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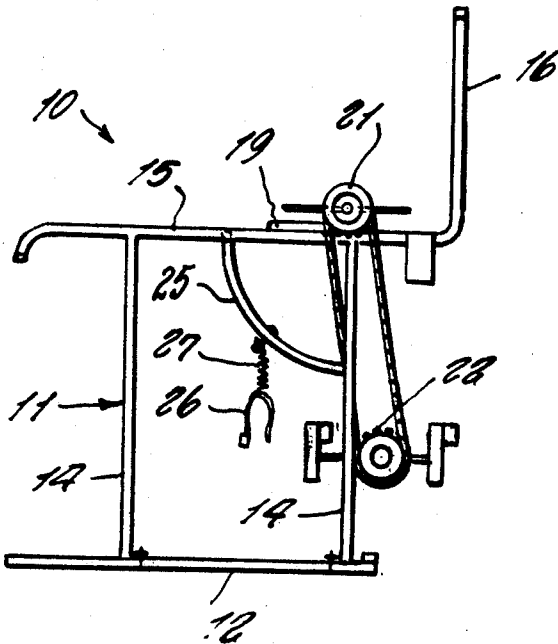
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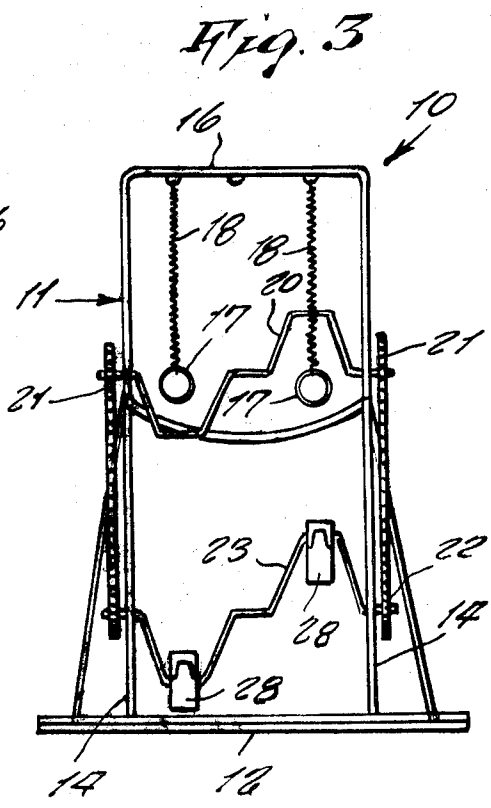
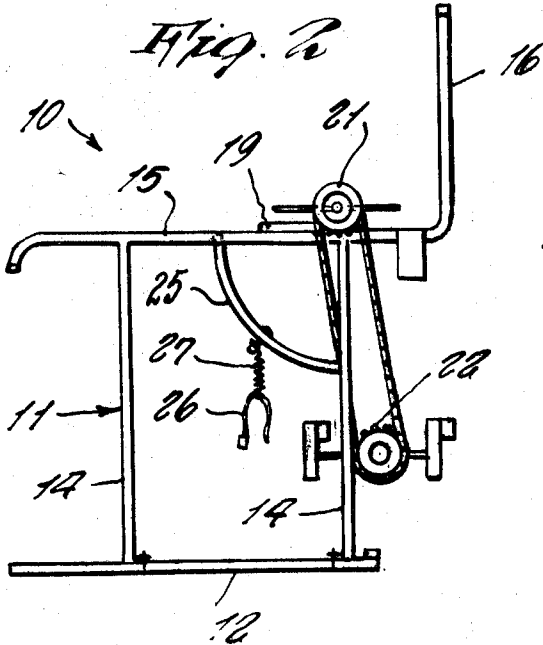
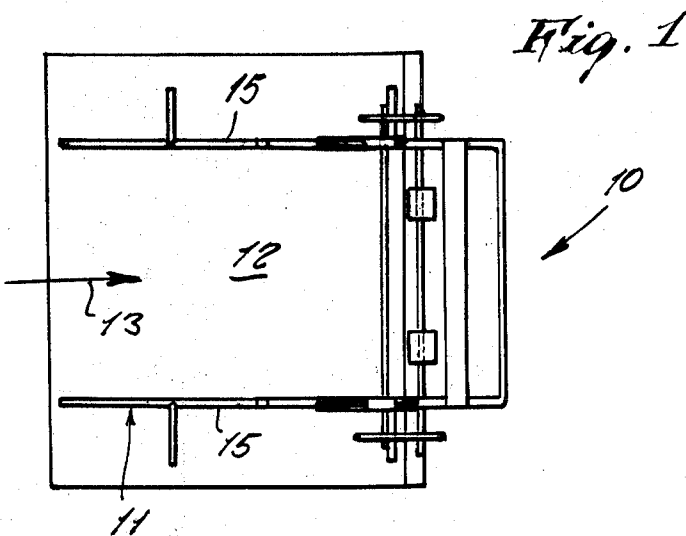
[56] References Cited			
UNITED STATES PATENTS			
2,735,422	2/1956	Jones.....	128/25
3,017,180	1/1962	Aronsohn.....	272/58
3,510,128	5/1970	Richardson	272/73X

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[54] **PARALYTIC ACTIVATING MACHINE**
3 Claims, 3 Drawing Figs.
[52] U.S. Cl..... **128/25,**
272/58, 272/73
[51] Int. Cl..... **A61h 1/02**
[50] Field of Search..... **128/25,**
24.1, 242; 272/73, 82, 83, 58

ABSTRACT: A machine for use by paralytic patients, the machine permitting the patient to do various exercises directly from a wheelchair, the machine including a frame with leg straps to support the patient's knees, the frame carrying a rotatable handcrank driving a footcrank on which the patient places his feet, thus promoting exercise of the leg muscles and joints.





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PARALYTIC ACTIVATING MACHINE

This invention relates generally to exercising apparatus for paralytic patients.

A principal object of the present invention is to provide a paralytic activating machine for paralytic patients so to do various exercises while being seated in a wheelchair.

Another object is to provide an activating machine for paralytic patients which will keep fit the muscles and joints thereby aiding in more rapid progress of recovery where such is possible.

Yet another object is to provide an activating machine which is powered by the arms and shoulders of the patient thus promoting exercise of arm and shoulder muscles and joints not affected by paralysis, and additionally stimulating a better blood circulation in the body.

Yet another object is to provide an activating machine which accordingly is designed for patients who are paralyzed in a lower portion of the body.

Yet a further object is to provide an activating machine which could be motor powered for patients otherwise afflicted or who are not strong enough to operate the device by hand.

Other objects are to provide a paralytic activating machine which is simple in design, inexpensive to manufacture, rugged in construction, easy to use and efficient in operation.

Further objects of the invention will appear as the description proceeds.

To the accomplishment of the above and related objects, my invention may be embodied in the form illustrated in the accompanying drawings, attention being called to the fact, however, that the drawings are illustrative only, and that change may be made in the specific construction illustrated and described within the scope of the appended claims.

FIG. 1 is a top plan view of the invention.

FIG. 2 is a side view thereof.

FIG. 3 is a front view thereof.

Referring now to the drawing in detail, the reference numeral 10 represents a paralytic activating machine according to the present invention, wherein there is a frame 11 mounted on a thin flat base panel 12 upon which a wheelchair may ride from a direction as indicated by arrow 13.

The frame is comprised of a pair of side legs 14 on each side, each pair of side legs being surmounted by a side bar 15, each side bar at one end being integral with one end of an upstanding U-shaped scaffold 16 from which a pair of exercising rings 17 depend at the lower end of stretchable springs 18. A bearing bracket 19 mounted on each side bar 15 supports one

end of a transverse handcrank handle 20. A sprocket 21 on each end of the crank handle is connected by endless chain to a sprocket 22 on each end of a transverse footcrank 23 supported in brackets 24 secured to one leg 14 on each side of the machine.

A brace 25 between each side bar 15 and one leg 14 supports a leather knee strap 26 attached thereto by means of a flexible spring 27.

It is understood that the frame may be made of polished metal tubing or the like for purpose of strength and attractive appearance.

In operative use, a patient riding in a wheelchair rides upon the platform and then attaches the straps 26 at each knee. Then by operating the crank handle 20 with his hands will cause the foot crank 23 to rotate. With his feet placed thereupon, his leg muscles and joints will be exercised. Appropriate foot pedals 28 will be attached on the footcrank, the foot pedals being designed to retain the feet from falling off during operation.

Alternately the rings 17 and the side bars 15 may be used by the patient to do other exercises such as to raise himself from the wheelchair or the like.

While certain novel features of my invention have been shown and described and are pointed out in the annexed claims, it will be understood that various omissions, substitutions and changes in the forms and details of the device illustrated and in its operation can be made by those skilled in the art without departing from the spirit of the invention.

I claim:

1. In a paralytic activating machine for paralytic patients, the combination of a frame mounted on a thin base panel, said frame comprised of a pair of side legs on each side, a side bar surmounting each pair of side legs, one end of each side bar being integrally connected to one end of an upstanding U-shaped scaffold from which a pair of tension springs depend, each spring supporting a ring.

2. The combination as set forth in claim 1, wherein a bearing bracket is secured on each side bar, a transverse handcrank supported rotatably free within said brackets, a sprocket at each end of said handcrank connected by endless chain to a sprocket at each end of a transverse footcrank supported rotatably free in bearing blocks mounted on leg at each side.

3. The combination as set forth in claim 2, wherein a brace between each side bar and a leg supports a tension spring to which is attached a leather knee strap.

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