

[54] SUPPORTING TABLE FOR PATIENTS

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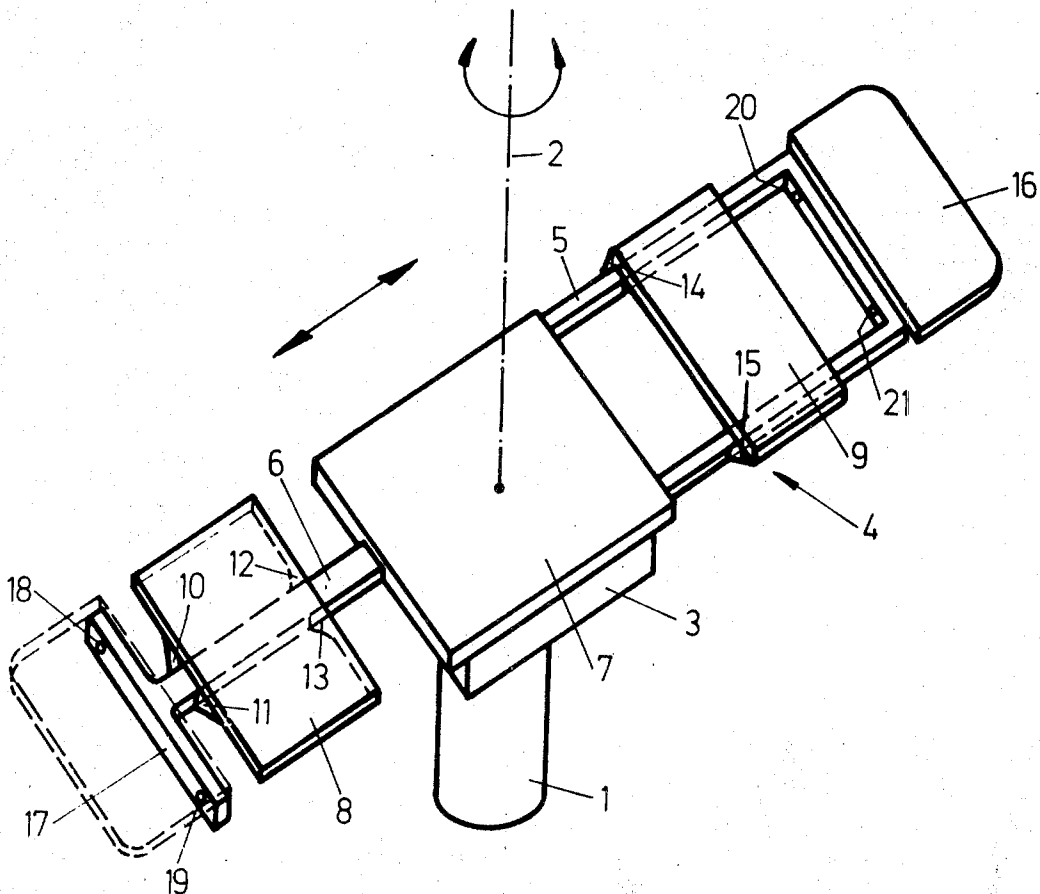
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[57] ABSTRACT

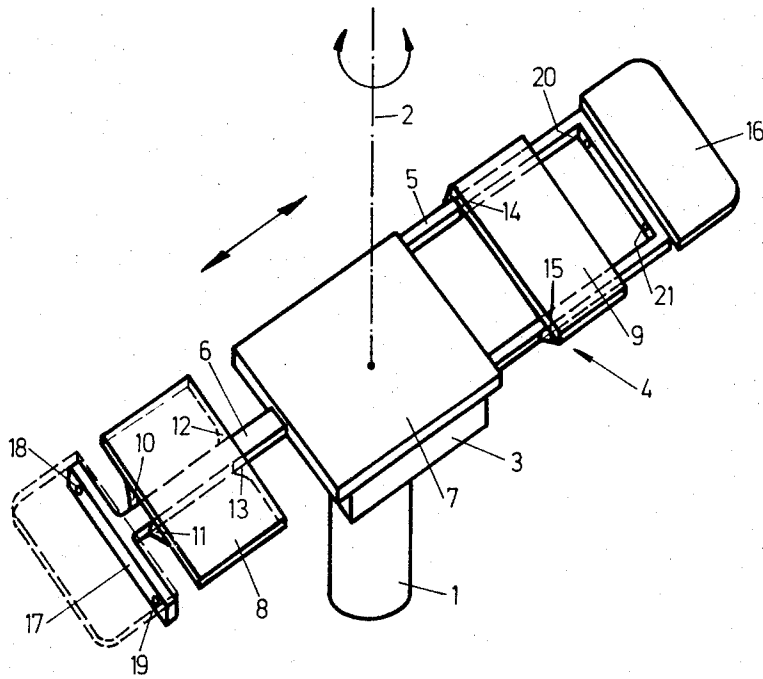
A support table for patients for use in X-ray technology has a plate mounted upon a support and a frame which is shaped partially as a central beam and partially as a double beam extending along the two longitudinal sides of the plate. The invention is particularly characterized in that the parts of the frame shaped as the central beam and the double beam are located upon the opposite sides of the support.

4 Claims, 1 Drawing Figure



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3,751,028



**SUPPORTING TABLE FOR PATIENTS**

This invention relates to a support table for patients for use in X-ray technology which is provided with a plate mounted upon a support and a frame which is shaped partially as a central beam and partially as a double beam extending along the two longitudinal sides of the plate.

In X-ray therapy it is advisable when illuminating body parts to avoid ray absorption and stray rays by metal parts located in front of or directly behind the patient. In case of certain directions of incoming rays and in the treating of sick sections located to the side of the body trunk it is therefore advantageous to use patient carrying tables wherein, due to the use of a central beam, the longitudinal sides of the table plate are free from metallic parts.

A patient carrying table is known wherein a table plate provided with a head rest is supported by a frame which is partially constructed as a central beam and partially as a double beam. The end of the frame located opposite the head rest is fixed to a column-like stand. The drawback of this table is that the table plate must be made excessively long in order to be able to support different body parts of the patient either over the double beam range or over the middle beam range of the frame. Furthermore, due to the high tilting moment of the table plate it is necessary to provide an expensive attachment of the base to the floor.

An object of the present invention is to eliminate these drawbacks of existing constructions.

Other objects of the present invention will become apparent in the course of the following specification.

In the accomplishment of the objectives of the present invention it was found desirable to place the parts of the frame shaped as the central beam and the double beam upon opposite sides of the support. This arrangement avoids an excessive length of the table plate and an excessive tilting moment of the supporting table. When a patient lies on the table a mere exchange of the foot end with the head end makes it possible to place the body part being examined either over the middle beam range or over the double beam range of the table plate. Finally, due to a small overhang of the table a frame with smaller beam cross sections can be used.

The length of the table plate can be further reduced by providing head supports which can be placed at will at any one of the two front sides of the table plate. In that case the length of the double beam as well as the length of the middle beam of the frame can be shortened by the length of the head support.

According to a further advantageous embodiment of the present invention the table plate is made swingable about a vertical axis to the extent of at least 180°. Due to this further inventive development the shifting of the ray source from one table end to the other table end becomes superfluous. Depending upon requirements the section with the middle beam or the section with the double beam can be swung under the ray source. The same advantage can be attained by the use of table plates which can be raised from the support provided that the plate can be again placed upon the support after having been turned to the extent of 180° so as to exchange the middle beam section with the double beam section. In both of the above-mentioned embodiments of the present invention comparatively small

shiftings of the table plate relatively to the X-ray examining device suffice to adjust the position of the body part being examined.

The invention will appear more clearly from the following detailed description when taken in connection with the accompanying drawing the sole FIGURE of which is a perspective view of a patient supporting table of the present invention.

The table shown in the drawing has a support 1, a guide member 3 mounted upon the support and rotatable about a vertical axis 2 and a table plate 4 consisting of several parts, which is mounted upon the guide member 3 and is movable in the longitudinal direction. The table plate 4 consists of a frame which is shaped partly as a double beam 5 and partly as a middle beam 6. Supporting plates 7, 8 and 9 for the patient are mounted upon the frame. The plates 8 and 9 are removable from the frame and can be shifted by guides 10 to 15 upon the beams 5, 6 in the longitudinal direction of the table plate 4. A head support 16 which can be passed by rays without shadows can be mounted at both front sides of the frame. A transverse support 17 is fixed at the free end of the middle beam to support the head rests. This transverse support as well as the opposite front side of the frame carry bore holes 18 to 21. Pins extending through these bore holes are used to firmly connect the head rests 16.

At the beginning of the treatment the patient is placed upon the supporting table in such manner that the sick body part lies in the range of that frame portion which seems to be most suitable for the intended type of treatment. The head rest 16 is fixed to the resulting head end of the supporting table. Should the sick body part be later found upon the side of the table plate 4 which is not directed toward the ray source, it is sufficient to turn the table plate by 180° around the axis 2.

In case of supporting tables wherein the table plate 4 cannot be rotated upon the support 1 by 180°, it is possible instead to raise the table plate from the guide member 3, exchange the head and foot ends and then place it back again. To center upon the object being examined it is merely necessary to shift the table plate relatively to the ray source by an extent corresponding to the length and width of the double beam range or the middle beam range.

What is claimed is:

1. A supporting table for patients for use in X-ray technology, said table comprising a support, and a table plate mounted upon said support and having a frame comprising a central beam portion and a double beam portion with beams extending along two longitudinal sides of said plate, said central beam portion and said double beam portion being located on opposite sides of said support.

2. A table in accordance with claim 1, comprising a head rest selectively attachable to opposite sides of said table plate.

3. A table in accordance with claim 1, wherein said table plate is swingable to the extent of at least 180° about a vertical axis.

4. A table in accordance with claim 1, wherein said table plate is removably and replaceably mounted upon said support to be turned by 180° to exchange the ranges of the middle beam and the double beam.

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