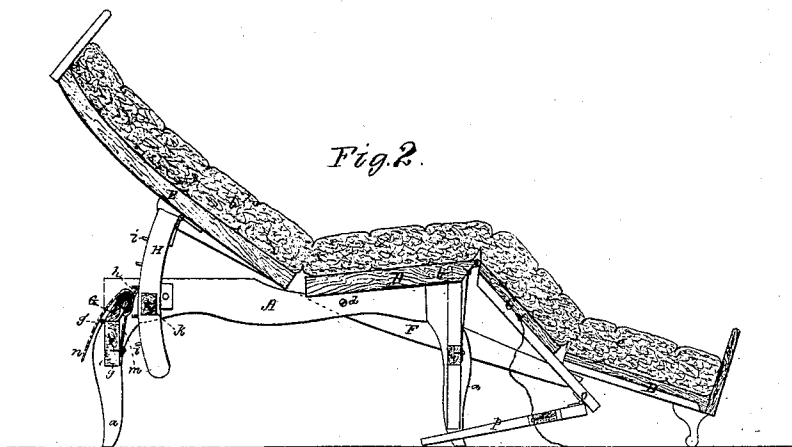
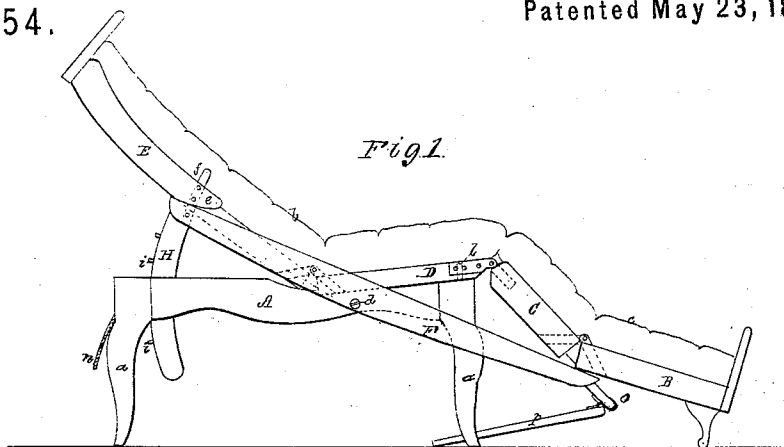


WILLIAM HEATH.

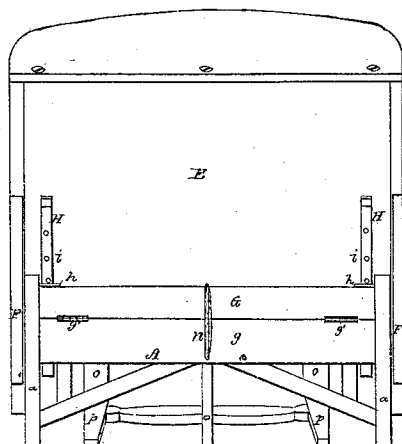
Improvement in Invalid-Bedsteads.

No. 115,054.

Patented May 23, 1871.



*Fig 3.*



Witnesses.

L. N. Piper

L. N. Moller.

W. Heath.

by his attorney.

R. W. Day

## UNITED STATES PATENT OFFICE.

WILLIAM HEATH, OF BATH, MAINE.

## IMPROVEMENT IN INVALID-BEDSTEADS.

Specification forming part of Letters Patent No. 115,054, dated May 23, 1871.

*To all persons to whom these presents may come:*

Be it known that I, WILLIAM HEATH, of Bath, of the county of Sagadahoc, in the State of Maine, have invented an Improved Invalid-Bedstead or Couch or Reclining-Chair; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 is a side elevation, Fig. 2 a longitudinal section, and Fig. 3 a rear elevation of the said bedstead, couch, or reclining-chair, as it appears when the back is in an elevated position.

In its main features it is analogous to the invalid-bedsteads represented in Letters Patent Nos. 59,600, 73,008, and 75,265, heretofore granted to me, though differing from them in other and important particulars, whereby it is simplified in its construction and operation, and thereby rendered cheaper as well as better.

My present improvement has reference to the arrangement of the levers for elevating the leg-frames, such levers, under such arrangement, being disposed on and pivoted to the outer sides of the main supporting-frame, and extended underneath the leg-frames and shoulders of the back-frame, they being connected with the latter by straps or hangers; and, furthermore, there is hinged to the supporting-frame, at its rear, a toothed stop-board, to operate with two bars depending from the back-frame, and provided with pins, knobs, or teeth, arranged in their rear edges, all being as hereinafter explained, and substantially as represented in the accompanying drawing.

In such drawing, A denotes the main supporting-frame, it being square or rectangular, and furnished with four legs, *a a a a*. On the front half or part of the said frame rests the seat-frame D, constituting part of the bedstead-frame, which is composed of the four sections or portions B C D E, all of which are to be arranged as represented, suitably connected by hinges, and properly cushioned or upholstered, the cushions being exhibited at *b c*. To maintain the seat-frame in its proper connection with the main frame A there extend up from the latter, near its front corners, two pins or tenons, *l l*, to enter mortises in the seat-frame, the whole being so as to enable the

seat-frame to be raised with the back-frame to an acute angle with the top of the main frame A. Arranged against the two opposite outer sides of the frame A are the leg-frame lifters or levers F F, each being supported on a fulcrum or pivot, *d*, projecting from or being fixed into the frame A. The sections B C are each of equal length transversely of the bedstead, and are to project beyond the section D and the supporting-frame A, so as to rest at or near their junction upon the front arms of the two lifters or levers F F. The rear arm of each of the said levers F F is extended underneath a shoulder, *e*, there being such a shoulder at each end of the back-frame E. Such arm is also connected to the back-frame by a hanger or strap, *f*, nailed or fastened both to the arm and frame. On the top of the rear girt *g* of the main frame A is the stop-board G, which, arranged as represented, is connected to such girt by hinges *g' g'*. Near its two upper corners there are fastened to the stop-board two teeth, *h h*, to engage with a series of pins, knobs, or teeth, *i i*, extended from the rear edges of two bars, H H, depending from and hinged to the back-frame and connected together by a bar, *k*. An elastic strap or band, *m*, of India rubber, fastened to the girt *g* and the stop-board at or near their middles, serves as a spring to draw the teeth of the stop-board up to the bars H H, a rope or cord, *n*, fixed to the stop-board, answering to enable a person to retract the stop-board in order to simultaneously disengage its teeth from those of the said bars H preparatory to either raising or depressing the back-frame.

By depressing the back-frame the two levers F F may be caused to force upward the leg-frames, which, in a horizontal position, may be supported by arms *o o* projecting from the frame C, and by legs *p p* hinged to such arms at their outer ends, these supports for the leg-frames being substantially such as are described and represented in my patent No. 75,265, dated March 10, 1868, and reissued May 26, 1868.

From the above it will be observed that in the construction of my present invalid-bedstead or reclining couch or chair, as it may be termed, I have dispensed with the gears and racks or windlass and ropes, as shown in my

former patents hereinbefore mentioned, and used for operating the back-frame, such frame in my present bedstead being manipulated by manual power applied directly to it.

By arranging the lifters or levers on the outside of the frame A I am enabled to strengthen such frame at its front to better advantage. The arrangement also greatly facilitates the application of the levers to or their removal from the frame.

The stop-board, with its adjuncts, as set forth, arranged as described, affords a ready means of effecting the adjustment of the back-frame to any desirable elevation.

I therefore claim, in the above-described invalid-bedstead—

1. The leg-frame levers or lifters F F, as arranged on and pivoted to the outer sides of the main frame A, and extended underneath and against shoulders *e* of the back-frame E, and connected with such back-frame, all substantially as described.

2. The toothed stop-board G and its spring *m*, combined and arranged with the main frame A and the back-frame E, and its depending toothed bars H, in manner and so as to operate as described.

W. HEATH.

Witnesses:

EZRA CUNNINGHAM,  
S. T. WOODWARD.