

Specification of Robert Salmon : trusses.

Contributors

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A.D. 1821 N^o 4526.

S P E C I F I C A T I O N

OF

ROBERT SALMON.

—
TRUSSES.
—

LONDON:

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A.D. 1821 N° 4526.

Trusses.

SALMON'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, ROBERT SALMON, of Woburn, in the County of Bedford, Esquire, send greeting.

WHEREAS His most Excellent Majesty King George the Fourth did, by His Letters Patent under the Great Seal of that part of the United Kingdom
5 of Great Britain and Ireland called England, bearing date at Westminster, the Fifteenth day of January, in the first year of His reign, give and grant unto me, the said Robert Salmon, my eñors, adñors, and assigns, His especial licence, full power, sole priviledge and authority, that I, the said Robert Salmon, my eñors, adñors, and assigns, during the term of years therein
10 mentioned, should and lawfully might make, use, exercise, and vend, within England, Wales, and the Town of Berwick-upon-Tweed, my Invention of "CERTAIN IMPROVEMENTS IN THE CONSTRUCTION OF INSTRUMENTS FOR THE RELIEF OF HERNIA AND PROLAPSIS, WHICH INSTRUMENTS, SO IMPROVED, HE DENOMINATED SCIENTIFIC-PRINCIPLED, VARIABLE, SECURE, LIGHT, EASY, ELEGANT, CHEAP, AND
15 DURABLE TRUSSES;" in which said Letters Patent there is contained a proviso that if I, the said Robert Salmon, shall not particularly describe and ascertain the nature of my said Invention, and in what manner the same is to be performed, by an instrument in writing under my hand and seal, and cause the same to be inrolled in His Majesty's High Court of Chancery
20 within six calendar months next and immediately after the date of the said Letters Patent, that then the said Letters Patent, and all liberties and advantages whatsoever thereby granted, shall utterly cease, determine, and become void, as in and by the same, relation being thereunto had, will more fully and at large appear.

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NOW KNOW YE, that in compliance with the said proviso, I, the said Robert Salmon, do hereby declare that the nature of my said Invention, and the manner in which the same is to be performed, are particularly described and ascertained in and by the Drawings hereunto annexed, and the following description thereof (that is to say):—

5

To make my instruments on just and scientific principles I do construct them as herein-after described, with self-adjusting pads and springs, so as to perform in the best manner, and being so constructed they will be more secure, light, easy, and elegant, and the ways of construction and application, as well as the force and action thereof, may be varied at pleasure, all of which 10 properties are obtained in the cheapest manner, and when so obtained are substantial and durable; and the various improvements I describe and class as follows:—

First, improvements on my former patent self-adjusting trusses, by making the elastic hoops which pass round the body of oval or round steel wire, instead 15 of flat steel as heretofore. And I do particularly claim as my Invention the making of opposite-sided trusses of oval or round steel wire springs. Also of making of both-sided trusses of similar springs. Also of making same-sided or double trusses with similar springs. Also a variation of the same or hip spring double truss. Also a second varied vertical application of such sort of truss, 20 which, when so applied, I call vertical truss.

Secondly, improvements on my former patent horn-like or front spring truss, which improvements are variable in their construction and application; whereas in my former Patent, and all imitations thereof, the front spring was straight on its edges, and passed directly across the body, I do now particu- 25 larly claim, as my present Invention, the making of such trusses in various ways curved, so as to raise and leave room for the action of the thigh. This I perform in various ways by flat springs as heretofore, but curved and twisted to clear the thigh—by contracted centre spring and iron non-elastic ends; by oval or round steel wire springs; and by non-elastic front bar, connected with 30 an elastic belt.

Thirdly, improvements in the mode of impelling pads or cushions on the body by means of springs or bandages, which also are variable, as follows:— By an elastic belt, connected or not at pleasure with any of the improvements secondly described; by a back spring; and by triple spring support for 35 prolapsis ani.

All which said improvements, with their variations and properties, are described by the Figures and explanations relating thereto, which fully explain the principle of my improvements and inventions. But it being manifest that

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infinite trifling variations in shape and size, according to circumstances, may be made, as well as in the materials whereof they are composed, I therefore claim all the variations in sizes and shapes as different-sized bodies and circumstances and complaints may require, and any sort of fit and proper
5 material to effect the purpose of my described improvements; and I, separately or together, claim as parts of my Invention all the parts particularly described in the Figures and explanations following, and comprized in the foregoing three general heads.

Fig. 1. Improved opposite-sided truss.—A, round or oval steel wire spring
10 to go round the body, with eyes at each end, to receive a pin, and attach to the front and back parts. B, front pad, made of any proper material, and of size and shape as the case may require, attached by a universal or staple moveable joint in the centre of the pad. C, back pad, made and attached in
15 same way as the front pad, so that both may adjust themselves in any inclination, and bear uniformly on the body in all the postures it may assume, as in my former patent self-adjusting trusses. Note, this truss is shewn as applied to the hip on the contrary side to that wherein the complaint is seated, and therefore it is called opposite-sided; and the making of such sort of truss with oval or round steel wire, instead of rolled flat steel as heretofore made,
20 constitutes my present improvements, and such truss so composed is particularly claimed as my Invention; and the horizontal shape of the spring being a plane, the spring will indifferently apply to the right or left side as the case may require, and from being a plane requires no upright elevation to explain it.

25 Fig. 2. Improved both-sided truss.—A, round or oval steel wire spring to go round the body, with eye at back end to receive a pin, and attach to the back pad and eye at front, and to receive a screw and attach to the coupling bridge. B, B, front pads, attached by universal or staple joints to a coupling
bridge, which bridge is united in its centre by a screw, on which it is movable,
30 leaving both cushions self-adjusting on the body. C, back pad, attached by a joint, and left at liberty to adjust itself to the bearings on the body. D, bridge, coupling together the two cushions. Note, the spring being made on a plane no elevation is required, and the spring will indifferently apply at pleasure to the right or left hip.

35 Fig. 3. Improved double truss.—A, A, two separate round or oval steel wire springs. B, B, front pads, attached as before described in Fig. 1. C, back pad, with mortice in the middle of a knob, into which both the back ends of the springs are pinned, so as to leave play and motion for the cushion to adjust itself on the bearing.

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Fig. 4. Improved double truss, with connected front pads.—A, A, round or oval steel wire springs, set to collapse on the body. B, B, front pads, connected with bridges, as before described. C, connecting front bar, to which both the springs are jointed, and turn as a hinge. D, D, small cushions, fixed at the other ends of the springs, to rest on the hips. E, E, strap and buckle, 5 by tightening of which the springs are expanded and drawn on the body, and thereby the force of the front bar and pads are increased and impelled on the body. F, connecting front bar, explained as jointed to the hip springs, which springs are turned upwards a little from the horizontal plane so as the better to clear and give room for raising the thigh. 10

Fig. 5. Improved vertical truss.—A, round or level steel wire spring, with eye at each end. B, B, front pads as connected by bridge, as before described in Fig. 2. C, back cushion as before. D, a curvature in the wire, so as to clear the scrotum and again return to the centre of the body. Note, this truss is to be placed vertically between the thighs, and may be mounted with 15 double or single pads as may be required; but for single complaints the curvature must be towards the required side, and not return back to the centre.

Fig. 6. Improved horn-like or front spring truss.—A, spring of flat rolled steel, curved on the face to raise and clear the thighs, as shewn in the elevation. B, B, front pads, double or single, the double being attached and 20 connected as before described, but the single attached to a half bridge only, and this screwed fast to the spring A. C, C, straps fastened to or enclosing the springs and continuing round the body, and connected by buckle or otherwise as the wearer may prefer. Note, before being drawn in by the straps the springs project forward, according to the dotted lines D, and being 25 drawn in they impel the pads on the body of the wearer.

Fig. 7. Improved horn-like or front contracted spring truss, with non-elastic ends.—A, contracted steel spring set outwards when at liberty, so as to project forward itself, and also to project the non-elastic ends, according to the dotted lines D, D, in Fig. 6. B, B, iron or other metal non-elastic curved ends, 30 to receive the straps. C, C, straps to draw in springs on to the body, as described in Fig. 6. Note, this truss is drawn in, and double or single pads, as may be required, attached, as in Fig. 6.

Fig. 8. Improved round or oval steel wire horn-like front springs, curved to clear the thighs.—A, centre piece of brass or other metal enclosing and fast on to 35 the steel wire, by rivetting, screwing, or brazing. B, B, wire spring, curved on the face to clear the thighs, and projecting forwards, as shewn by the dotted lines D, D, Fig. 6, and also applied to double or single pads, and confined to the body, as described in Fig. 6.

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Fig. 9. Improved horn-like non-elastic front bar, to be impelled by self-regulating belts.—A, non-elastic front bar, curved on the face to clear the thighs, and formed to fit the shape of the body, with studs or eyes or other preparation to connect with self-regulating belt herein-after described, the center part being flattened and prepared to receive double or single pads, as described in Fig. 6. B, B, front pads, as before described. Note, this bar being non-elastic, and curved exactly to fit the body of the wearer, will not by the force applied change its shape, and being attached to a self-regulating elastic belt the force impelled on the body will always be as the degree of tension to which the elastic belt is drawn, and this always at the will of the wearer; and although the spiral elastic spring inclosed in the belt appears the preferable way of applying it, yet the application of the springs round the cross bar itself, as shewn at C, C, is a part of my Invention, and when so applied one end must be fast on the cross bar, and the other end attached in any of the known and customary ways to a case or strap passing round the body, the drawing in of which strap will produce on the bar an impelling and elastic force towards the body, regulated to any degree at pleasure, and the spiral spring may be formed and attached so as to act by tension or contraction, as may be found best; or otherways, the spiral springs may at one end of them be immediately attached to the end of the bar, and the other end continued backwards and attached to straps and buckle, so as to buckle behind the body.

Fig. 10. Improved elastic self-regulating bandage or belt.—A, belt of leather or other soft material, sewed together in two thicknesses, and forming a case for the springs. B, B, two or more spiral springs, connected in the centre by buckle or otherways, and enclosed in the case A. C, C, straps connected with the ends of the springs, and drawn out at the ends of the case. These straps being attached by stud, buckle, or otherways, to the front bar, Fig. 9, will constantly impel the same and its parts on the body of the wearer with any degree of force required; and this belt may also be attached to either of the springs Fig. 6, 7, and 8, so as to increase their elasticity; and the springs may be used and attached in various other ways according to the pleasure of the wearer; and this sort of belt, and its application to impel pads by horn-like front springs or bars, I particularly claim as my Invention.

Fig. 11. Improved back spring truss.—A, back spring to place on the back of the body, inclosed in proper soft linen or leather case. B, back plate, to receive a cushion and form a pad to rest on the body, with a spherical knob on its centre, and moveably attached by a screw to the spring. C, C, buckle, stud, or other fastening for receiving straps to connect this spring with any of the before-described front springs, cross bars, or any other contrivance for

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impelling pads on the body, claiming to myself the Invention of the back spring wholly, wherever it may be useful for herniary support.

Fig. 12. Improved bandage with triple spring, for prolapsis ani.—A, belt as before described in Fig. 11. B, B, B, spiral springs, enclosed in a case of proper materials, and open at ends to let the spring act. C, strap passing 5 between the thighs to a buckle or stud behind the body. D, D, front straps to connect the springs. Note, near the intersection of the three springs is placed a small cushion to support the prolapsis ani, and when the springs are tightened it is plain a force will be impelled on the prolapsis in the proportion of the tension of the springs, and at the will of the wearer. 10

Although in the before-described Figures and references I have explained my instruments as applied to inguinal hernia, yet they will equally apply for umbelical complaints, the only difference being, that the front cushions for that complaint will require to lay flat on the body, nearly like the back cushions described in the various Figures, but subject to variation in size and shape as 15 the nature of the complaint may require.

In witness whereof, I, the said Robert Salmon, have hereunto set my hand and seal, the Sixth day of July, in the year of our Lord One thousand eight hundred and twenty-one.

ROBERT (L.S.) SALMON. 20

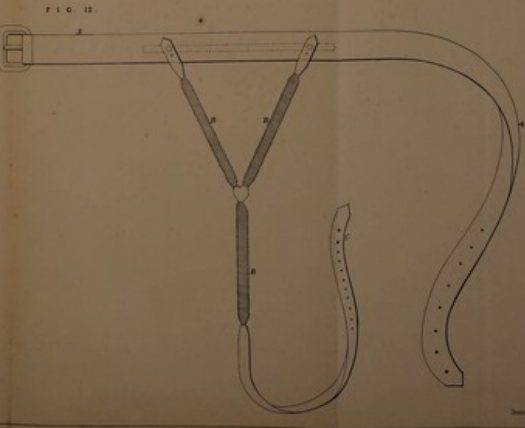
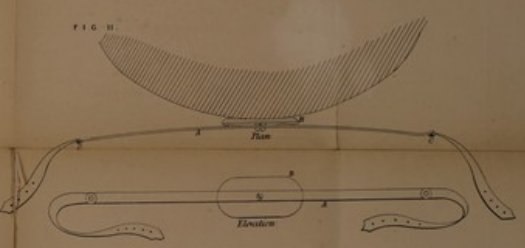
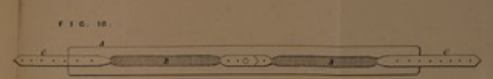
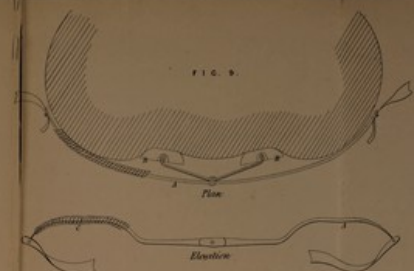
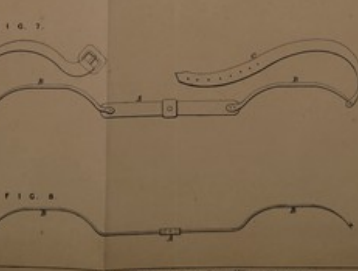
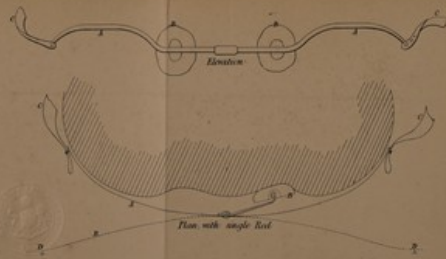
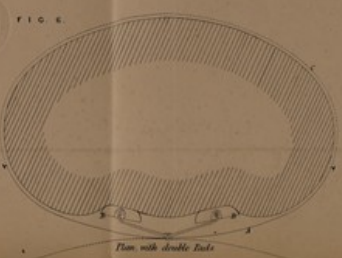
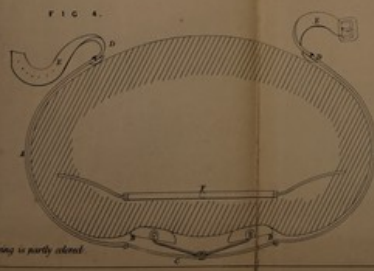
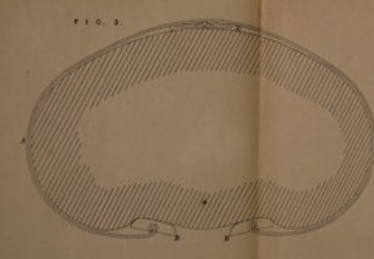
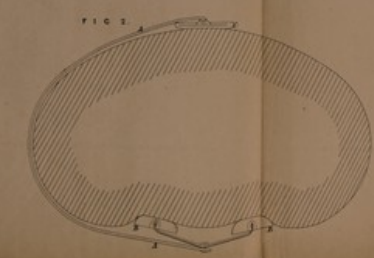
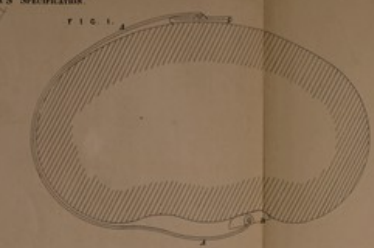
WILLIS, Extra.

AND BE IT REMEMBERED, that on the Sixth day of July, in the year of our Lord 1821, the aforesaid Robert Salmon came before our said Lord the King in His Chancery, and acknowledged the Specification aforesaid, and all and every thing therein contained and specified, in form above written. And also the Specification aforesaid was stampd according to the tenor of 25 the Statute made for that purpose.

Inrolled the Ninth day of July, in the year of our Lord One thousand eight hundred and twenty-one.

LONDON:

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1857.



The method shown is partly altered.

