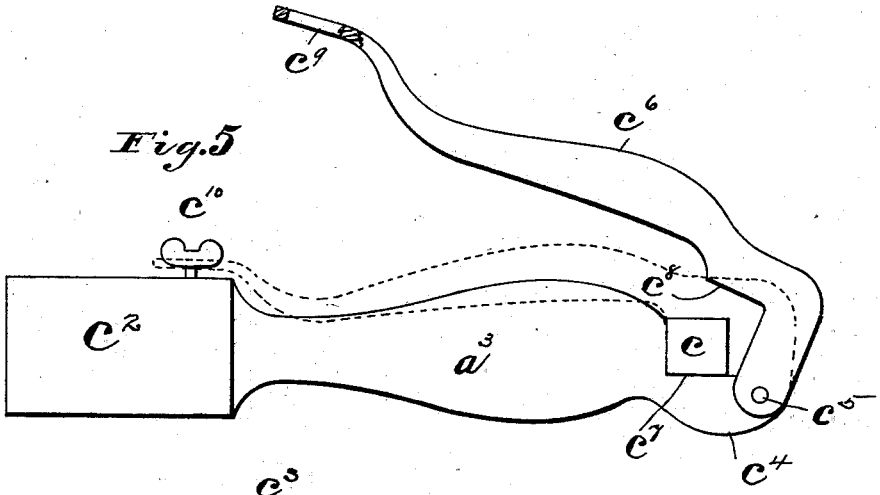


Fig. 6

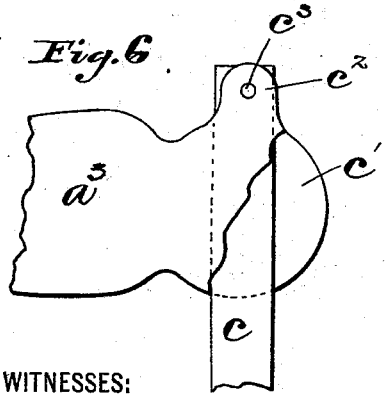
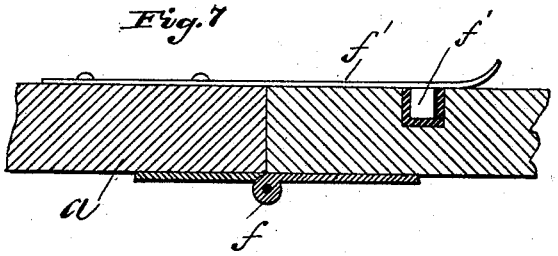


Fig. 7



WITNESSES:

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Chas. I. Wetele

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UNITED STATES PATENT OFFICE.

SHERMAN N. HISER, OF SPRINGFIELD, OHIO, ASSIGNOR OF TWO-THIRDS TO EDGAR N. LUPFER AND CHARLES H. HISER, OF SAME PLACE.

STRETCHER.

SPECIFICATION forming part of Letters Patent No. 524,824, dated August 21, 1894.

Application filed February 2, 1894. Serial No. 498,894. (No model.)

To all whom it may concern:

Be it known that I, SHERMAN N. HISER, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Stretchers, of which the following is a specification.

My invention relates to improvements in stretchers, and the special object of my invention is to provide a stretcher of novel construction, particularly adapted for handling disabled and deceased persons.

In handling disabled and deceased persons, particularly the latter, with the appliances now in use, a great deal of difficulty has been experienced in the lifting and placing of the bodies of such persons in position, and for the most part the lifting of corpses from a bed to a cooling board, or from either to a casket, has been accomplished by human efforts without the aid of appliances whatsoever. The handling of a large body by this method is fraught with much difficulty, and frequently with serious accidents. To obviate these difficulties, and to provide an adjustable stretcher adapted to the handling of bodies with facility, is the object of my invention.

To this end my invention consists essentially in forming a stretcher of two parts having inwardly projecting portions adjacent but independent of each other, and connecting devices at the ends by which the parts may be connected or disconnected, as desired.

My invention further consists in the various constructions and combinations of parts as will more fully appear from the following description and claims thereto attached.

In the accompanying drawings, Figure 1 is a plan view of my improved stretcher. Fig. 2 is a perspective view illustrating the manner of using the same for depositing a body into the casket. Fig. 3 is a side elevation illustrating the adjustable head rest. Fig. 4 is an end elevation of one of the rails, showing the projecting portion in side elevation. Fig. 5 is a detail view of one of the handles and the connecting devices. Fig. 6 is a detail view of the same. Fig. 7 is a detail view showing the hinged connection. Fig. 8 is a side elevation showing the device folded for transportation or storage.

Like parts are represented by similar letters of reference in the several views.

In constructing my improved stretcher I preferably employ side rails, a and b, each provided with inwardly extending projections or fingers a' b', which projections or fingers are preferably arranged so as to stand opposite each other when in their operative position. These side rails and fingers are each preferably made of wood, though any other material may be used if desired. The projections or fingers are tapered from the rails toward their free ends, and are adapted to overlap slightly, or to be slightly separated in the adjustment of the stretcher, as will hereinafter more fully appear.

The rails a and b are each preferably provided at the end with socket pieces a^2 and b^2, preferably cast in metal so as to fit over the ends of said rails; said socket pieces being preferably cast integral with handles a^3 b^3. To one of the handles a^3 b^3 is hinged a connecting bar c, the end of the handle being provided with a slotted opening c' and projecting ears c^2 for this purpose; the bar being pivoted at c^3 between the respective ears c^2, so as to rest in the slotted opening c' when in the normal position. Each of the other handles a^3 b^3 is provided at the outer end with a projecting portion c^4, to which is pivoted at c^5 a clamping lever c^6. This projection c^4 and the clamping lever c^6 are provided with bearing seats c^7, c^8, adapted to rest on opposite sides of the connecting bar c and hold the same firmly in position in the handle to which the parts are connected. The end of the lever c^6 is provided with a slotted opening c^9, adapted to fit over a button or other suitable fastening device c^{10}, arranged on said handle, so that when the lever is forced downwardly until the bearing c^8 rests on the connecting bar c, the said lever will be in the position shown in dotted lines in Fig. 5. By pressing said lever firmly toward the handle, the fastening device c^{10} may be turned so as to hold the lever in this position and thus firmly clamp the bar c. By loosening these clamp-

ing levers the respective side rails may be moved to or from each other to adjust the width of the stretcher.

Near one end of each of the side rails I provide a small rod or bar d, which may be secured to the side rails by small clips or fastening devices d', and on this bar d I mount a sliding support d^2, having small lugs or buttons d^3, onto which is buttoned a strip of canvas, or other suitable flexible material, e, which serves as a head rest.

Each of the connecting rods c is preferably provided with a handle c^{11}. It will be understood that one of the connecting rods c is hinged to one of the side rails, a, and the other connecting bar to the side rail b, said bars being clamped by clamping devices to the opposite side rail. Means are thus provided by which the said side rails may be readily connected or disconnected, and when so disconnected the projecting portions may be slipped from opposite sides under a body while lying on a bed, table or cooling board, after which the parts may be connected together, as described, the head rest buttoned to the movable supports and adjusted back or forth thereon so as to support the head in the proper position. When thus mounted the body may be carried the same as on an ordinary stretcher.

In placing the body in a casket, the stretcher is lowered so as to rest on the casket, after which the respective connecting bars are disconnected, and by using said bars as levers an operator at each end of the stretcher may turn the respective side rails so as to allow the body to slip gently through the same and between the projecting portions of the respective parts, said projecting portions being adapted to press back the linings of the casket and hold them in their proper position while the body is lowered gently into the same. After the body is in position one end of the head rest may be disconnected and the head lowered to the proper position.

If desired, the rails a and b may each be formed of a single piece, or they may be hinged together, as shown, so as to fold up as indicated in Fig. 8. When so hinged, the hinges f are placed on the bottoms of said side rails with the ends of the respective parts abutting, as shown in Fig. 7, so as to properly sustain any weight which may be placed on the stretcher. A small connecting device f' is preferably provided on the opposite side of said rail from the hinge to prevent the parts of the rail from turning on their hinged connection in any operative position which the rails may assume. Any suitable device may be used for this purpose. I have shown a small spring catch f', secured at one end to one part of the rail and provided on the other with a projecting portion f^2, to fit in a socket in the other portion of the rail.

It is quite obvious that the construction of a device of this character may be variously modified so as to accomplish the same result without departing from the spirit of my invention. I do not therefore limit myself to the constructions shown, but

I claim, broadly, as my invention—

1. A stretcher consisting essentially of two parts, each having inwardly extending projections arranged adjacent to but independent of each other, and connecting devices at or near the ends of said parts, substantially as specified.

2. A stretcher formed of two parts, each having inwardly extending projections adjacent to but independent of each other, handles at the ends of the respective parts, a hinged bar attached to each of said parts and adapted to form a connection between the same, said bar being capable of use as a lever for supporting and turning said parts, substantially as specified.

3. A stretcher consisting essentially of side rails having inwardly extending projections adjacent to but independent of each other, a hinged bar on each of said side rails and clamping devices adapted to connect said hinged bar to the other side rail, substantially as and for the purpose specified.

4. In a stretcher formed of two parts, as described, each of said parts having inwardly extending projections and hinged connecting devices, and an adjustable detachable head rest, substantially as specified.

5. A stretcher consisting essentially of side rails, and inwardly extending projections on said side rails, said projections being beveled or tapered, as described, and connecting devices on the ends of said side rails for connecting said side rails together, substantially as specified.

6. In a stretcher, side rails each having a socket piece formed integral with the handle at each end thereof, one handle of each side rail being provided with a hinged bar and the other handle of each of said side rails having a clamping device, as described, adapted to clamp said bar so as to be adjustably secured thereon, substantially as and for the purpose specified.

7. In a stretcher, side rails having inwardly extending projections adjacent to but independent of each other, and connecting bars hinged at opposite ends to the respective side rails, and clamping devices on each of said side rails by which said bars may be adjustably connected thereto, a detachable movable head rest connected to said side rails, and a handle on each of said connecting bars, substantially as specified.

8. In a stretcher, side rails having inwardly extending projections, as described, each of said side rails having a socket piece with a handle formed integral therewith, a hinged bar on one of said handles of each of said side rails, and a clamping device on the other handle of each of said side rails, said clamping devices being provided with oppositely ar-

ranged bearing seats to support said bar, and a fastening device for securing said seats in contact with said bar, substantially as specified.

9. The combination with the side rails, of a hinged connecting bar connected to one of said side rails and a pivoted lever connected to the opposite side rail, a projection on said side rail opposite to said hinged lever, and bearing faces on said projection and lever, respectively, adapted to clamp said bar, and a holding device for securing said lever in position to clamp said bar, substantially as specified.

10. The combination in a stretcher, of side rails having inwardly extending tapered projections, as described, a detachable head rest supported on adjustable supports on each of said side rails, and hinged connecting devices at the respective ends of said side rails, said connecting devices being each hinged to one of said side rails only, so as to turn only in a plane parallel with said projecting fingers, substantially as specified.

In testimony whereof I have hereunto set my hand this 30th day of January, A. D. 1894.

SHERMAN N. HISER.

Witnesses:
ROBERT C. RODGERS,
CHAS. I. WELCH.