(No Model.)

W. S. SEYMOUR.

HEAD SUPPORT FOR BEDS.

No. 493,303. Patented Mar. 14, 1893.

Fig. 1.

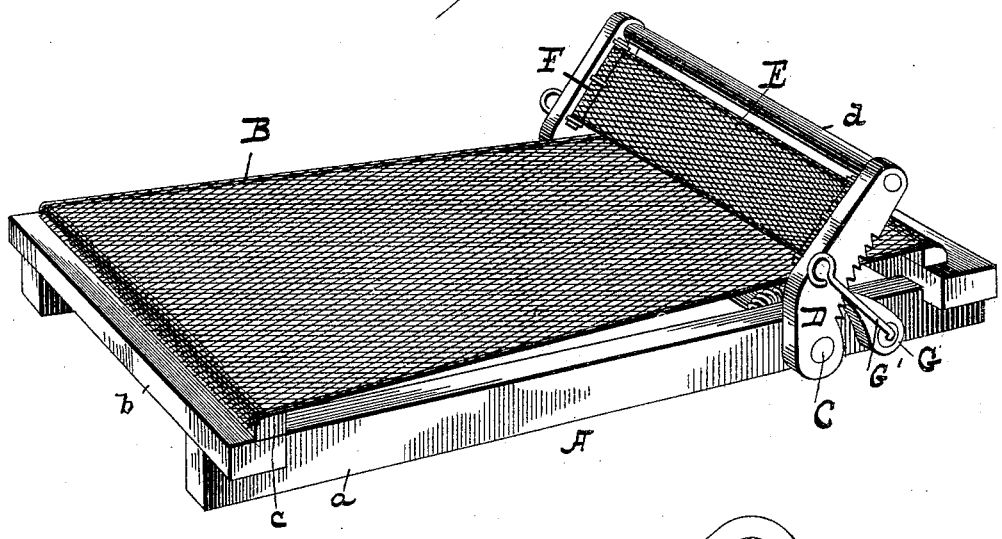
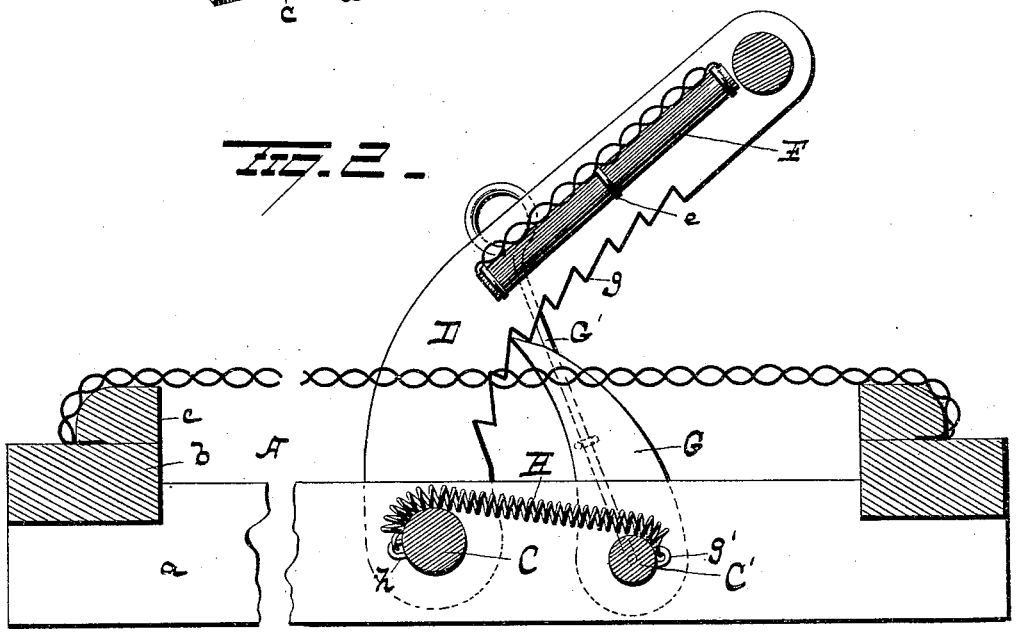


Fig. 2.



Witnesses
S. G. Nottingham
A. M. Bright.

Inventor
William S. Seymour
by H. A. Seymour
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM S. SEYMOUR, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO M. H. MARCUS & BRO., OF BALTIMORE, MARYLAND.

HEAD-SUPPORT FOR BEDS.

SPECIFICATION forming part of Letters Patent No. 493,303, dated March 14, 1893.

Application filed September 10, 1892. Serial No. 445,549. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. SEYMOUR, a resident of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Head-Supports for Beds; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in head supports for beds,—the object of the invention being to produce a head support for a bed which shall be exceedingly simple in construction, cheap to manufacture and effectual in the performance of its functions.

A further object is to construct the device in such manner that it can be operated equally well from either side of the bed without any liability of any parts of the device twisting or otherwise becoming out of proper alignment.

A further object is to construct a head support for a bed in such manner that the proper engagement of the dogs at both sides of the bed with their respective ratchet bars will be insured and so that their engagement will be simultaneous.

A further object is to so construct the device that it can be made to lie flat on the bed bottom when it is desired not to employ the head support.

A further object is to provide a head rest or support and the locking device with springs so constructed and arranged that they will serve the double purpose of maintaining the locking devices in their proper locked position and at the same time assist in returning the support to its closed position when the locking devices are released.

A further object is to construct the yielding portion of the head support in such manner that it will possess a proper amount of elasticity and be free to yield at all points in its length and at its longitudinal edges.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts as hereinafter set forth and pointed out in the claims.

In the accompanying drawings: Figure 1 is a perspective view illustrating my improvements. Fig. 2 is a longitudinal sectional view.

A represents the frame of the bed, comprising side bars *a* and end bars *b*. To this frame the bed bottom is secured, said bed bottom being of any preferred form of construction. For convenience of illustration I have shown a woven wire bed bottom having my improvements applied thereto. When this form of bottom is employed I prefer to secure strips *c* to the end bars *b* and to secure the ends of the woven wire bottom B to said strips. By this means the bed bottom B is elevated somewhat above the frame A so as to give room for certain parts of the head support hereinafter described. It is evident that instead of providing the strips *c*, the end bars *b* may be made of greater thickness than is usual.

The side bars *a* of the frame A are perforated at points in proximity to the head of the frame for the accommodation of an oscillatory bar or shaft C, the ends of which project somewhat beyond the said side bars and have arms D secured thereto. The arms D are preferably curved and at their free ends are connected together by means of a rigid rod or bar *d*.

Extending from one arm D to the other is a yielding head rest E, preferably of woven wire such as used for the bed bottom, although other yielding material could be employed if desired. In attaching the yielding material E to the arms D, dowels or rods F are passed through the meshes of the wire at the ends, and these dowels, together with the ends of the yielding material are secured to the arms D by means of staples *e*. From this construction and arrangement it will be seen that both longitudinal edges of the yielding material are free and that the yielding material or head rest will be permitted to yield freely at all points between its ends.

By making the arms D curved, the yielding head rest can be made to lie flat upon the bed bottom when it is not desired to employ a head rest.

Mounted at its ends in the side bars *a* of the frame A in proximity to the oscillatory shaft C is another oscillatory shaft C′. The extremities of the shaft C′ are projected somewhat beyond the side bars *a* and have

dogs G rigidly secured thereto, said dogs being adapted to engage ratchet teeth *g* in the forward edges of the arms D. Staples or pins *h* project from the shaft C preferably in proximity to its ends and similar staples or pins *g'* project from the ends of the shaft C'. Springs H are attached at one end to the staples or pins *g'* and at their other ends to the staples or pins *h*, said springs being made to partially embrace the shaft C. In practice I find that coiled springs such as shown in the drawings answer well, but other kinds of springs might be employed. From this construction and arrangement of springs, it will be clearly seen that the dogs will be maintained in contact with the ratchet teeth in the arms D when the head rest is in position for use, and that when said dogs are moved out of engagement with said ratchet teeth, the spring will assist in returning the head rest to its flat position on the bed bottom. Each dog G is provided with a handle G' whereby to operate it. These handles may conveniently consist of a piece of stout wire secured at one end to the dog and at the other end bent in the form of a ring or loop.

From the construction and arrangement of the device as above described, it will be seen that the arms D, comprising the frame of the head rest are rigidly connected to the ends of a shaft and consequently must move exactly in unison with each other when the device is adjusted from one position to another. It will also be seen that the dogs G are secured to the ends of another shaft and consequently when said shaft is turned both dogs must move in unison. It is therefore evident that the device may be operated from either side of the bed and both ends of the frame of the head rest and both dogs will move in unison, thus preventing the twisting of the frame of the head rest or the turning of the dogs independent of each other and insuring the proper engagement of said dogs with the ratchet teeth of the arms D at all times.

The device is very simple in construction, cheap to manufacture, will obviate the use of a bolster on the bed and is effectual in the performance of all its functions.

Slight changes might be made in the details of construction without departing from the spirit of my invention or limiting its scope, hence I do not wish to limit myself to the precise details of construction herein set forth, but,

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a frame, and a pair of shafts capable of rocking therein, of a head rest carried by one shaft, and dogs carried by the other shaft, and spring secured to each shaft the ends of said spring extending in opposite directions around the shafts, substantially as set forth.

2. The combination with a frame, a rock shaft supported in the frame, said shaft carrying a head rest, of a second rock shaft carrying dogs, and a spiral spring secured to each shaft in a manner to normally draw the head rest and dogs toward each other, substantially as set forth.

3. The combination with a pivoted head rest, having teeth thereon and pivoted dog, of spiral spring extending from the axis of the head rest to the axis of the dog whereby to rock said parts toward each other normally, substantially as set forth.

4. The combination with a hinged head rest, of a dog pivoted in proximity to the head rest and adapted to cooperate therewith, a spring extending from the axis of the head rest to the axis of the dog whereby to rock said parts toward each other normally, and handles secured to the dog for operating the latter, substantially as set forth.

5. The combination with a bed bottom, of a shaft mounted therein, arms having ratchet teeth secured to the ends of said shaft, another shaft mounted in the bed bottom, dogs secured to the ends of said last mentioned shaft and adapted to engage the ratchet teeth, and springs attached at their ends to said shafts in such manner as to maintain said dogs in engagement with the ratchet teeth and tend to force the arms to a closed position and a flexible head rest secured to said arms, substantially as set forth.

6. The combination with a bed bottom, of a shaft mounted therein, arms having ratchet teeth, secured to the ends of said shaft, a flexible head rest connecting said arms, another shaft mounted in the bed bottom, dogs secured to the ends of said last mentioned shaft and adapted to engage said teeth, handles carried by the dogs, and springs attached at one end to one of said shafts and at the other end to the other shaft, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILLIAM S. SEYMOUR.

Witnesses:
J. C. LOWENBACH,
HOWARD F. SAYLER.