Hand Swivel: An Attachment for The Paralyzed Hand

By K. B. NELSON, C.O.

The patient with one or both hands paralyzed has always been a serious problem in the brace shop. We want to do something to enable him to help himself. A number of means have been taken to attach such instruments as a spoon or pencil to a wrist splint. Usually, however, it has been necessary for someone else to prepare the patient to use these tools and to attach whatever devise is used.

To meet this need, we have developed a Hand Swivel. This consists of a simple forearm trough with a bar extending to the palm. To the end of the bar the Swivel is attached. The Swivel has an opening in which can be inserted any one of a variety of attachments useful to the patient in his daily living. Among them are a knife, fork, a spoon, a pencil, a comb, a toothbrush, a razor, a cigarette holder, a water glass holder.

The Swivel is made of aluminum with a button on the under side which activates a steel wheel inside and permits rotation of the portion of the Swivel that holds the tools, to select one of fifteen positions. In releasing the button the tool locks in position and also locks into the Swivel. The Swivel rotates 360°. The release button is so sensitive that merely resting the hand on the table or against a part of the body will release it. Then the attachments can be changed without force. The change can be made by the teeth if necessary.

We have developed an attachment that may be inserted into the Swivel and used to pick up things from the floor, such as a paper, handbag or towel, or any one of the other attachments. This tool may be closed by simply pressing it down on the floor. It can be opened by sliding it over a ridge or over the other arm without use of fingers.

We have found this Hand Swivel most successful where the patient has reasonably good elbow and shoulder motion. For wheelchair cases, the tools may be carried in a tray clamped in front of the lap board and within easy reach. The Hand Swivel with proper tools handy, makes it possible for many handicapped persons to take care of themselves for a considerable period of time, thus releasing the services of an attendant.
The Hand Swivel modeled by Catherine Keane, Nelson Orthopedic Company.

The Swivel is precision made and requires dies and special tools. We are prepared to supply the Swivel with or without the attachments from our Pittsburgh shop at moderate cost. We shall be glad to supply any information desired by other facilities interested. The Swivel unit is in the process of being patented, the attachments are not.

The Hand Swivel was developed in the facility of the Custom Brace and Appliance Company over a three-year period. Since then we have fitted several patients with this Swivel. Dr. Jessie Wright of Pittsburgh has used and demonstrated the Hand Swivel with attachments at the Geneva Conference on Poliomyelitis in Switzerland and in other places in Europe this summer. It was well received there and every other place where shown.

George Zetts, Manager of the Washington branch of the Custom Brace & Appliance Co., was of considerable assistance to the author in developing this Hand Swivel.

REVIEWS

A MANUAL FOR OCCUPATIONAL THERAPISTS ON THE REHABILITATION OF UPPER EXTREMITY AMPUTEES

By Thelma L. Wellerson, A.M., OTR

Published by the Institute for the Crippled and Disabled, New York 10, N. Y.; 1957; 144 pages.

Although this Manual was prepared for occupational therapists it will be found very helpful to prosthetists, particularly those who are preparing for the Certification Examination.

In addition to the chapter on historical development which is reprinted elsewhere in this issue of the Journal, the Manual includes chapters on the team concept, the nomenclature and function of U.E. appliances, stump shrinkage and other pre-prosthetic training, and the training of the amputee in the use of his appliance. It is one of the most practical publications in its field.

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