

J. M. Pitts,
Fracture Apparatus.

N^o 30,588.

Patented Nov. 6, 1860.

Fig. 1.

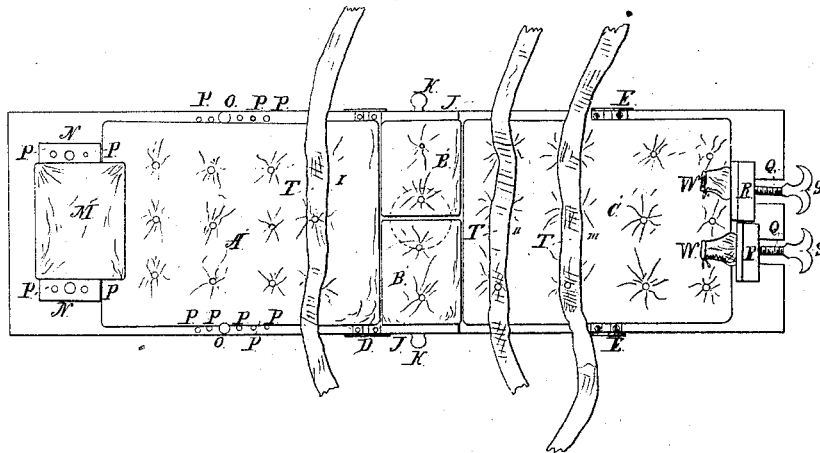


Fig. 2.

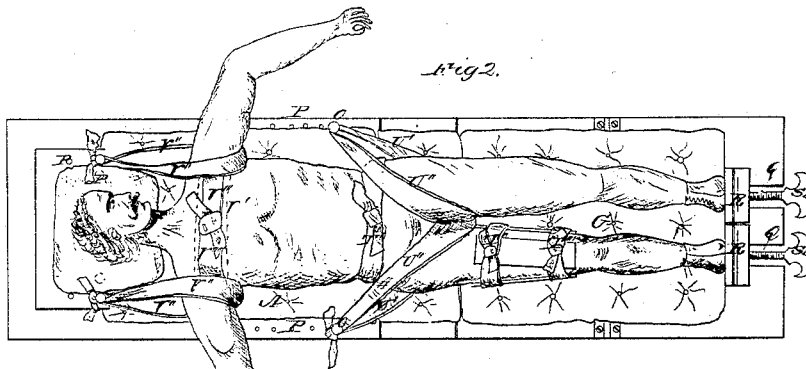
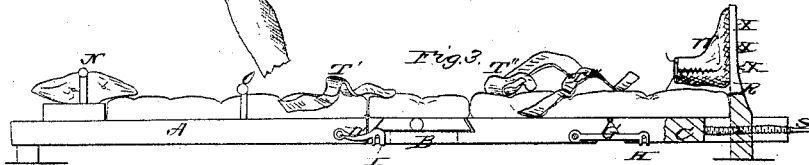


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

J. M. PITTS, OF SUMTER, SOUTH CAROLINA.

APPARATUS FOR FRACTURED LIMBS.

Specification of Letters Patent No. 30,588, dated November 6, 1860.

To all whom it may concern:

Be it known that I, J. M. PITTS, of Sumter, in the district of Sumter and State of South Carolina, have invented a new and useful Improvement in Apparatuses for Adjusting and Supporting Fractured Thighs and Legs; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1, is a plan of the bed. Fig. 2, a plan of the same with the patient on it, and Fig. 3, a side view and partial section.

Similar letters of reference, in each of the several figures indicate corresponding parts.

The nature of my invention consists, first, in one or two pairs of staples secured to the bed frame, one pair at the sides of the mattress and the other pair at the sides of the head pillow, in combination with straps and a shoe or gaiter or its equivalent fastened to an adjustable foot board, and with bandages for securing the upper part of the patient's body to the said staples. It consists, second, in combination with the staples—straps, shoe and bandages, in making the mattress of a bed for the treatment of invalids, in four parts, when the two central parts are secured to two slides movable in lateral ways in the bed frame and over an evacuation aperture.

To enable others, skilled in the art, to make and use my invention, I will proceed to describe its construction and operation.

The bed frame is made in three parts A, B, C, hinged together at D, E. These three parts are secured in a horizontal position by hooks F, G, pivoted to the end of one part and clasping pins H, I, projecting sidewise from the end of the next part. On lifting these hooks off of the pins, the parts of the bed frame can be brought into inclined positions in relation to each other so as to accommodate themselves to different positions of the limbs of the patient and thus prevent stiffening of the joints of the limb during the treatment of the same.

The center part B, of the bed frame is provided with lateral grooves and an aperture L, in the center. This aperture is closed by means of two slides J, J, movable in said grooves.

The mattress is made in four sections, one A', being secured to part A, and one C', to

the part C, of the bed frame and the other two, B', B', to the two slides J, J, each of the slides being provided with a knob K, at its side, whereby they can be drawn out laterally in opposite directions to such an extent as will partly expose the aperture and enable the patient to have an evacuation without liability of his buttock sinking down into the aperture and thereby disturbing the set of the fractured limb.

M, is the head pillow.

Staples N, N, and O, O, are secured one N, to each side of the pillow and one O, to each side of the section A', of the mattress. These staples may be adjusted more or less apart from each other, by inserting them in any of the holes P, seen in Fig. 1, of the drawings, so as to adapt them to the dimensions of the patient's body.

The outer end of the part C, of the bed frame is provided with two slots Q, Q, in which the shanks of two vertical foot-boards R, R, slide. Set screws S, S, working through said shanks, serve to move the foot-boards more or less in or out.

When it is desirable to keep the patient perfectly quiet, for instance when a fracture of the leg is to be treated, the straps T', T², T³, are secured to the mattress, as seen in Fig. 1, and the bandages U, and V, are placed on the mattress, before the patient is made to occupy the bed. The cross strap V', of bandage V, being under the back of the patient and the upper portion of the straps V², under his shoulders, the lower ends of straps V², are slung around and over the shoulders of the patient, and are (together with the upper ends of said straps V²) tied to the staples N, N, at the side of the pillow and the two straps V³, V³, are tied across the patient's breast, as seen in Fig. 2. The two straps U', U', of the bandage U, are made to pass under the hip and those marked U², over the groins of the patient. The ends of these straps are tied to the staples O, O, as seen in Fig. 2. In this manner it will be seen the upper part of the patient's body is secured so that he cannot move it. The ends of strap T', are tied around the pelvis of the patient. The gaiter—or its equivalent—W, is put upon the foot of the fractured leg and then the gaiter is fastened to the foot board R, by means of cords or straps X, extending from the sole of the gaiter through suitable holes in the foot-board. The foot-board can

then be moved out by means of the set screw S, until the leg of the patient is stretched out. The upper part of the patient's body being tied to the staples O, N, and his foot 5 to the foot-board R, the patient is confined in one position as long as the treatment requires it. The patient being so secured in a horizontal position and the leg being properly stretched as described, the fracture may 10 be set and the splints—two at the sides and one above the leg—be put in place and secured by tying the straps T², and T³, around the leg and splints. It will be seen that by securing the upper part of the patient's body 15 and his feet to the foot boards of the bed frame, a counter traction either from the arm pits or crotch or from both, as deemed advisable, may be effected and at the same time any improper movement of the patient 20 is prevented and the leg kept extended while under treatment.

In treating a patient having a fractured thigh, I usually during certain periods confine the well leg by means of a garter the 25 same as that used on the broken limb. By this means, the surgeon can use the well leg

as a guide whereby to set or adjust the fractured limb.

What I claim as my invention and desire to secure by Letters Patent, is— 30

1. One or two pairs of staples secured to the bed frame, one pair at the sides of the mattress and the other pair at the sides of the head pillow, in combination with straps and a shoe or gaiter or its equivalent, fastened to an adjustable foot board and with 35 bandages for securing the upper part of the patient's body to the said staples, substantially as set forth.

2. In combination with the staples— 40 straps, shoe and bandages, making the mattress of a bed for the treatment of invalids, in four parts, when the two central parts are secured to two slides movable in lateral ways in the bed frame and over an evacuation ap- 45 erture, substantially as and for the purposes set forth.

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Witnesses:

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