

## BED HOIST FOR TETRAPLEGIC PATIENTS

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**ABSTRACT.** A bed hoist for patients who are unable to grip with their hands but who have retained flexion of the elbow joint is described.

This device helps to prevent decubitus ulcers and it facilitates dressing and bed making by staff.

In case of spinal injury at the level of C6, the hand will lack grip function and often triceps function (segments C7-Th1) is lost as well. The intact muscle function of the upper extremities consists of shoulder motion and elbow flexion (biceps; segments C5-C6).

Compared with patients with lower level injuries in whom the triceps function is retained, these patients are considerably more exposed to the risk of bedsores. Thus, they are unable to lift themselves by means of a bed hoist of ordinary design. Nor can they effectively lift the upper part of their body from a prone or supine position.

In order to meet this need for these patients, a special hoist has been constructed. The construction is shown in Fig. 1.

This device has been of help not only in con-

nection with decubitus prevention; it has also saved a great deal of nursing time insofar as it is much easier to make the patient's bed. Dressing and undressing the patient can also be handled more quickly.

### *Case history*

A 19-year old lumberman with tetraplegia following a traffic accident. *Status:* Height 190 cm. Weight 90 kg. Complete transverse spinal lesion at C6. When he was admitted to the hospital, dressing and undressing took approximately 1 hour with help by an occupational therapist. When the patient had been equipped with the new bed hoist the same task could be performed in 30 min.

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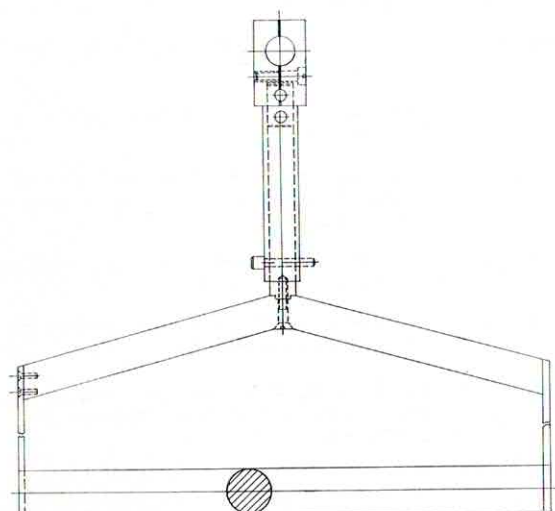


Fig. 1

