

UNITED STATES PATENT OFFICE

1,934,302

LUNG COLLAPSING HAMMOCK

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Application November 21, 1932

Serial No. 643,756

2 Claims. (Cl. 5—327)

In treating tuberculosis, it is often necessary or advisable to collapse one of the patient's lungs. This is now accomplished usually by plastic surgery, or by having the patient lie continuously for sixty days or more on a bag of shot or some other similar support placed under the affected side. Such supports are exceedingly uncomfortable and the discomfort caused by their use, often seriously retards the gains which would otherwise be made by the patient. Moreover, the supports are heavy and cumbersome and cause numerous inconveniences not only to the patients but to nurses and other attendants.

The present invention aimed to provide a new and improved support which would be free from such draw-backs as those enumerated, and successful use of a number of them has proven that such end has been attained.

The preferred form of the device is illustrated in the accompanying drawing, but variations may be made within the scope of the invention as claimed.

Fig. 1 is a perspective view showing the device in use.

Fig. 2 is a fragmentary end elevation.

Figs. 3 and 4 are detail sectional views on lines 3—3 and 4—4 of Fig. 2.

Fig. 5 is a fragmentary perspective view.

In the drawing above briefly described, the numeral 10 denotes two vertically elongated inherently rigid side frames having supports 11 between their ends to rest upon the usual side rails 12 of a bed, said side frames being of a height to project several inches above the mattress 13 and to project to quite an extent below the rails 12. A relatively long and narrow sling 14, preferably formed from canvas or the like, extends between the upper ends of the frames 10 and is connected therewith, and a tie 15, preferably a chain, extends between and connects the lower ends of said frames 10, for holding them in sling-supporting position.

Each of the side frames 10 is of substantially V-shape, with the upper portions of its side arms 16 disposed in parallel relation, said arms being preferably connected between their ends by a horizontal bar 17. Secured to the angular lower end of one of the frames 10, is a vertical plate 18 which spans said end, said plate having an opening 19 in which one end of the chain 15 is anchored. A similar plate 18' is provided for the other frame 10, said plate 18' having a slot 19' with which any of the links of the chain 15 may be engaged, to vary the effective length of said chain according to the width of the bed.

The ends of the sling 14 are provided with hems 20 and 20' which receive rods 21 and 21'. The ends of the rod 21 are connected in any preferred manner with the arms 16 of one of the frames 10, while the rod 21' and its receiving hem are positioned in a peripheral groove 22 in a reel 23 which is journaled between the arms 16 of the other frame. The reel is used for tightening the sling to the required extent and may be locked against retrograde rotation by any preferred means.

Preferably, the ends of the rod 21 are bent laterally at 24 and hooked into openings 25 in the arms 16 of the adjacent frame 10. The arms 16 of the other frame may well be provided with aligned openings through which a rod 26 is passed for rotatably mounting the reel 23. For turning this reel to stretch the sling 14 to the required extent, I provide a suitable lever or the like (not shown) which may be inserted into openings 23' in one end of said reel. This reel end is, in the present showing, provided with a peripheral flange 27 having spaced openings 28 through any one of which a locking pin 29 may be passed. This locking pin may merely abut one of the arms 16, or this arm may be formed with an opening 30 through which said pin is passed. By removing pin 29 and engaging an appropriate tool with the openings 16, the reel 23 may be rotated to stretch the sling 14 to the required extent. Reinsertion of the pin 29 will then lock the reel against retrograde rotation.

The patient lies upon the mattress with the affected side supported by the sling 14, as seen in Fig. 1, for the required length of time to cause the upward pressure of the sling and the downward pressure of the body, to collapse the affected lung, and throughout this tedious period, the patient is much more comfortable than when supported in conventional ways. Moreover, the improved support causes less trouble and inconvenience to all parties concerned and may be adjusted with ease without the necessity of disturbing the patient.

I claim:—

1. A device of the class described comprising two vertical side frames for disposition against the side rails of a bed, said frames being of substantially V-shape and having horizontal bars rigidly connecting the intermediate portions of their side arms, supports projecting laterally inward from said intermediate arm portions to rest on said side rails, a chain connected with the lower extremities of the two side frames and having an adjustable connection with one of the

latter, a sling whose ends extend between the upper ends of said side arms of said frames, and means connecting said sling ends with said arm ends.

- 5 2. A device of the class described comprising two vertical side frames for disposition against the side rails of a bed, each of said frames being of substantially V-shape and having a horizontal bar rigidly connecting the intermediate portions
10 of its side arms, supports projecting laterally inward from said intermediate arm portions to rest

on said side rails, vertical plates at the lower ends of the two side frames and rigidly joined to the lower ends of said side arms thereof, a chain having one of its ends secured to one of said plates, the other of said plates having a notch in which links at the other end of the chain may be engaged, a sling whose ends extend between the upper ends of said side arms of said frames, and means connecting said sling ends with said arm ends.

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