A MODIFICATION OF THE HUBBARD TANK

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During the course of work amongst mentally defective children with spastic paralysis, the Hubbard tank was found to be a most useful means of securing relaxation, or in imparting to the patients a sensation of free movement, such as they often fail to obtain on a treatment table or even with a springs and slings apparatus.

In order to retain the full confidence of small patients it was felt that a movable platform or false bottom in the tank would be an advantage. Such a platform would have to fulfil the following requirements: it must be moved with minimum effort on the part of the physiotherapist; it must move very gently, with freedom from jerking or other sensation of instability; it must be readily and easily detached from the tank for cleaning purposes; and it must be under the complete control of the physiotherapist.

The Apparatus

Standard Jackall hydraulic jacks as motive power have been used. They are relatively cheap and easy to install and have the supreme advantage of being easily serviced with standard spare parts, if required. The Jackall pump unit and fluid reservoir are mounted at one end of the tank. An extension arm is fitted to the pump release valve with

Photograph showing the movable platform in a Hubbard tank.

a control knob mounted on the flange of the tank. Four standard Jackall jacks are mounted on the outer sides of the tank and give an upward thrust to the extension arms of the platform.

The platform or false bottom is made of two light aluminium sheets screwed to a framework of piping. At the four corners of the platform the piping is extended upwards and welded to an inverted metal cup, which rests on the jack head. In order to give complete stability to the platform during movement, a second pipe has been welded to the cup by means of a short piece of metal. This second short length of piping passes through a close-fitting hole in the flange of the tank and also through a small guide mounted on the outer side of the tank, near its base. The entire platform can therefore be easily removed, as it simply rests on the jack heads.

The platform is pumped up and warm water is run in through a thermostatically controlled mixing valve, to a depth of 6 in. (15 cm.) above the level of the platform or

false bottom (see Fig.). By means of the control valve the platform can be made to sink slowly, giving an additional depth of approximately 8½ in. (21.5 cm.). The platform can, of course, be kept at any intermediate depth if so desired.

So that additional warm water may be added without distracting the patient by splashing from taps, the water inlet to the tank is in the form of a hood projecting downwards and opening close to the bottom of the tank. Provision is also made for overflow to take place at a constant level.

No fixed head-rest is fitted to the tank. A standard 16-in. (40-cm.) air cushion partially inflated, doubled on itself, and secured by a tape, has been found to give enough buoyancy when placed under the nape of the neck. It does not have the disadvantages associated with ordinary water wings in hydrotherapy.

Experience gained by the physiotherapy staff during the past nine months has shown that this type of platform has a wide field of usefulness not only amongst cerebral palsy cases but also in cases of poliomyelitis.

Exercises in the bath can be given either with gravity almost eliminated and the patient fully immersed or with the platform raised and the patient only partially supported by water. By means of a simple knob, the physiotherapist can adjust the platform to suit the type of exercise she wishes to give the patient.

Summary

A hydraulically operated platform for incorporation in a Hubbard tank is described and illustrated.

The device has been found to be exceedingly useful in hydrotherapy during the course of treatment of cerebral palsy and poliomyelitis cases.

I wish to record my thanks to Mr. Kenny, chief engineer, and his staff at Pewsey Hospital for the Mentally Defective, who carried out this work for me. A similar platform is being constructed at the Marlborough Children's Convalescent Hospital by Mr. Jefferies and his staff, of Swindon Hospital Management Committee.

BRITISH COUNCIL FOR REHABILITATION

The hope that a blue-print to guide the activities of all concerned in the rehabilitation and resettlement of disabled persons will emerge from the deliberations of the new Committee on the Disabled* was expressed by Sir Walter Monckton, Q.C., Minister of Labour and National Service, at the annual general meeting of the British Council for Rehabilitation, held at the Royal Institution on March 25. He said that the setting up of the committee was proof of the Government's wish to learn from the far-reaching developments that had taken place and the knowledge gained since the interdepartmental committee under the chairmanship of the late Mr. George Tomlinson issued its report 10 years ago.

The Minister went on to say that he thought one of the most encouraging trends of the past 10 years had been the ever-widening interest in the problems of rehabilitation, and he paid a warm tribute to the work of the British Council for Rehabilitation in this field. With regard to the work of his Ministry, Sir Walter Monckton said that there were 14 industrial rehabilitation units with a total capacity of 1,500 places; these were usually filled to 85% of their capacity, and over three-quarters of the men and women came from hospitals and medical practitioners. More than 70% of those who completed courses at the units were placed in employment, and the fullest use was being made of the training facilities provided at residential colleges operated by voluntary organizations.

*Sir Walter Monckton announced in the House of Commons on March 12 that, in conjunction with the Minister of Health and the Secretary of State for Scotland, he had decided to set up a committee under Lord Piercy's chairmanship to review the existing provision for the rehabilitation, training, and resettlement of disabled persons.