

No. 620,318.

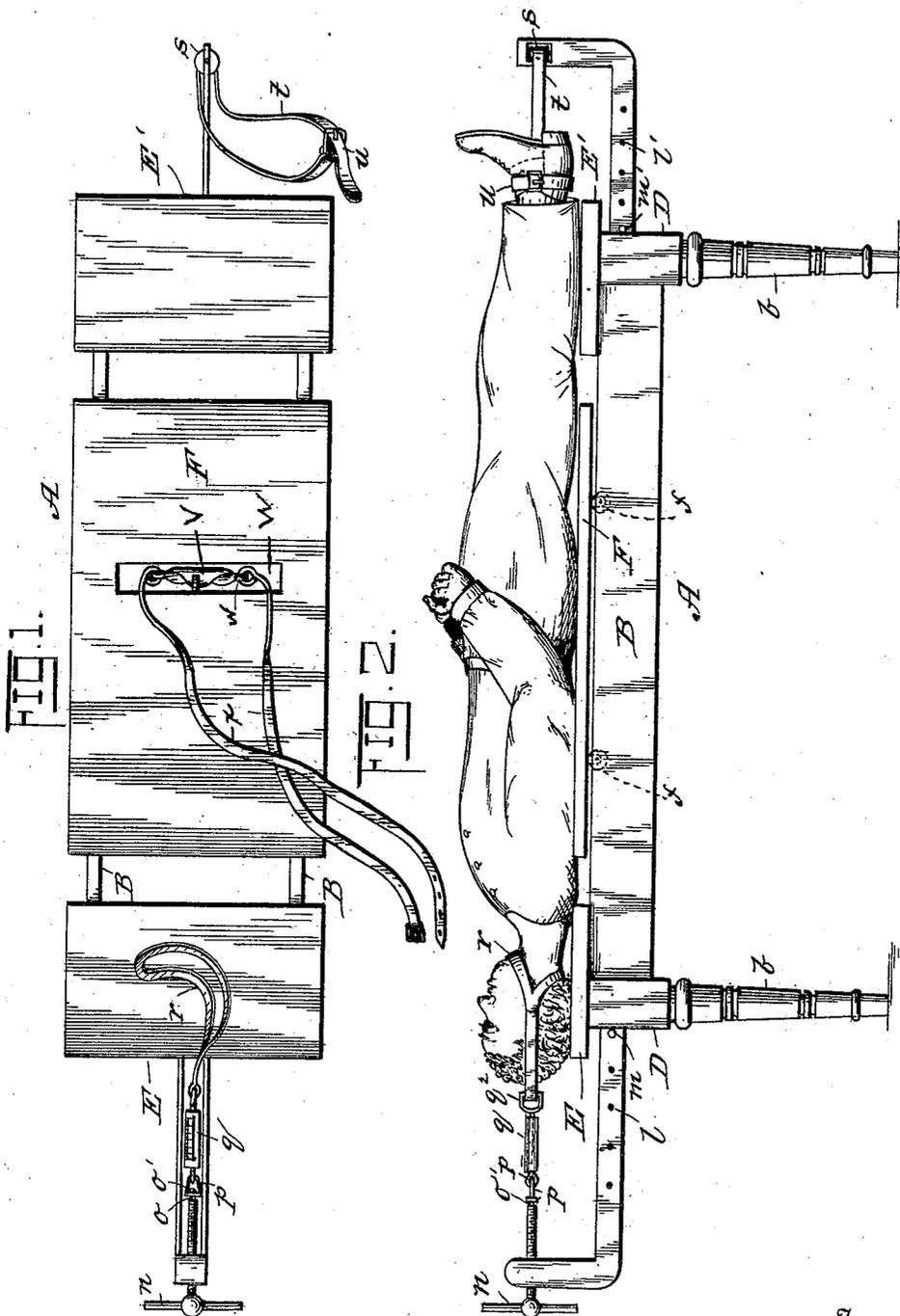
Patented Feb. 28, 1899.

S. HAVNAR.
SURGICAL TABLE.

(Application filed Mar. 5, 1898.)

(No Model.)

2 Sheets—Sheet 1.



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UNITED STATES PATENT OFFICE.

SAMUEL HAVNAR, OF PAINESVILLE, OHIO.

SURGICAL TABLE.

SPECIFICATION forming part of Letters Patent No. 620,318, dated February 28, 1899.

Application filed March 5, 1898. Serial No. 672,714. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL HAVNAR, a citizen of the United States, residing at Painesville, in the county of Lake and State of Ohio, have invented certain new and useful Improvements in Surgical Tables; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in surgical tables for treating locomotor ataxia and kindred diseases; and it has for its object to provide a simple and effective apparatus whereby the patient may recline in a comfortable position while being treated.

With this and other objects in view my invention consists in an apparatus of this class embodying certain novel features of construction, combination, and arrangement of parts, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 is a plan view of a surgical table constructed in accordance with my invention. Fig. 2 is a side elevational view of same. Fig. 3 is a longitudinal section. Fig. 4 is a horizontal section of the head portion of the table. Fig. 5 is a plan view of the scale and coacting parts of the adjusting mechanism. Fig. 6 is a transverse section through the sliding leaf, showing the saddle turned down.

Like letters of reference designate corresponding parts throughout the several figures of the drawings.

A represents a table supported on legs *b* and comprising in its construction the two parallel side bars B and end cross-bars C, connected to the corner-posts D, to which the legs are secured in the usual manner. At the head of the table is a rigid top piece E and at the foot thereof a rigid top piece E', and arranged between the same is a sliding central leaf or top section F, mounted on rollers *f*, adapted to travel grooved ways *f'*, formed in the side bars B. The rigid top pieces are provided with depending guides *g g'*.

H I represent supporting-brackets arranged, respectively, at the head and foot of the table and each consisting of a horizontal

body portion H' I', provided at one end with a vertical arm *h i*. The body portion of the bracket H is bifurcated from the arm to form the parallel shanks *j*, which are fitted to slide in slots in the guide *g* and end cross-bar C at the head of the table, and the inner ends of said shanks are provided with stop-lugs *k* to limit the outward movement of said bracket. The shanks are also formed with a series of openings *l* for the reception of a pin *m*, whereby the bracket may be adjusted as desired and held against inward movement. The body portion of the bracket I is also bifurcated to form shanks *j*, which are fitted to slide in slots in the guide *g'* and adjoining cross-bar C at the foot of the bed, and these shanks are likewise provided with stop-lugs *k'*, adapted to limit their outward movement, and with openings *l'* for the reception of a pin *m'*, having the same function as the corresponding pin on the bracket H.

The vertical arm *h* of the bracket H is formed with a threaded orifice, in which operates a hand-screw *n*. This screw is provided at its inner end with a neck *o* and a head *o'*, and this neck projects through an opening in the cross-bar of a link *p*, which is connected with an eye *p'* on one end of a scale or indicator *q* and is held from disengagement by the head. By this construction it will be seen that the screw has a swivel connection with the scale and may turn freely independently thereof. The scale bar or beam *q'* of the indicator, which carries the pointer, is connected with a strap-guide *q²*, to which a strap *r*, designed to engage the head of the patient, is attached.

The arm *i* of the bracket I is formed with a slot, in which is located a friction pulley or roller *s*, around which passes a strap *t*, carrying buckle-loops *u*, designed to engage the feet of the patient.

The manner of using my invention is as follows: The patient reclines upon his back on the table, with his body resting on the sliding central leaf-section, the head and legs being supported, respectively, by the stationary top pieces E E'. The top piece may be padded or provided with a head-rest. The brackets H I are next adjusted to suit the length of the patient, the straps *r u* secured about the head and feet of the patient, and

then the screw is operated to stretch the neck, back, and legs at one operation. This mode of treatment is much more satisfactory than the method heretofore employed of suspending the patient, as the patient reclines in a comfortable position and is thereby enabled to stand the treatment for a longer period. The legs, too, are stretched at the same time as the neck, and the pulling strain may be regulated as desired and determined by consulting the scale.

The object of the sliding central leaf or top section F is to permit the patient to assume a comfortable position at the start without raising his body and also to allow free back-and-forth movement of the body as the pulling mechanism is operated.

It is sometimes desirable to stretch the legs of the patient without stretching his entire body, and to this end I provide a saddle V, provided at its rear end with an eye *v*, whereby it is pivoted to swing in a transverse opening W, formed in the sliding section F. This saddle normally projects below the said section, as shown in Fig. 6, but may be swung up to the position shown in Fig. 3 to take between the legs and serve as a seat-support. The saddle is also provided at opposite sides with loops *w*, to which straps *x* are attached. When the saddle is in use, the free ends of these straps are connected directly to the strap-guide *q*² of the scale bar or beam *q*'. If desired, however, these straps may be secured about the body of the patient and the sliding section F connected with the scale-beam or an additional strap provided to connect the eye *y* on the cantle of the saddle with said scale-beam. The operation with this construction will be readily understood.

I desire it understood that I do not limit my invention to the specific construction and arrangement of parts herein shown and described, but reserve to myself the right to make such changes and alterations as clearly fall within the spirit and scope of my invention.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent, is—

1. A surgical table for the purpose described, comprising a table-frame proper, a sliding central section thereon, a saddle car-

ried by said sliding section, fastening means at the foot of the table to confine the feet of the patient, stretching mechanism at the head of the table provided with means for confining the head of the patient, and means for connecting the saddle directly to said pulling mechanism, whereby the parts may be connected up to stretch the entire body or legs only of the patient, substantially as described.

2. A surgical table for the purpose described, comprising a table-frame proper provided with brackets at the head and foot thereof, a central section mounted to slide thereon, a saddle carried by the sliding section and adapted to be raised and lowered to project above or below the same, foot-straps connected to the bracket at the foot of the table, stretching mechanism carried by the bracket at the head of the table, a scale connected with the said mechanism and carrying a head-strap, and means for connecting the saddle to said scale, whereby the parts may be connected up to stretch the entire body or legs only of the patient and the pulling strain exerted determined with certainty in either case, substantially as described.

3. In a surgical table, the combination of a table-frame, a sliding leaf-section, a scale or indicating device, a saddle pivotally swung in an opening in said sliding leaf, and means for connecting said saddle to the said scale or indicating device, substantially as described.

4. In a surgical table, the combination of a table-frame provided with stationary top pieces at the head and foot thereof, a sliding central section, adjustable brackets at the head and foot of the table, foot-straps connected with the latter bracket, an operating-screw mounted in the head-bracket and provided at its inner end with a swivel, a scale having a sliding beam or bar movable through one end thereof and connected to said swivel, and a head-strap connected to a swivel on the other end of the beam, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

SAMUEL HAVNAR.

Witnesses:

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