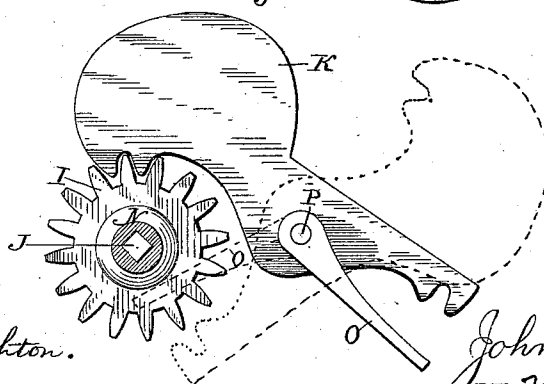
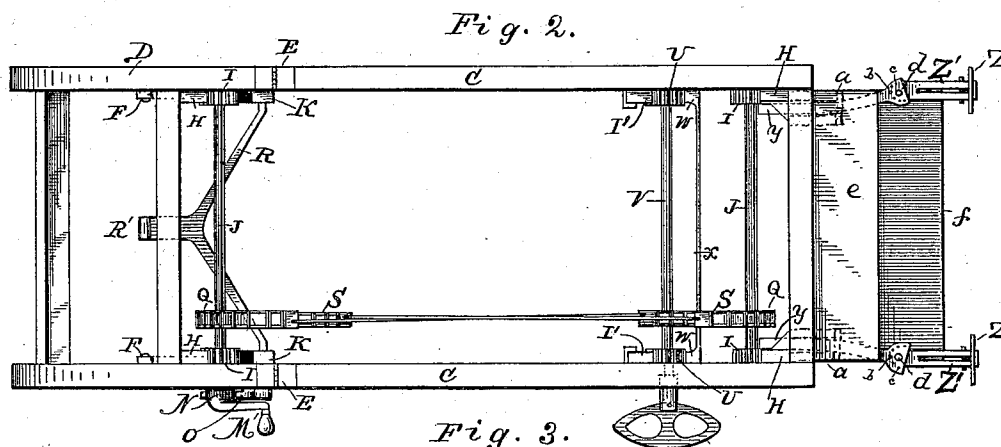
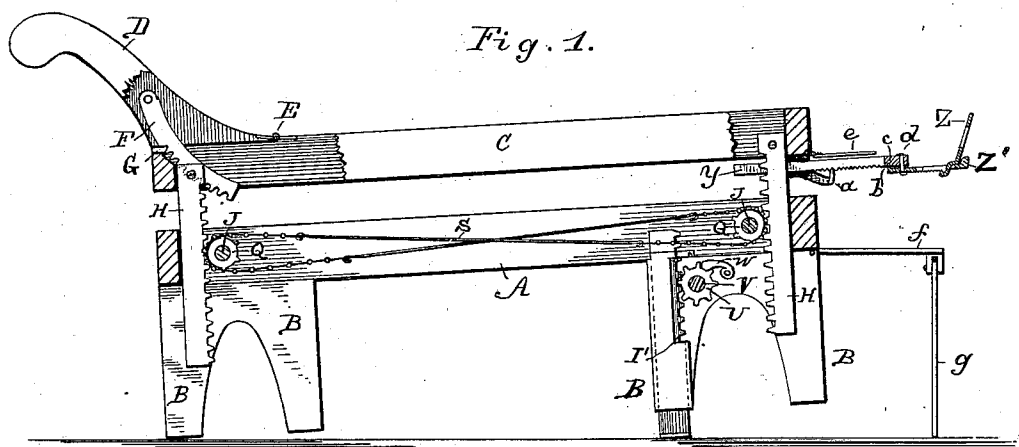


(No Model.)

J. BAGGS.  
SOFA BEDSTEAD.

No. 294,954.

Patented Mar. 11, 1884.



WITNESSES:  
*Thos Houghton.*  
*W. X. Stevens.*

INVENTOR:

*John Baggs*  
BY *Munn & Co*  
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# UNITED STATES PATENT OFFICE.

JOHN BAGGS, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-HALF TO  
CHARLES SHIPLEY, OF SAME PLACE.

## SOFA-BEDSTEAD.

SPECIFICATION forming part of Letters Patent No. 294,954, dated March 11, 1884.

Application filed August 17, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN BAGGS, a citizen of the United States, residing in Baltimore city and State of Maryland, have invented a new and useful Improvement in Lounges, of which the following is a specification.

My invention relates to that class of lounges to which various devices are attached for convenience in surgical operations; and the invention consists in the construction and combination of parts hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of my invention, partly broken away to show the interior. Fig. 2 is a plan view of the same, and Fig. 3 is a detail view of my ratchet-and-pawl attachment.

A represents the frame of the lounge, provided with four pairs of legs, B, firmly secured to it—two pairs at the head and two pairs at the foot. (See Fig. 1, showing one side of the lounge.)

C is the bed-frame, of the same width and length as lounge-frame, and resting thereon to form a finish flush with the same all around.

D is the head portion of the bed-frame, hinged to it at E to raise and lower. F F are two arched braces, having rack-teeth, and pivoted at their upper ends to the head portion, and adapted to be raised or lowered at their lower ends to disengage or engage two stop-pins, G, fixed in the bed-frame for the purpose of holding the head portion at any required angle of elevation.

H represents four metallic racks, secured at their upper end to the inner corners of the bed-frame C.

I represents four pinions, mounted rigidly on two shafts, J, engaging the four racks, H, to raise or lower them.

K represents four latches, of peculiar construction and operation, engaging the four pinions, I, to hold them from being revolved by the weight of the racks and their load. Each of these latches is provided with teeth at both ends, and may be reversed on its pivot to engage either end with its pinion. When the smaller end engages the pinion, the pinion cannot be turned either way; but when the

large end is engaged the pinion may be turned to raise the bed, but not to lower it. The weighted end tends to keep either end engaged. One end of the head-shaft J is squared, and a cranked socket-wrench, M, is fitted thereto, to be put on or off at pleasure. This wrench has a large cylindrical hub, N, upon which an arm, O, secured to latch-rod P, may rest, (see dotted lines, Fig. 2,) to keep the latches disengaged, so that the bed may be either raised or lowered so long as the wrench is on the shaft; but the latches will be free to engage their pinions when the crank is removed. When the crank is on the shaft and the heavy ends of the latches engage their pinions, the bed may be raised by the crank, but cannot be lowered. The two latches K are connected by a crooked shaft, R, which is provided with a handle, R', which may be reached from the head of the lounge for convenience in some operations. These two latches serve to prevent the descent of the bed, both at the head and the foot of the lounge, by means of the following-described connections: The two shafts J are provided with sprocket-wheels Q, upon which a chain belt, S, runs to communicate the motion of the head-shaft to the foot-shaft, so that both head and foot of the bed may be raised and lowered together. I' I' are two racks, provided with feet to stand on the floor. They are engaged by two pinions, U, on a shaft, V, which has its bearings in the lounge-frame, and is squared at one or both ends, to be turned by the socket-wrench before described. When the shaft V is turned one way, its pinions U climb the racks, thereby lifting the foot of the lounge from the floor until the desired angle of elevation is attained, when latches W on rod X, engaging the pinions, hold the foot of the lounge in position on the racks as legs. Y Y are two stirrup-bars sliding into the foot of the bed-frame, to be concealed when not in use, and sliding out to any required distance to extend the stirrups Z, attached to the ends of their extensions Z', to any required distance. The under side of each stirrup-bar is notched like a rack, to engage a stud, a, fixed in the bed-frame. These racks are first raised to disengage them from the studs, then slid out or in to

the required position and allowed to rest in the nearest notch on the stud, their rear ends prying over said studs as a fulcrum to rest against the bed-frame. The stirrup-extensions Z are loosely pivoted at *d* to their respective bars, and provided each with a fixed pin, *b*, adapted to register with a semicircle of pin-holes, *c*, in the bar. The pivot *d*, fitting loosely, allows the outer end of the extension to be raised to disengage the pin *b* from its hole. Then the extension may be turned to the angle required and allowed to rest its pin in the nearest hole to hold it at that angle. These stirrups Z are used to fasten the feet of the patient to, for different purposes, and their longitudinal and rotary adjustment is to adapt them to the various requirements for that purpose. Each stirrup Z is shaped as shown in the drawings, having a cylindrical neck passing through a slot in extension Z', and a T-shaped head to engage cross-notches in the under side of the extension. When the stirrup stands vertically, its head is disengaged from said notches; but when pushed forward its shoulder, resting on the top of the extension, causes the head to pry into a pair of notches. *e* is a shelf hinged to the bed-frame, to hang over and cover the stirrups when pushed into the bed-frame. It is raised by the act of drawing out the stirrups, is supported on their bars, and in this position serves as a shelf on which the surgeon may place his instruments. *f* is a shelf hinged to the lounge, to swing down flush with the end thereof to form a close finish. It is provided with two legs, *g*, hinged at their upper ends to the under side

of its outer edge. These legs may be folded into a groove in the shelf to conceal them when not in use, or they may be stood vertically on the floor to support the outer edge of the shelf. This shelf, when so supported, may be used as a foot-rest for the patient, or as a fixed stool for the surgeon to kneel upon in operations requiring such a position.

What I claim as my invention, and wish to secure by Letters Patent, is—

1. A shaft shaped at its end to be engaged by a wrench, and provided with a toothed wheel, and a frame in which said shaft is journaled, in combination with a latch pivoted to said frame, having teeth to engage said wheel, a wrench having a hub shaped to engage the end of said shaft, as described, and an arm secured to said latch to engage said hub, substantially as described, whereby the said latch will be restrained from engaging the wheel by the wrench when the latter is in place on the shaft, but will be free to engage said wheel when the wrench is removed.

2. The combination, with a lounge having legs at its four corners, of the racks I', having feet to stand on the floor, and connected to the lounge near its foot-legs, substantially as described, whereby they may slide vertically, the shaft V, journaled in the lounge, the pinions U, fixed on said shaft, the latches W, and the rod X, connecting them, journaled in the lounge, as shown and described.

JNO. BAGGS.

Witnesses:

G. B. GRAFF,

CHARLES A. DAVIS.