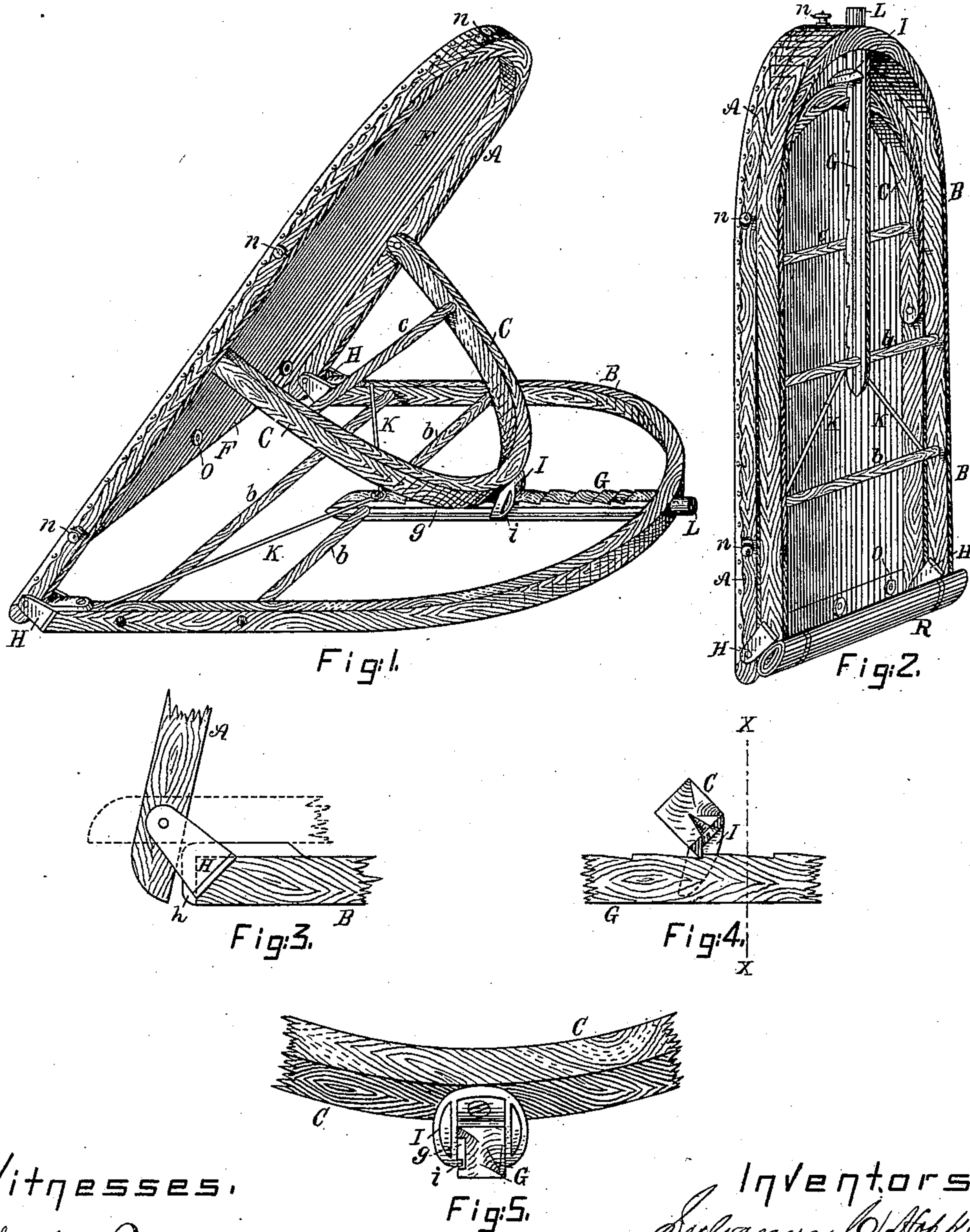


(No Model.)

S. C. HOPKINS & A. HIGGINS.
Adjustable Head Rest for Invalids.

No. 238,780.

Patented March 15, 1881.



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UNITED STATES PATENT OFFICE.

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ADJUSTABLE HEAD-REST FOR INVALIDS.

SPECIFICATION forming part of Letters Patent No. 238,780, dated March 15, 1881.

Application filed May 1, 1880. (No model.)

To all whom it may concern:

Be it known that we, SYLVANUS C. HOPKINS, of Boston, Massachusetts, and ATKINS HIGGINS, of Cambridge, Massachusetts, have jointly invented certain Improvements in Adjustable Head-Rests for Invalids; and we hereby declare that the same are fully described in the following specification and illustrated in the accompanying drawings.

The object of our invention is to provide a light, strong, cheap, and ornamental support for the head and upper part of the body. This support is designed more especially for the use of invalids in bed to elevate the body toward a sitting posture; but it is convenient for general use when a lounging position is desirable, either indoors or in the open air.

Our improvements relate to that class of head-supports in which a base is employed with an upper part pivoted thereto at the front end, and means of adjusting the latter at any desired angle to the horizon.

Our invention is embodied in a head-rest having its main frames of wood bent centrally to a semicircular form and hinged or pivoted together, as shown, and provided with an adjustable brace; also, in such pivoted frames having a bent wood brace pivoted to the inner edges of the upper frame, and made to fold within the same and engage when spread with the notches of a ratchet-bar; also, in a peculiar hinge adapted to connect the base and adjustable frame, and in the means of connecting adjustably the ratchet-bar and the brace.

In the drawings, Figure 1 is a rear view, in perspective, of my improved head-rest spread for use. Fig. 2 shows the same folded. Fig. 3 is a side view illustrative of the hinge-connection of the main frame; Fig. 4, a transverse section through the ratchet-bar and casting; Fig. 5, a longitudinal section of same.

The three principal frame-pieces are shown made of bent wood—viz., the base, the adjustable support, and the brace, the two former of uniform curve, and the latter bent in a somewhat smaller arc.

A is the adjustable supporting-frame, united to the base B by hinges H *h*, and having a canvas or other suitable fabric, F, stretched tightly and tacked or otherwise secured there-

to. The curved brace C is pivoted at its ends to the inner edges of the frame A, in such relation to said frame as to fold snugly and lie just within its curve, and in the same plane as that frame when the article is packed for transportation or storage. The brace C has preferably a stiffening-rod, *c*, spanning it, and the base B should also be provided with like transverse rods, *b b'*, to hold its ends in proper position, and stiffen the structure without the necessity of specially heavy stock in the parts A B C. The frames B and C stiffen the frame A, which has no transverse rods, but is purposely left free from everything but the fabric F, so as to be comfortable to the occupant.

G is a notched bar in the horizontal plane of the base B, extending from its curve forward, so that the tie-rod *b* may pass through and be secured to it. The bar G has a groove, *g*, in one of its sides, to receive a lug, *i*, formed on the casting I, which is secured to the middle of the curved brace C, and serves as a toe or paw to engage with the notches of the bar G. The groove is sufficiently wider than the lug *i* to allow for the rise and fall of the casting due to the notches of the bar. This casting is slipped onto the bar G before the parts are secured together, and when they are united, as in Fig. 1, the brace may engage with or move freely along the ratchet-bar, but cannot otherwise be separated from it, and the whole may be adjusted in any spread position or folded, as shown. A stout wire or small metal rod, K, connects the extremities of the frame B with the bar G. This serves to stiffen the base-frame still further under severe strain. A rubber fender, L, is attached to the outside of the base-frame B, in order to prevent friction upon the head-board of the bedstead.

The hinges H *h* are original in construction, and are specially adapted to our purposes. They are cast to fit the frames A and B, the central part having a horizontal and vertical portion, *h*, to fit upon the top and end of the base-frame, and the sides consisting of flanges H, between which the frame A is pivoted, so that its extremities may not twist or turn inward under the strain of use. Fig. 3 will make clear their construction and mode of operation. It exhibits, also, a peculiarity of our device,

that the upper frame projects somewhat beyond the lower one, and the fabric extends to this front end, so that when spread, as in Fig. 1, the supporting fabric will reach downwardly nearly into contact with the bed or base upon which the article rests, thus avoiding a disagreeable ridge or open space at that point.

We provide, when desired, studs *n* in the outer edge of the frame A, over which to button a thin mattress, cushion, or covering for the fabric and frame. Buttons *o* may be attached to the bottom of the fabric F, by which a removable rubber apron may be held in position with relation to the structure so as to be spread upon the bed or ground.

Some of the advantages of our improved head-rest are: combined lightness and strength, due to the bent wood-frames, non-liability to injure bedding or bedstead, because of the fender and the round corners of the frame, and noiselessness during adjustment, due to the movement of the casting I along the grooved wooden ratchet-bar.

We are aware that it has long been common to bend wood in the construction of baskets, carriages, chair-frames, and various implements, and that hinges permitting the parts united to fold flat together are very ancient; hence we do not claim these things, broadly; but

We claim as of our joint invention—

1. As a new article of manufacture, a porta-

ble head-rest for invalids, consisting of the pivoted frames A and B, bent centrally to a semicircular form, as shown, with a flexible fabric secured to the frame A, in combination with an adjustable brace pivoted at both ends to the frame A, and a ratchet-bar, G, and fender L, secured to the frame B, substantially as set forth.

2. The frames A, B, and C, made of wood bent to a semicircular form and pivoted together so as to open and close, as shown, the latter into the plane of the former, in combination with a central ratchet-bar and a stiffening-brace secured to the base B, for the purposes set forth.

3. The hinge-castings herein set forth, consisting of the central portions, *h*, adapted to fit upon the top and end of the base-frame B, and the side flanges, H, adapted to receive between them one end of the frame A and be pivoted thereto, for the purposes set forth.

4. The curved frames A B and the grooved ratchet-bar G *g*, in combination with the adjustable brace C and the casting I *i*, secured centrally thereon, substantially as and for the purpose set forth.

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