

LYON & CURTIS.  
HEAD REST.

No. 104,473.

Patented June 21, 1870.

FIG. 1

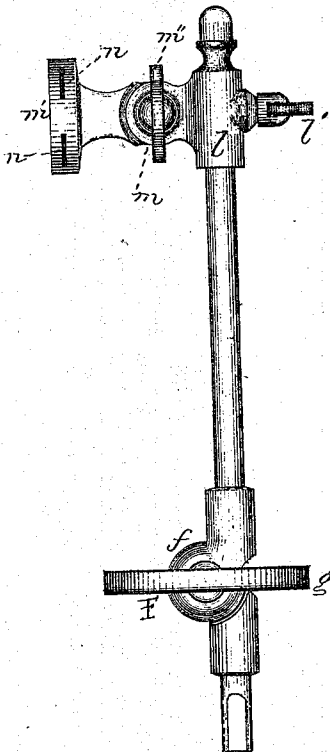


FIG. 2

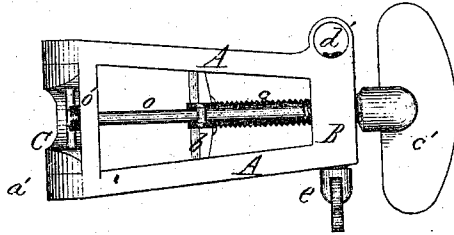


FIG. 3.

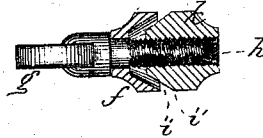


FIG. 5

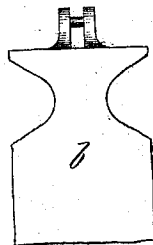
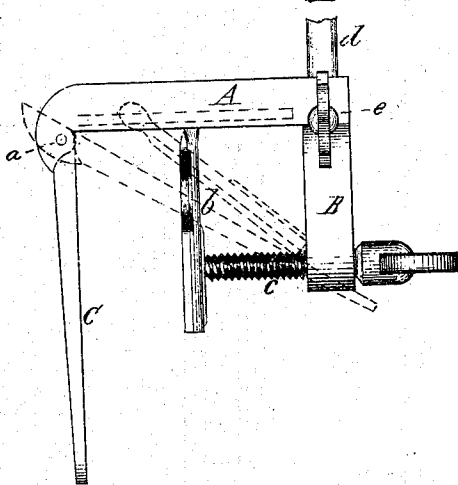
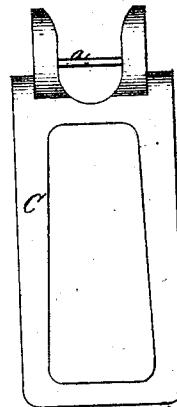


FIG. 4



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Paxton Lyon,  
Charles M. Curtis,  
By J. A. Curtis, their Attorney.

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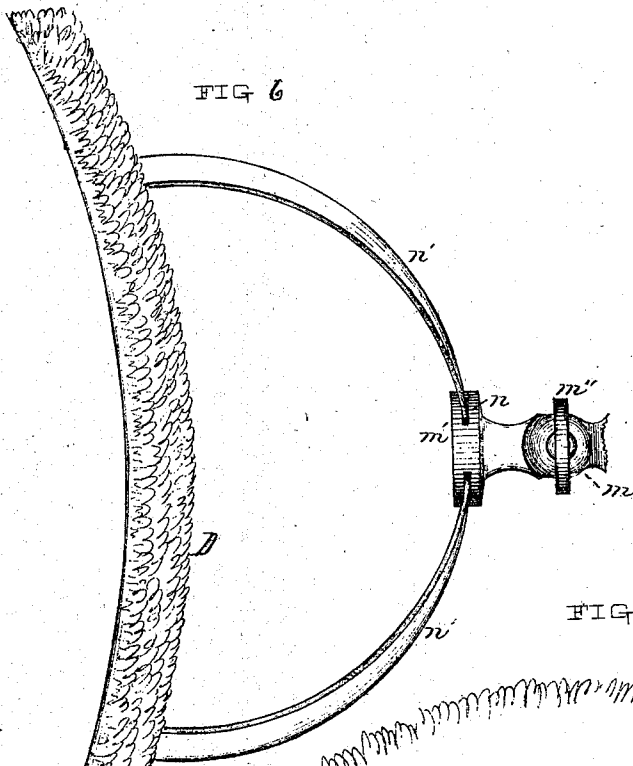
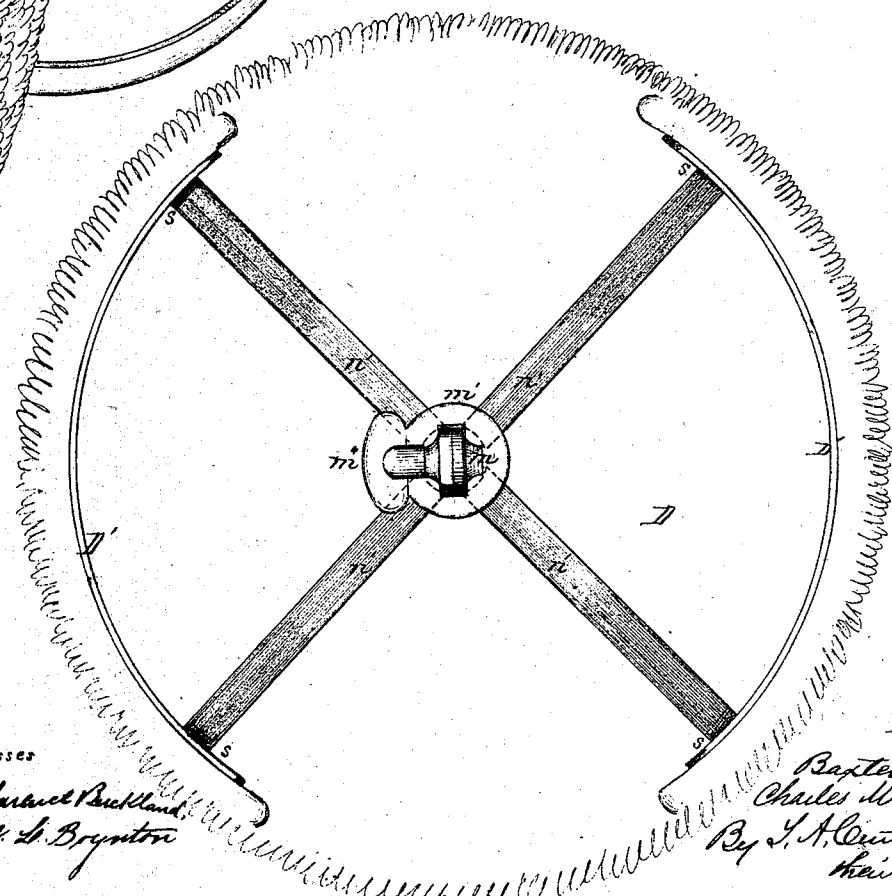


FIG. 7



Witnesses  
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# United States Patent Office.

BAXTER LYON AND CHARLES M. CURTIS, OF SPRINGFIELD, MASSACHUSETTS.

Letters Patent No. 104,473, dated June 21, 1870.

## IMPROVED HEAD-REST.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, BAXTER LYON and CHARLES M. CURTIS, of Springfield, in the county of Hampden and State of Massachusetts, have invented a new and useful improved Head-Rest; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, and to the letters of reference marked thereon, in which—

Figure 1, plate 1, is a side elevation of the standard and the clamp of a head-rest made according to our invention;

Figure 2 is a plan view of the clamp;

Figure 3 is a transverse section of the tapered joint;

Figure 4 is a front view of one of the clasps;

Figure 5 is a front view of the smaller clasp;

Figure 6, plate 2, is a side view of the head-piece as it appears in place; and

Figure 7 is a back view of the same.

Our invention relates to the portable head-rests designed to be used by attaching them to the backs of chairs or seats, and is particularly adapted for use by travelers in railway cars; and

It consists of a clamp, having a perforated jointed clasp attached to the frame or top piece of the clamp, the other clasp being a solid plate hung upon a horizontal wire or rod, the two clasps being secured to the seat-back by means of a thumb-screw passing through a portion of the clamp.

A vertical hole is made in the main part of the clamp into which may be introduced a rod, which may be secured at any desired height therein by means of a set-screw. This rod is jointed with a tapered joint, and to the top of said rod is secured, by means of a set-screw, a jointed piece, having holes or mortises made therein, into which are inserted four curved springs, having attached thereto a frame, of metal or other suitable material, to which is secured a piece of cloth or other substance.

That others skilled in the art may be able to make and use our invention, we will now proceed to describe its construction and mode of operation.

In the drawing—

A represents the two main bars of the clamp, having jointed thereto, at one end, the clamp C, which may be moved upon the pivot *a*, as indicated in dotted lines in fig. 1.

The cross-piece *o* connects the bars A together at one end, and the piece B connects them at their other end, said piece B projecting downward as far as desirable.

To the bar *o* is firmly secured the rod or wire *o*, which extends nearly to the piece B, and which serves as a spring, upon which is suspended freely the small

clasp *b*, which is free to move in either direction along the rod *o*, and a thumb-screw, *c*, operates through a threaded hole made in the lower part of the piece B.

The clasp C is perforated or open in its central portion, as shown in fig. 2, and also more fully in fig. 4.

A vertical hole, *d*, is made in the part B, and a set-screw, *e*, is turned through the part B and into said hole *d*.

A rod, *d*, is inserted into said hole, and secured at any desired height by means of said set-screw *e*.

This said rod *d* is jointed at F, said joint consisting of the piece *f*, which has a conical interior seat, *i*, into which fits well the conical part *i* of the piece *k*.

A hole is made through the piece *f*, through which passes a thumb-screw, *g*, its thread engaging with the thread made in the hole *h*, so that, when the said thumb-screw *g* is turned in tightly, the conical part *i* is drawn firmly in contact with the conical seat *i* in the part *f*.

To the top of the rod *d* is secured, by means of the set-screw *l*, the socket or piece *l*, to which is jointed, by means of a joint similar to that already described, the circular piece *m*, having the radial mortises or holes *n n* therein, into which are inserted, fitting well therein, the spring pieces *n n*, as shown in figs. 6 and 7 in plate 2. These spring pieces *n* are attached, at their other ends, to the pieces D, which may be made of metal or other suitable material, to which is properly secured the cloth piece D, either by riveting or sewing, and which may be suitably ornamented around the edge, if desirable. This cloth piece and its frame D are represented as circular in the drawing, but any convenient form may be used instead, either oval, square, or any other form desirable.

The operation of the device is as follows:

The clamp is placed upon the back of a car-seat or chair, with the upper edge of the back between the two clasps C and *b*, and, if the thumb-screw *c* is turned against the piece *b*, said piece, being suspended freely upon the spring rod *o*, will readily adjust itself to the particular form of the seat-back, while a small portion of the cloth or upholstery upon the front of the seat-back will be pressed out into the central opening in the clasp C, which operates to give the said clasp a firmer hold upon the seat-back.

The inside of the piece *b* may be covered with plush or cloth, to prevent defacing the back of the seat-back, if made of wood, and to assist in securing a firmer hold upon the seat-back.

The rod *d* is inserted in the hole *d*, and secured at the desired height by the set-screw *e*.

The upper part of the rod *d* may be given any inclination backward or forward by turning it at the joint F and tightening the screw *g*, and the circular

block, which holds the springs *n'* of the head-piece D, may be given any desirable vertical inclination by means of the tapered joint *m* and the thumb-screw *m'*, and the head of the person, when the rest is properly adjusted, will rest comfortably and easily against the piece D.

For convenience in carrying it, the rod *d* may be removed from the hole *d'* and the clasp C folded up near to the piece B, in the direction indicated by dotted lines in fig. 1. The rod may be folded together at the joint F and the springs *n'* removed from the mortises or holes *n*, and said springs *n'* be folded down parallel with and alongside the frame D', and the cloth head-piece D and springs *n'* may be rolled up and conveniently carried either in the pocket or in the satchel, occupying very little space therein.

The joints *m* and F are tapered, so that more friction may be obtained between the piece *f* and the piece *k*, and the joint is thereby made much more rigid, and is more sure to be held secure from turning, by means of the thumb-screw *g*, when the device is being used.

The clamp may be designated as a whole by the letter A, as the other letters used, C, *b*, B, and *c*, merely designate the details of the clamp.

The bars *n'* may be made rigid, having no elastic qualities, and may be secured to the frame of the head-piece, and the elasticity of the cloth or other substance might then be quite sufficient for a practical and comfortable head-rest.

Having thus described our invention,

What we claim as new, and desire to secure by Letters Patent, is—

1. In a head-rest, a clasp, *c*, having a central opening made therein, or perforated, and jointed, at *a*, to the frame A, in combination with the thumb-screw *g*, small clasp *b*, and spring wire *o*, all constructed as herein described.

2. In combination with a head-rest constructed as described, the friction-joint F, having a conical seat, *i*, and a corresponding conical bearing, *i'*, fitting therein, the same being held firmly together by means of the thumb-screw *g*, operating in the threaded hole *h*, as herein described and for the purpose specified.

3. The bars *n'*; pivoted to a frame D', having attached thereto the cloth D, or other suitable material, said bars being secured in a socket or block, *m'*, having radial holes *n*, and made adjustable by means of the joint *m* and socket *l*, as herein described, for the purpose specified.

4. An improved head-rest, consisting of the clamp A, the jointed rod *d*, the block *m'*, pivoted to the socket *l*, and the head-piece D, having the bars *n'* attached to the frame D', all constructed substantially as described.

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CHARLES M. CURTIS.

Witnesses:

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M. L. BOYNTON.