L. L. SCHELLINGER.

BED LEG.

APPLICATION FILED FEB. 6, 1917.

1,265,257.

Patented May 7, 1918.

Fig. 1.

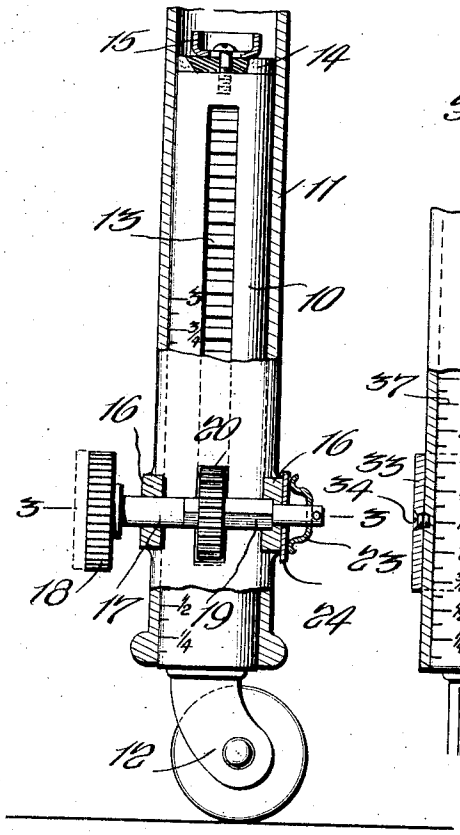


Fig. 6.

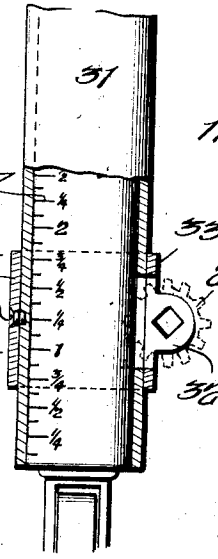


Fig. 2.

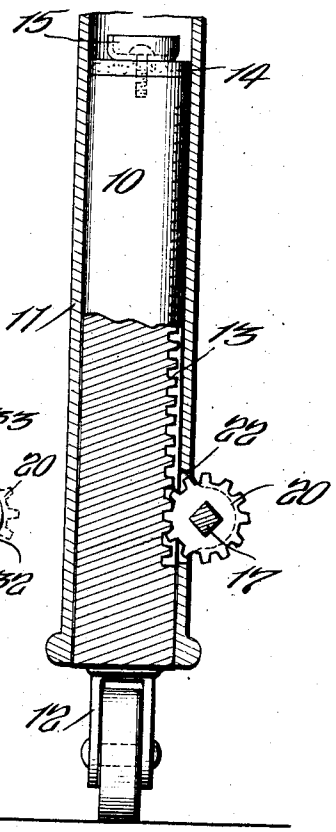


Fig. 7.

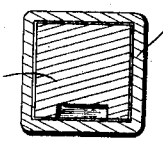


Fig. 4.

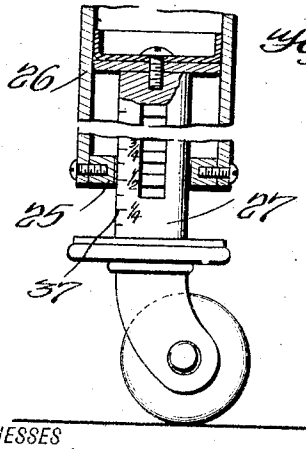


Fig. 5.

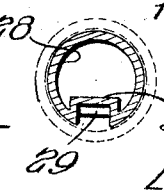
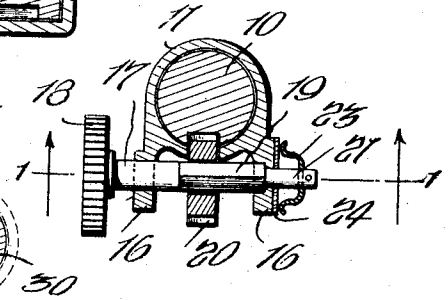


Fig. 3.



WITNESSES

E. A. Callaghan

Myron H. Clark

INVENTOR

LEE L. SCHELLINGER,

BY Munn & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

LEE L. SCHELLINGER, OF McGRAW, NEW YORK.

BED-LEG.

1,265,257. Specification of Letters Patent. Patented May 7, 1918.

Application filed February 6, 1917. Serial No. 146,879.

To all whom it may concern:

Be it known that I, LEE L. SCHELLINGER, a citizen of the United States, and a resident of McGraw, in the county of Cortland and State of New York, have invented a certain new and useful Improvement in Bed-Legs, of which the following is a specification.

My present invention relates generally to legs for beds and other articles of furniture, and more particularly to a tubular leg of this character having means whereby its length may be controlled in order to vary the distance between the surface supported thereby and the supporting surface on which the leg rests, whereby the surface supported by the leg, or more particularly by a plurality of such legs, may be leveled at any time, in order to compensate for inequalities in the supporting surface itself.

Certain other objects, residing as they do in the particular details of construction as proposed by my invention, will be readily apparent from the following description of the several parts thereof, reference being made to the accompanying drawing forming a part of this application, and wherein—

Figure 1 is a side elevation partly broken away and in section of the lower portion of a supporting leg as proposed by my invention;

Fig. 2 is a vertical longitudinal section taken therethrough in a direction at right angles with respect to Fig. 1;

Fig. 3 is a vertical longitudinal section taken substantially on line 3—3 of Fig. 1;

Fig. 4 is a sectional view illustrating a slightly modified form;

Fig. 5 is a horizontal section through the slightly modified form;

Fig. 6 is a vertical section illustrating a slightly modified form, and

Fig. 7 is a horizontal section illustrating another slightly modified form.

Referring now to these figures, and particularly to Figs. 1 to 3 inclusive, my invention contemplates the provision of a telescoping extension piece 10 within a hollow bed or other leg 11, said extension piece 10 carrying the usual caster 12 at its lower end, which project externally through the lower open end of the leg 11, and being also provided with a vertical longitudinal rack 13 in a plane parallel with the plane of its axis, and extending for the major portion of its length, the upper inner end of the extension 10 preferably having a washer 14 of a relatively soft material, and an oil cup 15 open at its base onto the washer 14, to feed oil to the latter.

The tubular leg 11 is, in accordance with my invention, provided adjacent its lower end, with a pair of parallel laterally projecting and spaced lugs 16, having alined openings forming bearings for a horizontal shaft 17, the latter of which is provided at one end with a milled head 18, whereby it may be rotated. The shaft 17 is also provided with an intermediate squared portion 19 slidably engaging the squared central opening of a gear wheel 20, the shaft 17 having at the end of its square portion 19 farthest from the milled head 18, a reduced extension 21 passing through the opening of one of the lugs 16, which latter is provided with an enlarged inner squared bore to receive one end of the squared portion 19 of the shaft, in the position shown in Figs. 1 and 3, in order to lock shaft 17 against rotation.

The tubular leg 11 is also provided with a vertically slotted opening 22, through which the gear wheel 20 partially extends to engage the vertical rack 13 of the extension or post 10, whereby upon longitudinal movement of the shaft 17 in its bearing lugs 16 to withdraw the engaged end of its squared portion 19, said shaft may be rotated by grasping the milled head 18, to rotate the gear 20 and in turn adjust the extension or post 10 inwardly or outwardly with respect to the tubular leg, dependent upon the direction of such rotation.

It is obvious that, upon rotation of the shaft 17 to adjust the extension or post inwardly of the tubular leg, the surface supported by the latter will be lowered, and that, when the shaft is rotated in the opposite direction, to adjust the extension of post 10 outwardly with respect to the tubular leg, the surface supported by the latter will be correspondingly elevated.

The reduced end 21 of the shaft 17 is further provided with a transverse opening adjacent its extremity, receiving the intermediate portion of a bow spring 23, the ends of the latter of which engage a washer 24 disposed against the outer surface of the adjacent bearing lug 16, so as to thus enable spring 23 to normally hold the shaft in locked position, as seen in Figs. 1 and 3.

It is not necessary that the post or extension 10 shall precisely interfit the tubular leg

11, inasmuch as by the use of a filler ring 25, secured to the internal surface of the lower end of the tubular leg 26, as seen in Fig. 4, an extension or post 27 may be utilized in connection with a tubular leg of considerably greater diameter.

Furthermore, instead of constructing the extension or post solid, as seen in Fig. 2, it may be hollow, as indicated at 28 in Fig. 5 wherein the vertical rack 29 is formed in connection with a longitudinal indented portion 30 thereof.

As seen in Fig. 6, the actuating shaft with its milled head as before described, may be mounted in connection with a leg 31 of comparatively thin material, through the ears 32 of a supporting band 33 disposed around the said leg and secured thereto by set screws 34.

As seen in Fig. 7, the leg 35 and its extension or post 36 may be square, or otherwise than cylindrical, and as seen in several of the figures, the post or extension may, in each case, be provided with graduations 37 vertically thereon, so that elevation of a bed, for instance, to a higher plane may be quickly accomplished and its former level maintained.

It is thus apparent that my invention provides exceedingly simple, inexpensive means for the purpose described, which will at the same time be durable, efficient, and effective for the intended purposes, and particularly useful in connection with hospital beds for adjusting as well as leveling the same.

I claim:

1. In combination with a tubular leg having a lower open end, and a side opening adjacent the said lower end, a post or leg extension adjustable within the said tubular leg having a caster at its lower end provided with a vertical rack, a pair of spaced laterally projecting lugs carried by the tubular leg at opposite sides of its opening, a shaft journaled through the said lugs having a milled head at one end and a reduced extension at its opposite end, a gear wheel having a squared opening and projecting partially through the opening of the leg and into engagement with the rack of the said extension, said shaft having an intermediate squared portion extending through and interfitting the squared opening of the gear wheel, and one of said lugs having a squared bore in its inner face into and out of which one end of the said squared portion of the shaft is shiftable by longitudinal movement of the latter with respect to the gear wheel and the said lugs.

2. In combination with a tubular leg having a lower open end, and a side opening adjacent the said lower end, a post or leg extension adjustable within the said tubular leg having a caster at its lower end provided with a vertical rack, a pair of spaced laterally projecting lugs carried by the tubular leg at opposite sides of its opening, a shaft journaled through the said lugs having a milled head at one end and a reduced extension at its opposite end, a gear wheel having a squared opening and projecting partially through the opening of the leg and into engagement with the rack of the said extension, said shaft having an intermediate squared portion extending through and interfitting the squared opening of the gear wheel, and one of said lugs having a squared bore in its inner face into and out of which one end of the said squared portion of the shaft is shiftable by longitudinal movement of the latter with respect to the gear wheel and the said lugs, and a spring normally resisting longitudinal movement of the shaft and adapted to retain the same in locked position.

3. In combination with a tubular leg having a lower open end and a side opening adjacent the said lower end, a post or leg extension adjustable within the said tubular leg having a caster at its lower end provided with a vertical rack, a pair of spaced laterally projecting lugs carried by the tubular leg at opposite sides of its opening, a shaft journaled through the said lugs having a milled head at one end and a reduced extension at its opposite end, a gear wheel carried and rotated by said shaft and projecting through the leg opening and into engagement with the rack of the post or extension, said shaft being shiftable longitudinally with respect to its gear wheel and the said lugs, relatively engaging means carried by the shaft and one of the lugs, and engageable and releasable by relative longitudinal movement of the shaft, whereby to normally lock the latter, and a spring engaging the shaft to normally hold the latter in locked position.

4. A tubular supporting member of the character described having a side opening and supports adjacent to said side opening, an extension or post projecting into said member through its lower end and adjustable with respect thereto, said extension or post having a longitudinal rack, a rotatable and longitudinally movable shaft journaled through said supports and having a handle, a gear carried by the shaft and projecting through the side opening of said supporting member into engagement with said rack, and relatively engaging means carried by said shaft and one of said supports and movable, upon longitudinal movement of the shaft, into and out of engaged position, to normally lock the shaft against rotation.

LEE L. SCHELLINGER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."