

## **Electric Operating Room Bed**

**Surgical beds are basically a device that the patient basically sleeps on during the surgical procedure, and there are such surgical beds inside each surgical ward, but each of these surgical beds has special designs that can be found in each operating room. Each surgical bed should have a series of advantages, which can be mentioned as follows: There is an oil pump under each bed, which makes it possible to change the position of the operating room bed in any direction. On all these types of beds, there is a sponge mattress that can be detached and also has the ability to be washed. The tops of this type of beds are protected from damage by sharp and sharp objects. All the beds in the operating room have a pedal, which causes the bed to be placed on the damp and damp floor steadily and is easily moved and placed in the right place when moving.**

## Electrically Engineered Components

Electric surgical beds have an electric motor that can be easily moved by these electric motors. The attachments of any surgical bed include brakes, bed straps, foam mattresses, and also have an anesthesia screen. Patients suffer from pressure ulcers due to prolonged lying on surgical beds, and for this reason, doctors are trying to use any amenities in the operating room area to prevent these injuries. The patient should always be in a position in the operating room so that he can easily do the necessary work for the patient to restore the patient's health. This placement should be done on the surgical bed before the surgery so that the person can be more comfortable during the surgery. In the electric type, electric motors are responsible for adjusting the bed as well as adjusting the positions of the bed. Some of them have the ability to change the position of the operating room beds by means of a remote control. An electric operating room bed is a device that places the patient on the surgical bed during the surgery and the patient is easily operated on during the operation. The electric operating room bed should have three areas, one of which should be bent downwards in the head or leg area to move the leg downwards.

It should also be turned to one side, and it should also have the ability to be brought up or down.

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# New Generation of Electronic Surgical Beds



## Outline of the invention:

The overall shape of the bed is in the form of a humanoid robot in a lying position. It can be used for surgery on any organ where the patient's organs are fixed on the flat organ.

### **Ability to change position for each operation:**

**Litotomy position:** Hemorrhoidal surgery and anal fistula or gynecologic curettage or cerclage surgery In these operations, the patient's legs should be raised and bent from the knee and the end of the bed should be opened so that the surgeon is close to the operating site while sitting. After selecting this position on the control bed. The limbs of the flat legs are first open to the sides and bent to the knee while the patient's legs are fixed on it.

**Lateral position: for kidney and lateral mass surgeries or femoral joint replacement surgeries**

**For this purpose, after anesthesia of the patient, the supporting parts of the chest, abdomen and pelvis are removed from the patient's side and after the part is leveled with the patient's side, it moves towards the center of the organ (chest, abdomen, and pelvis) and when the head of the two pieces meets, the two pieces are locked together. Then, after choosing to side the patient to the right or left. Three pieces are moved while the desired limb is fixed in it, and after being completely literal. The organ to be operated on is selected and the desired part is opened rectangular to the size of the surgeon's induction site. After the surgery, by selecting the reversal button, the actions performed on the control of all the steps are from the last to the first (first, the operating chamber is closed, then it returns to the position of the sofan (open vault) and the pieces are opened and the body is released).**

**Perron position: (lying on the abdomen) for lumbar disc surgeries or lumbar fractures**

**For these operations, such as the lateral position, the holding parts are locked on the three members, but after selecting the Peron position key on the control. The patient is placed in a lying position on the abdomen (rotating in a rotational manner). Then, the site of the insonation is selected on the touch control and the site of the operation is opened rectangularly on the patient's back. After the operation, the reverse key is repositioned.**

## **Advantages of this bed:**

**1- Less use of accessories for each part (side of the bed and rolls for lateralization, base screw and two literal bases, no need for two underwear to put hands)**

**2. Saving time at the beginning of the operation and the surgeon's force and helping the surgeon to position the patient.**

**3- In case of a global patent that does not have a foreign equivalent, global currency and sale for the manufacturing company**

**Thank you Saeed Aminzadeh**