Oct. 12, 1926. 1,602,628

A. SCHWEIZER

TABLE FOR HOSPITAL BEDS

Filed Oct. 19, 1923

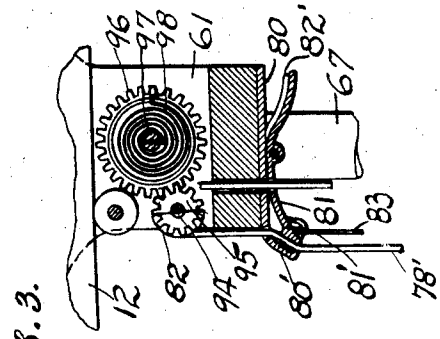


Fig. 3.

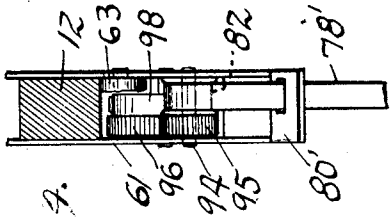


Fig. 4.

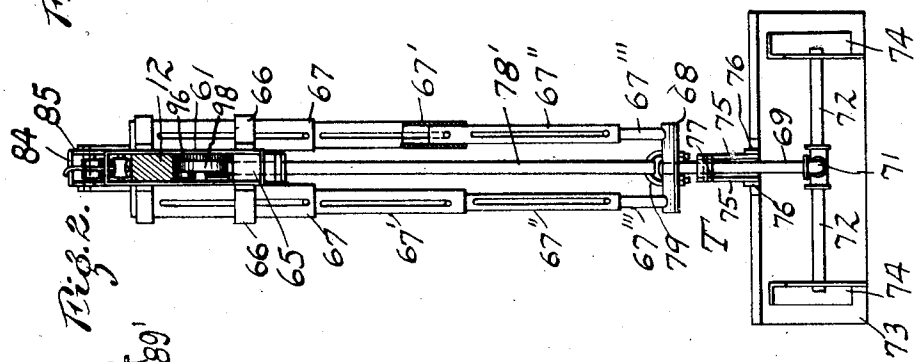


Fig. 2.

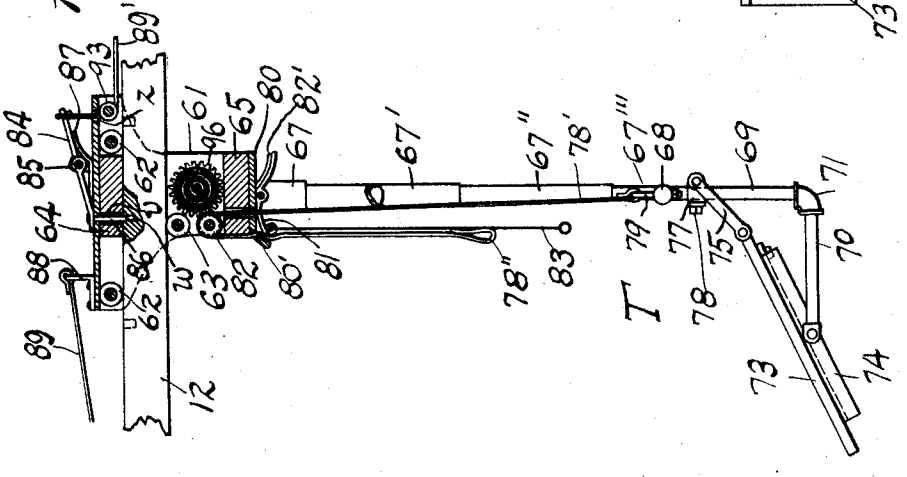


Fig. 1.

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UNITED STATES PATENT OFFICE.

ALTO SCHWEIZER, OF OBERBAYERN, GERMANY, ASSIGNOR TO CHARLES SCHWEIZER, OF ST. LOUIS, MISSOURI.

TABLE FOR HOSPITAL BEDS.

Application filed October 19, 1923. Serial No. 669,510.

My invention has relation to traveling and adjustable tables to be used in connection with a hospital bed, and consists in the novel features of construction more fully set forth in the specification and pointed out in the claims.

The present invention has for its main object the provision of a table suspended from a rail on which it travels; another object is to make the table adjustable in various positions as well as providing means for raising and lowering the table to different heights. This application is a continuation in part of my copending application Serial No. 571,870 filed June 30, 1922.

The specific features of the invention will be readily apparent from a detailed description of the invention in connection with the accompanying drawings, in which—

Figure 1 is a side elevation of my improved table with one wall of the housing for supporting the table broken away; Fig. 2 is a rear elevation of the table; Fig. 3 is an enlarged sectional detail of the housing showing raising and lowering mechanism of the table; Fig. 4 is a front elevation of the mechanism shown in Fig. 3.

Referring to the drawings, T represents a traveling table adapted to roll on a track or rail 12 which may be suitably supported over a bed or cot (not shown), said table comprising a housing 61 in which are two rollers 62, spaced apart and adapted to ride on the rail 12, and a roller 63 which bears on the under side of rail 12 to hold the table against rocking, a block 64 being fixed in the housing between rollers 62, and a block 65 closing the housing 61 at the bottom. Fixed to the sides of the housing 61 by straps 66 are tubes 67 to each of which is telescopically connected a series of telescoping sections 67′, 67″, and 67‴, and a cross-bar 68 is connected to the two lower sections 67‴, 67‴. A standard 69 is secured to the middle of the cross-bar 68, and a table supporting arm 70 is connected by an elbow 71 to the lower end of said standard, said arm having laterally projecting branches 72, 72, which support the table-board 73 by having angles 74, 74 fixed to the bottom of the table-board, rotatably mounted on them.

In order to hold the table-board 73 in properly inclined position, a pair of links 75, 75 are pivotally connected at one end to lugs 76, 76 projecting from the inner edge of said board, the other ends of the links being pivotally connected to a block 77 slidingly mounted on the standard 69, a set-screw 78 being provided to secure the block 77 in adjusted position. The table-board 73 may be raised or lowered by means of a strap 78′ secured at its lower end to a U-bolt 79 in the cross-bar 68, said strap passing through the block 65 and a toothed plate 80 and dog 81 mounted thereon, then over a pulley 82 in the housing 61 and downwardly from said pulley through an opening adjacent the toothed end 80′ of plate 80, a loop 78″ being provided at the free end of the strap 78′ for the patient to catch hold of when he wishes to raise or lower the table. The dog 81 is pivoted to the plate 80, and a spring 82′ causes the nose 81′ of said dog to bear on the strap 78′ and force it into contact with the teeth 80′ of the plate 80, thus binding the strap against movement in a direction to lower the table. However, the teeth 80′ are so pitched that the loop end of the strap may be pulled down to raise the table if desired. In order to release the dog 81 from the strap preliminary to lowering the table, a cord 83 is connected to the nose 81′ of the dog, a pull on said cord overcoming the tension of spring 82 and permitting the operator to let the table down by letting out on the strap 78′.

A lever 84 is pivotally mounted between a pair of ears 85, 85 over the top of the housing 61, the inner end of said lever carrying a pin 86 operating through a hole v in block 64, said pin being urged into one of a number of sockets w in the top face of the rail 12, by a spring 87 which is fixed to the top of the housing and bears against the outer arm of the lever 84, and a lug 88 is secured to the housing on the end opposite the lever. A cord 89 has one end secured to the lug 88, the cord then passing rearwardly to some part of the bed, and a cord 89′ passes beneath a pulley 93 mounted in the housing 61, and up through an opening z in the top of the housing to the free end of lever 84, where the cord is fastened. It will thus be seen that if the cords 89, 89′ are grasped by a patient on the bed and made taut, the lever 84 will be oscillated to pull the pin 86 out of the socket w when the table may be pulled forward or backward as desired.

In order that the table T may be easily

raised and gently lowered the pulley 82 is mounted on a shaft 94 which also carries a pinion 95. A gear 96 is mounted on an arbor 97 within the housing 61 and a coiled spring 98 has one end fixed to the arbor, and the other end to the gear 96 which meshes with pinion 95.

Now, when the table is lowered the pinion 95 will wind up the spring 98, which acts as a counter-balance for the table. On raising the table the unwinding of the spring will assist the operator to raise the table so that comparatively little force is needed.

Having described my invention, I claim:—

1. In an apparatus of the class described, the combination with a rail, a table carried by said rail, said table comprising a housing adapted to travel over the rail, a plurality of rollers in said housing resting on said rail, a table-board adjustably suspended from said housing, and suitable mechanism in said housing for raising and lowering said table and balancing the same in any position.

2. In an apparatus of the class described the combination with a rail, a table carried by said rail, said table comprising a housing adapted to travel over the rail, a pair of tubes composed of telescoping sections secured on opposite sides of said housing, said tubes being connected on their lower ends, a table board secured to the connected end of said tubes, means for moving the sections of said tubes to adjust the height of said table board, and means on the housing for securing said sections in any desired position.

In testimony whereof I hereunto affix my signature.

ALTO SCHWEIZER.