Specification of Edmund Adolphus Kirby: adjusting couch for medical, surgical, and general purposes.

Contributors

Kirby, Edmund Adolphus.

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A.D. 1852 N° 578.

SPECIFICATION

OF

EDMUND ADOLPHUS KIRBY.

ADJUSTING COUCH FOR MEDICAL, SURGICAL, AND GENERAL PURPOSES.

LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY:

PUBLISHED AT THE QUEEN'S PRINTING OFFICE, EAST HARDING STREET,
NEAR FLEET STREET.

Prince S. A.

1954





A.D. 1852 N° 578.

Adjusting Couch for Medical, Surgical, and General Purposes.

LETTERS PATENT to Edmund Adolphus Kirby, of Haverstock Hill, London, Surgeon, for the Invention of "An Improved Adjusting Couch for Medical, Surgical, and General Purposes."

Sealed the 30th April 1853, and dated the 30th October 1852.

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PROVISIONAL SPECIFICATION left by the said Edmund Adolphus
Kirby at the Office of the Commissioners of Patents, with his
Petition, on the 30th October 1852.

I, EDMUND ADOLPHUS KIRBY, of Haverstock Hill, Surgeon, do hereby 5 declare the nature of the said Invention for "An Improved Adjusting Couch for Medical, Surgical, and General Purposes" to be as follows:—

In the Drawings annexed I show 12 distinct views of my adjusting couch in different positions. The positions shown are those most 10 desirable for medical & surgical purposes, but in Figs. 1, & 2, it is shown as an ordinary couch; in Figs. 3, & 12, in its most complex form. For surgical operations this couch will be found very useful. It will be seen that each part is moveable; back, front, and sides shift, while joints in the frame admit of almost any change in position. The 15 required movement is effected by a graduated quadrant, actuated by a

rack & pinion, or other suitable means, on either side of the couch. A connecting rod is attached to this quadrant. By these means one part of the couch may be raised & another depressed in manner shown by the Drawings, which fully illustrate the Invention.

SPECIFICATION in pursuance of the conditions of the Letters Patent, 5 filed by the said Edmund Adolphus Kirby in the Great Seal Patent Office on the 30th April 1853.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, EDMUND ADOLPHUS KIRBY, of Haverstock Hill, London, Surgeon, send greeting.

10

WHEREAS Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Thirtieth day of October, in the year of our Lord One thousand eight hundred and fifty-two, in the sixteenth year of Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the said Edmund Adolphus Kirby, Her special 15 licence that I, the said Edmund Adolphus Kirby, my executors, administrators, and assigns, or such others as I, the said Edmund Adolphus Kirby, my executors, administrators, and assigns, should at any time agree with, and no others, from time to time and at all times thereafter during the term therein expressed, should and lawfully might make, 20 use, exercise, and vend, within the United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, an Invention for "AN IMPROVED ADJUSTING COUCH FOR MEDICAL, SURGICAL, AND GENERAL Purposes," upon the condition (amongst others) that I, the said Edmund Adolphus Kirby, by an instrument in writing under my 25 hand and seal, should particularly describe and ascertain the nature of the said Invention, and in what manner the same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of the said Letters Patent. 30

NOW KNOW YE, that I, the said Edmund Adolphus Kirby, do hereby declare the nature of my said Invention, and in what manner the

same is to be performed, to be particularly described and ascertained in and by the following statement (that is to say):

The couches for invalids hitherto made have been complicated in construction, costly in price, and unsuited for any other than the special 5 purpose for which they were made. Now the object of my Invention is, to construct a couch which shall be easily adjustable to every position required in the treatment of disease or accident, while it may be used for the ordinary purposes of sleeping or reclining. My improved couch, by an easy adjustment, forms a sofa, bedstead, or easy chair, and may 10 be put into a variety of positions without an effort of the patient. The arrangement of the mechanism is not complicated, and this places it within the means of all classes. But in order that my Invention may be well understood I will proceed to describe the same, referring to the Drawings annexed and to the figures and letters marked thereon, in

15 which similar letters of reference denote similar parts. Figure 1, in the accompanying Drawing is an elevation of the couch; Figure 2, a plan; Figure 3, an end view; and Figure 4, an elevation, shewing one of the various positions in which it may be placed. A, A, are legs supporting the framing B, B; within this is a moveable frame 20 C, C, upon which the mattrass or squab is placed; this is made in three parts, and jointed at D, E, and F. At the central joint E, the rod a, is fastened to the framing B, B, so that either end may freely move up and down. G, is the head piece secured to the framing B, B. The foot piece H, is so fastened to the framing B, B, that it may readily be 25 removed when required. I, is one of the side rails; these fit into the sockets b, b1, or when the position of the couch is altered they may be removed to the part marked b^1 , b^{11} ; a groove c, underneath the cushion of the side rail, is intended to receive the sides of the foot piece H, and this, when extended across the couch, forms a convenient table 30 either for writing, reading, or working. Below the framing B, B, are secured two pairs of brackets d, d^1 , these support the shafts e, and e^1 , upon which are fixed the wheels f, and f^1 , gearing into the curved racks g, and g^1 . By means of these racks or segments the parts D, F,

of the framing C, C, are elevated or lowered as required, the ends of

35 the shafts e, and e1, being made square, to receive a winch K, as shewn

at Figure 3. A ratchet wheel h, and h^1 , are also fitted upon each of the shafts e, and e^1 ; a pawl i, i^1 , secured to the brackets d, and d^1 , prevents the recoil of the ratchet wheel. This arrangement is to retain the framing C, C, in its place when elevated to any angle; to lower it, all that is required is to release the pawl regulating the descent of the 5 frame C, C, by the winch K. k, k, in Figures 2, 3, is a friction roller, against which the back of the rack g, works. The racks g, and g^1 , are screwed or fixed to the cross pieces L, L1, which are fastened to the lower part of the framing C, C. The upper part of the moveable frame between the joint F, and the head piece is adjusted, as required, by 10 mean of a spring and rack; to the cross piece L, is fastened a piece of metal m, terminating in a circular head, having teeth cut upon its surface, similar to the teeth of a ratchet wheel; the spring piece n, catches in these teeth, and retains the part to which it is affixed in any position That portion of the framing between the joints D, E, is 15 elevated and depressed by the rack g^1 , and wheel f^1 , in manner precisely similar to that just described. Beneath the lower end of the frame C, C, is jointed a lever o, which regulates the height and position of the frame C, C, at the leg piece. Upon the racks g, and g^1 , are studs l, l, and to either of these the lever o, is fixed by means of notches cut 20 in the edge of it. I call the part F1, the head part, the part from E, to F, the body part; the two other parts E1, and D1, the thigh and leg parts, because these parts can be raised independently of the others, or altogether, and the couch affords great ease and comfort to any one of these parts when required. The principle upon which I construct my 25 improved couch is applicable to any ordinary bedstead or couch, for it is obvious that if the framing of such bedstead or couch be jointed in manner similar to that described herein in reference to my improved couch, and the other mechanism be applied, namely, the segments or racks, ratchet wheels, pawl, winch, and connecting rods, that the bed- 30 stead or couch will assume the form and have the properties of my improved couch. I propose to make my improved couch of wood or metal, or of wood and metal, giving a preference to the latter materials. I do not limit myself to the precise details herein-before set forth and shown, as I may slightly vary the number or position of the segments, 35

ratchets, and other parts. But I claim the manufacture of an improved couch for medical, surgical, and general purposes, substantially as herein-before described and shewn.

5

In witness whereof, I, the said Edmund Adolphus Kirby, have hereunto set my hand and seal, this Thirtieth day of April, in the year of our Lord One thousand eight hundred and fiftythree.

EDMUND A. KIRBY. (L.S.)

LONDON:

Printed by George Edward Eyre and William Spottiswoode, Printers to the Queen's most Excellent Majesty. 1854. A.D. 1852.—Nº 578.

I Aspening Couch for Medical, Sure of parts. that I claim the manufactural, surgical, and general purposes of bed und Flower.

In witness whereof, I, the said Lidmond Adoldme Kindy, have between est my hand and seal, this Thirtiesh day of April, In the year of our Lord One thousand eight bundled and him-

EDMUND A. KIRDE

LONDON

Printed by Grongs Poward Bras and William Storrammon







