T. McIlroy,

Operating Table,

No. 49,132. Patented Aug. 1, 1865.

Fig: 1.

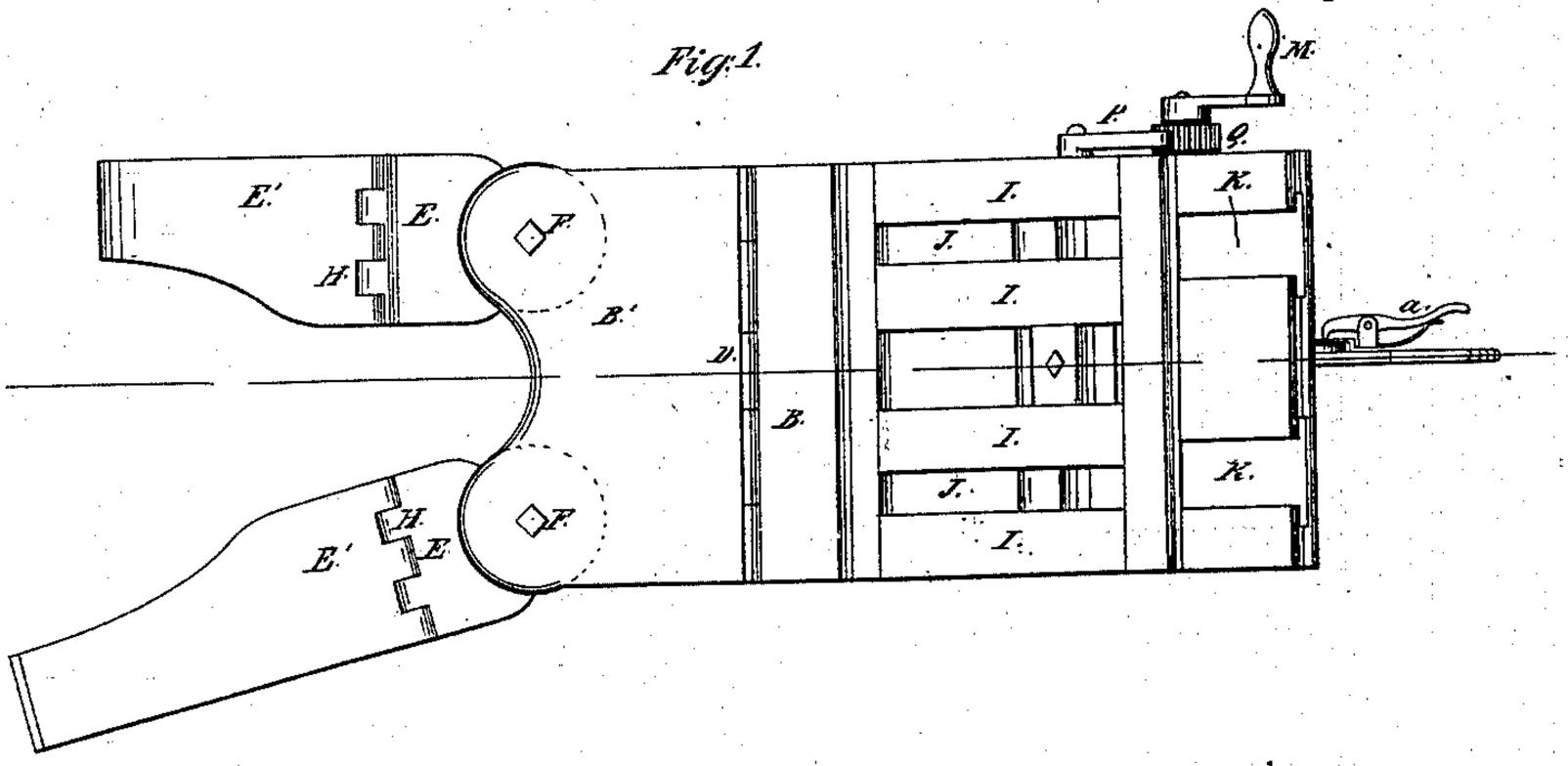
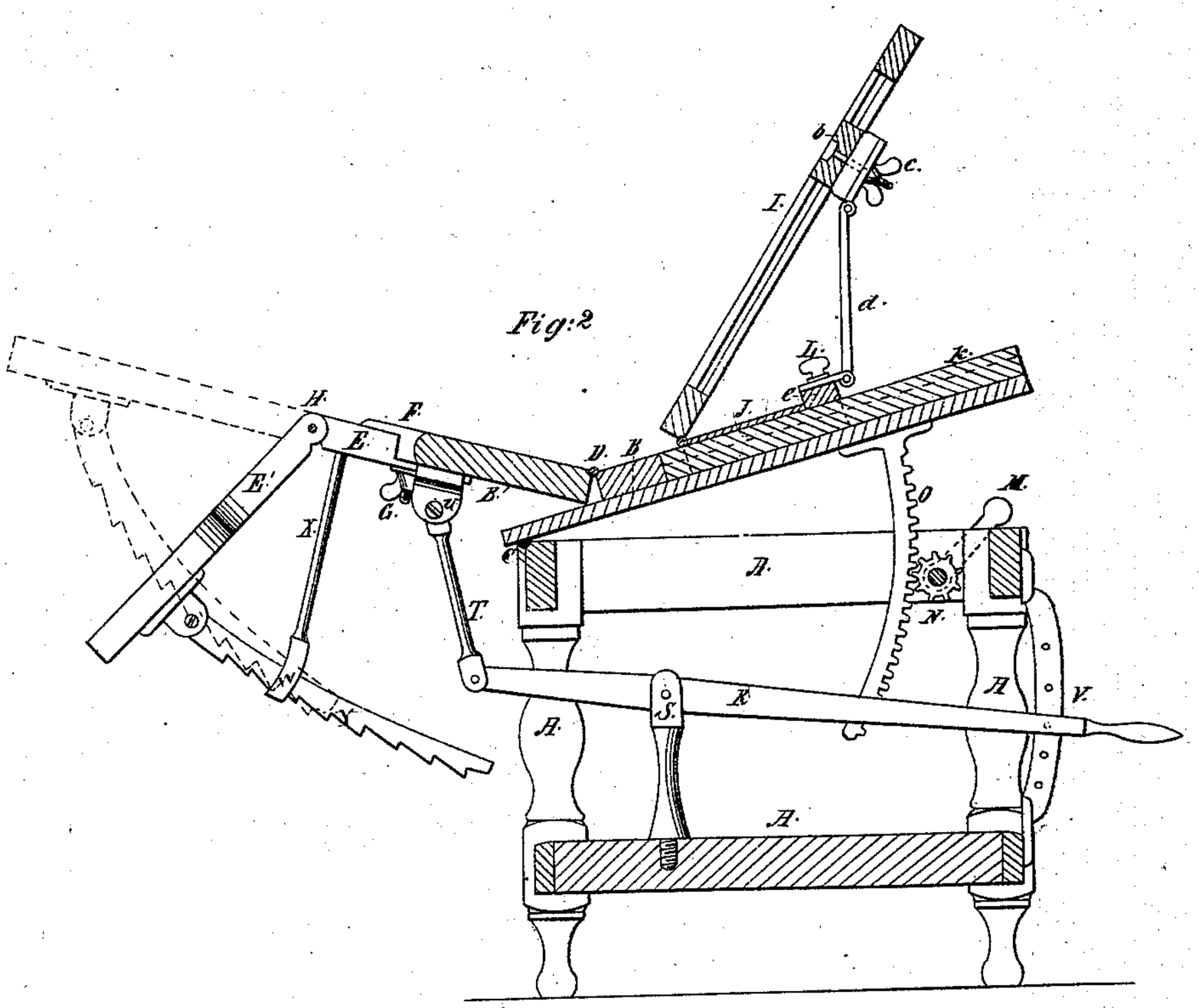


Fig: 2



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IMPROVEMENT IN SURGEONS' OPERATING-TABLES.

Specification forming part of Letters Patent No. **49,132,** dated August 1, 1865.

To all whom it may concern:

Be it known that I, THOMAS MCILROY, of the city, county, and State of New York, have made certain new and useful Improvements in Surgical Operating-Tables; and I do hereby declare that the following is a full, clear, and exact description of the nature, construction, and operation of the same, reference being had to the accompanying drawings, which are made part of this specification, and in which—

Figure 1 is a vertical central section on the line *x x*, Fig. 2. Fig. 2 is a plan or top view.

The same letters refer to corresponding parts in the two figures.

The object of my improvement is a table by the adjustment of which the patient may be presented to the surgeon in a position favorable for the performance of the operation.

To enable one skilled in the branch of manufacture to which my invention appertains to construct and use the same, I will proceed to describe it.

A A indicate the portions of the frame-work of the table, which frame consists of legs and cross-pieces supporting the table B B′, which is hinged at C to the frame. The portion B′ of the table is hinged to the portion B at D, and leg-supports E E′ are attached to B′ by pivot-joints F, which are tightened by means of nuts G beneath. The leg-supporters E E′ have hinges H, which permit the vertical adjustment of the portion E′ relatively to the portion E. The back-support I is hinged to slides J, which fit within slots K in the table A and are movable therein forward and backward, being secured in the required longitudinal position by means of the set-screws L.

From the Fig. 1 it will be readily perceived that while the back is supported at the required inclination by the frame I, B′ E support the thighs, and E′ the lower leg and foot, the hinge D corresponding to the articulation of the hips and the hinges H to that of the knees.

I will now, describe the adjusting arrangement, which consists of four distinct motions and set of appliances, considering that pertaining to the knees as one, it being merely duplication. I will commence with the adjustment of the table B, upon or to which all the other adjustable portions are supported or attached.

The table being hinged at C to the frame, may lie horizontally upon it, when required so to do, the patient lying thereon, the back-support I only being used for special operations—such, for instance, as lithotomy. When it is desired to raise the body of the patient to an inclined position it is effected by the crank M and pinions N, the teeth of which latter mesh into those of the rack O, and the required adjustment being reached, is maintained by the pawl P, which engages the rag-wheel Q. The portions supporting the legs of the patient are moved vertically and simultaneously by means of the lever R, which has its fulcrum at S, and a connecting-rod, T, pivoted at U to a lug underneath the thigh-piece B′. By downward pressure on this lever the said thigh-piece and the leg-extensions are raised, and the required set is maintained by means of a spring-pin, *a*, which engages the lever R to the segment-bar V.

The table, when inclined, may be all in the same plane, or it may have the hip-deflection shown in Fig. 1. But if desired to preserve the same plane throughout the length from head to foot, the portion below the hips or hinge D must be lowered by means of the lever R, as the table B is inclined by vibration on its hinge C.

I have before observed that the leg-extension pieces E have a pivotal attachment to the piece B, and the object of making the leg-extensions adjustable in a horizontal plane, or in a plane parallel to that of the piece B, is to enable the legs to be separated for lithotomic operations, high amputations of the thigh, &c. The set-nuts G hold the leg-pieces at the required divergence.

The deflection of the lower leg relatively to the thigh is regulated by the swinging curved ratchet-bar Y, which engages in the loop W of the pendant X, which is secured at its upper end to the portion E of the leg-extension. The same device is applied to the extension portion for each limb.

The back-support I, as has been observed, is a detachable portion of the apparatus, and is only designed for use in operations which require a certain amount of elevation of the body of the patient, such as the one I have before adverted to, and others where the seat of the disease or wound requires the presentation of the posteriors of the patient to the operator. The required inclination of this back-support

is given by means of the clamp-block *b*, which slides in the middle opening of the back-piece I, and is secured in position by turning the thumb-screw *c*, while the block is supported by the rod *d* from the cleat *e*, the screw L on which secures the slide J in its position on the table.

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

1. The table hinged to and supported upon the frame A, and provided with a hinged portion, B′, and hinged leg-extensions E E′, each section—to wit, B, B′, E, and E—being provided with devices for vertical adjustments, substantially as described.

2. The laterally-adjustable leg extension by means of the pivot-joint F, to support the leg in its laterally-deflected position.

3. In combination with the table B, the hinged back-support I J, with its device for vertical adjustment, substantially as described.

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