(No Model.) 2 Sheets—Sheet 1.

H. E. HILDEBRAND.

COMBINED TABLE AND CHAIR.

No. 318,250. Patented May 19, 1885.

Fig. 1.

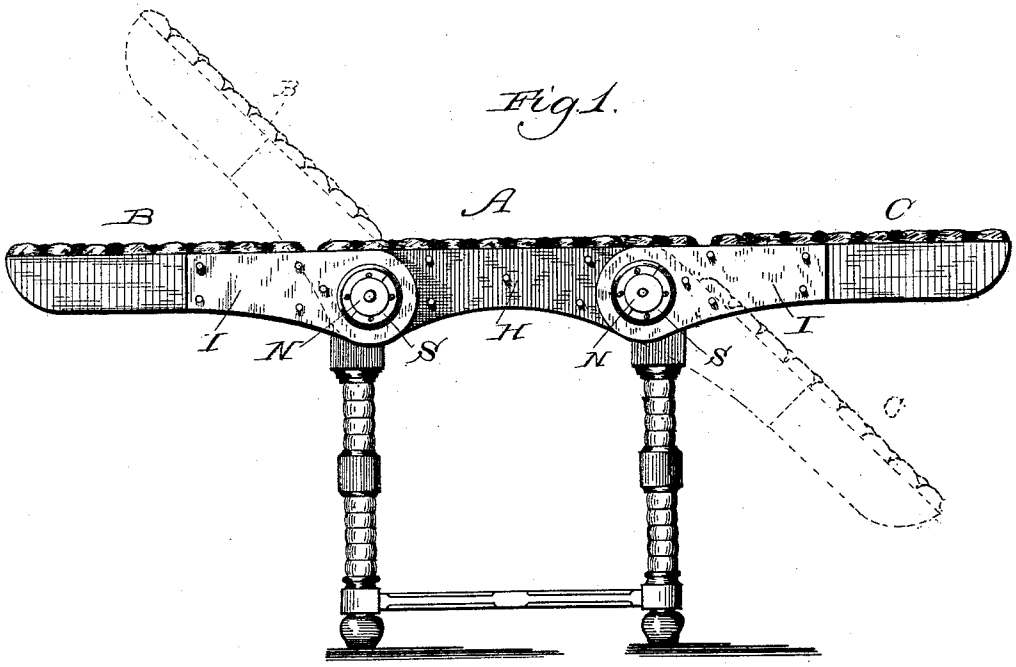
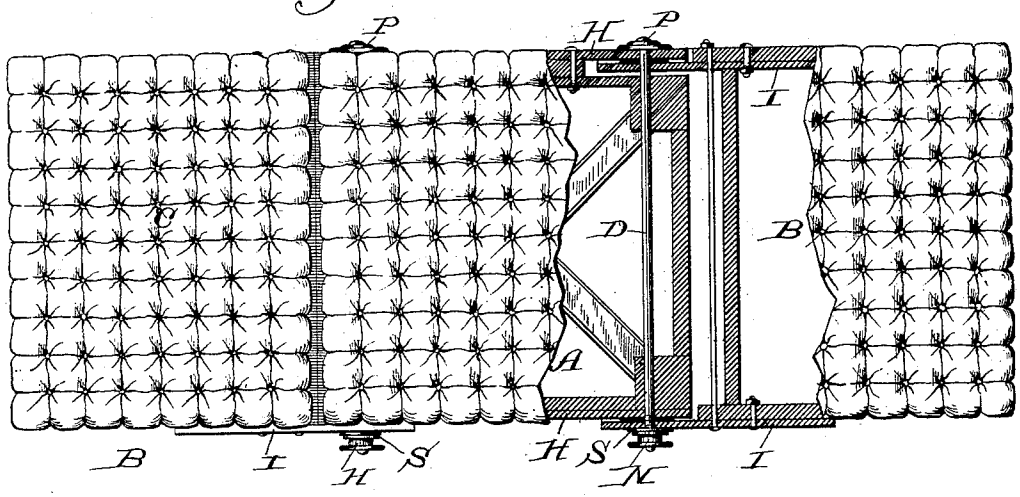


Fig. 2.



Witnesses:
Chas. E. Gaylord.
Mason Bros.

Inventor:
Herman E. Hildebrand,
By Dyrenforth and Dyrenforth,
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(No Model.) 2 Sheets—Sheet 2.

H. E. HILDEBRAND.

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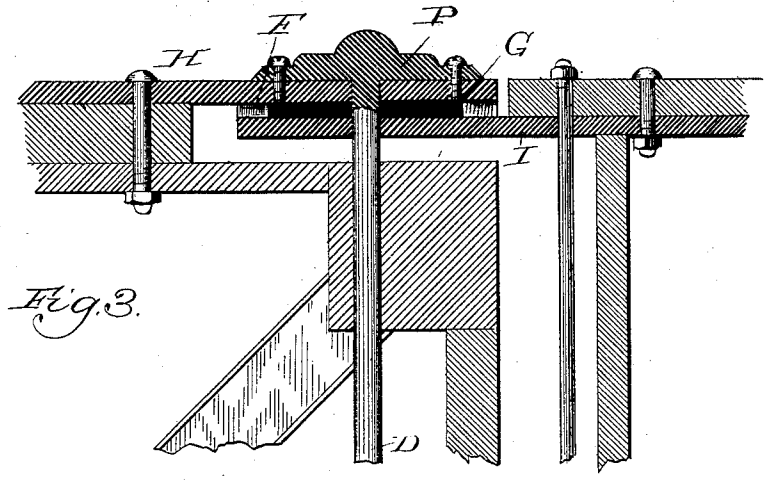


Fig. 3.

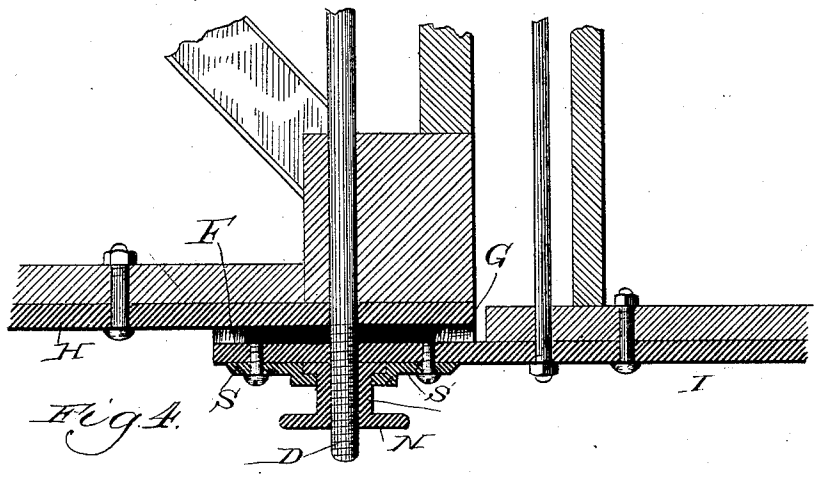


Fig. 4.

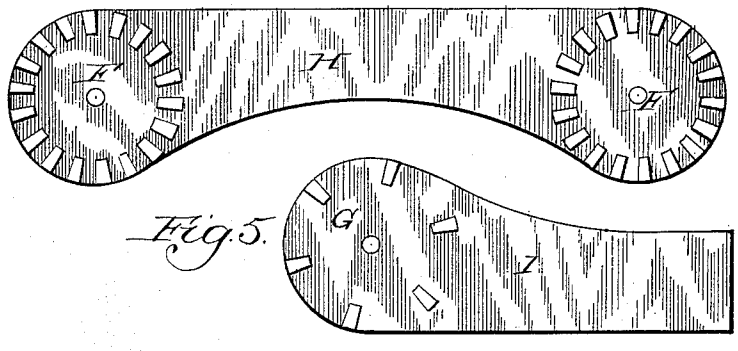


Fig. 5.

Witnesses:
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UNITED STATES PATENT OFFICE.

HERMAN E. HILDEBRAND, OF CHICAGO, ILLINOIS.

COMBINED TABLE AND CHAIR.

SPECIFICATION forming part of Letters Patent No. 318,250, dated May 19, 1885.

Application filed June 30, 1884. (No model.)

To all whom it may concern:

Be it known that I, HERMAN E. HILDEBRAND, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and Improved Combined Surgical Operating Table and Chair; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to the class of adjustable devices for use particularly in supporting patients during the performance upon them of surgical operations, and it is my object to provide a device for the purpose the parts forming which shall be readily adjustable by means of mechanism of great simplicity, and which shall possess stability in any adjusted position.

To this end my invention consists in the construction and combinations of parts by means of which the object hereinbefore set forth is accomplished.

Referring to the drawings, Figure 1 is a side elevation of my improved device; Fig. 2 a plan view of the same, partly in section, to display certain details; Fig. 3, an enlarged sectional plan view broken longitudinally toward its center, and showing the adjusting mechanism, and Figs. 4 and 5 detail views in elevation.

A is the central portion or body of the device, which forms the seat when other parts, hereinafter described, are adjusted to form a chair, and which is supported preferably on legs, as shown.

B and C are adjustable extensions hinged upon opposite sides of the part A, the mechanism hereinafter described, which affords such adjustability and the manner of producing the adjustment, constituting my invention.

Upon each side of the frame of the part A is rigidly secured a plate, H, having formed upon it toward each extremity, one upon its outer and the other upon its inner face when the plates are secured in position, cogs or teeth F, arranged in a circle, through the center of which an opening is provided. One plate, H, is secured directly to the frame of the part A, while the plate on the opposite side is secured thereto indirectly by the interposition of a suitable bar of desired dimensions, as shown.

I I are plates, each resembling in form a transverse half of the plate H, with circularly-arranged cogs or teeth G around a central opening, and provided on one face toward the enlarged extremity of each to mesh with the teeth F on the plate H, when the plates I are secured in position in the manner hereinafter described. A plate, I, is rigidly secured at each side on the frames of the extensions B and C in a manner to cause the circular row of teeth G of each one to mesh with that on each plate H. The number of teeth G may correspond, if desired, with the number of teeth F, though, if the latter are in excess of the former, sufficient strength and stability are afforded. A plate, I, is firmly secured upon each of the extensions B and C, on one side of the device, on the inner face of the frame of each, and on the opposite side on the outer face of the frame, to cause the teeth G upon each to mesh with those provided toward each extremity of the plate H. It will be seen that by this construction the teeth G on both sides of an extension, B and C, are brought into mesh with the teeth F on opposite sides of the body H by moving the extension in one lateral direction, and are released by a movement in the opposite direction.

D D are shafts extending through the openings provided in the plates H and I on opposite sides of the device, whereby the extensions are hinged to the body. Each shaft D is provided on one extremity, preferably on the same side of the device, as shown, with a head, P, whereby it is secured from movement within a suitable bearing provided on the plate H. The opposite end of each shaft D is screw-threaded, as shown, and provided with a nut, N, having a circular flange formed around its inner extremity, which abuts against an adjacent plate, I, and over which an annular plate, S, fits and is rigidly secured to the plate. If desired, the annular plate S may be cast in two or more parts and adjusted together.

To change the adjusted position of an extension, B or C, with relation to the central portion, A, of the device, the nut N is turned in one direction, whereby the extension is drawn toward the operator and the teeth G are released from engagement with the teeth F, thus

allowing the extension to be swung freely upon its axis D and brought to any desired angle with the part A when the nut N is turned in the opposite direction, (the part undergoing adjustment being in the meantime held by the operator to prevent its falling,) and thereby forces the teeth G into mesh with the teeth F, thus securing the extension with the utmost stability in its adjusted position, from which it may be readily changed in the manner hereinbefore set forth.

Although I have shown and described a single shaft, D, as extending transversely across the device and connecting pairs of plates H and I on opposite sides, it is quite obvious that it would be in perfect keeping with the principle of my construction if a separate short shaft were employed for each pair of adjacent plates, regarding each cog mechanism on a plate, H, as a separate plate, whereby to produce the sliding lateral motions of the extensions in adjusting them.

To afford the requisite stability of an adjusted extension, the toothed mechanism hereinbefore described should be provided upon each side of the device; but if provided only on one side it will afford advantages, and such construction is included within the spirit of my invention.

What I claim as new, and desire to secure by Letters Patent, is—

1. A combined surgical operating table and chair having a central part, A, provided on each opposite end with a hinged extension movable laterally and adjustable to any desired angle with the central part, A, by means of meshing-gear provided on the sides of the extensions and central part, substantially as described.

2. In a combined surgical operating table and chair having a central part, A, and hinged extensions on opposite ends, mechanism for adjusting laterally an extension to any desired angle with the part A, comprising teeth projecting laterally from the central part, A, teeth projecting in the opposite direction from such extension in line with those provided upon the part A, and set-screw mechanism on such extension operating to force the gear-teeth on the part A and extension in and out of mesh, substantially as and for the purpose set forth.

3. A combined surgical operating table and chair comprising, in combinaton, a central part, A, provided on each side toward the extremities thereof with circularly-arranged teeth F, projecting in the same direction from the opposite sides of the part A, hinged extensions on opposite ends of the part A, provided with lateral plates I, each having toward one extremity circularly-arranged teeth G, projecting in the same direction on opposite sides of each extension in line with the teeth F, and set-screw mechanism for each extension operating to bring the teeth F and G in and out of mesh with each other, substantially as and for the purpose set forth.

4. A combined surgical operating table and chair comprising, in combination, the following elements: a central part, A, provided on opposite sides with plates H, each having circularly-arranged teeth F toward the extremities of one face and projecting from the opposite sides of the part A in the same direction, extensions B and C at opposite ends of the part A, each provided on both sides with plates I, having circularly-arranged teeth G toward the extremity of one face of each and projecting in the same direction from the opposite sides of the extension to mesh with the teeth F on the plates H, a stationary shaft, D, passing at its extremities through the centers of the circularly-arranged teeth F and G to hinge each extension to the part A, and set-screw mechanism N S, operating upon the threaded extremity of each shaft D to force an extension in a lateral direction and thereby bring the teeth G thereon in and out of mesh with the adjacent teeth on the part A, the whole being constructed and arranged to operate substantially as and for the purpose set forth.

HERMAN E. HILDEBRAND.

Witnesses:
H. S. TUCKER,
M. G. HART.