## **Plastic Soft Socket Follow-Up**

by

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In the interval since the publication of a previous report<sup>1</sup> on 850 belowknee amputees fitted with a new plastic soft socket (*Flexolimb*, Bardach-Schoene Co., Inc., Chicago, Ill.) we have had opportunity both to improve the product and enlarge our experience with 100 additional cases, all of which were successful.

Some of these were old cases in which stump irritation had been a common annoyance while they were wearing prostheses with conventional sockets. One instance is that of a farmer, who, despite his physical handicap, finds it necessary to perform all the usual tasks of this occupation. His was a particularly difficult case of stump irritation; once initiated, it was difficult to control because of the man's physical activity. After being fitted with the new plastic soft socket and undergoing one or two routine adjustments he reports that he has had no trouble whatsoever.

Our own experience is confirmed by reports from other prosthetists who have visited our shop to observe the techniques of applying the material. The head of one facility² writes, "Every single case we have fitted has been successful, comfortable, and the client is extremely happy with his limb. The ages of the patients range from eleven to eighty-seven years. This has been the best improvement in B/K prosthesis in years."

Of one case in particular he adds, "The doctors at the clinic were amazed that one man fitted with this new soft socket was able to work three hours after getting his limb. He worked until two hours before clinic time eight hours a day for a week, using a piece of stockinette for a stump sock. When he was examined at the clinic his stump revealed not the slightest sign of pinkness. I was somewhat amazed myself, since this patient was carrying 100 pound sacks of salt and sugar, unloading ships at the waterfront."

The head of a Canadian facility reports, "Things are going along very nicely, and we are using the Bardach-Schoene technique to good advantage." In a later communication, he says that every case so far fitted with this soft socket has proved successful.

A number of prosthetists have reported that improvements made in the plastic sheets have not only increased the comfort of the patient but have increased the ease of handling as well. One writes, "It looks as though the new plastic sheet is softer and easier to work with."

The improvement to which they refer consists of a better fabric which, laminated to the plastic (polyvinyl chloride acetate), affords greater flexibility and heat resistance. The resin and plasticizer from which the plastic sheets are made in our plant are standard products available from commercial sources. The equipment and the process used to manufacture the plastic materials into sheets of appropriate thickness and lamination to the fabric facing have been previously described.<sup>1</sup>

We have had some inquiries as to whether or not this plastic soft socket can be used with all types of shanks. To all practical purposes, the answer is no. The shank we use was specifically designed for this purpose. While it is conceivable that the plastic might be adapted to other types, there can be no guarantee without taking the necessary time and trouble to investigate, that

such use would be successful.

From our own continuing experience with Flexolimb it still appears to be the best available insurance against stump complications, which for many years have troubled the patient and fitter alike. Stump irritation has not been seen in any of the below-knee cases we have fitted with this type of soft socket.

Perhaps it would be well to remind readers that this material is available to the profession generally, the only condition being the assurance that prosthetists using it are fully informed on the techniques of application. Since the original report<sup>1</sup>, 19 prosthetists have visited our facility for instruction. They came from Seattle, Charleston, W. Va., Detroit, Milwaukee, Edmonton (Alberta, Canada), Louisville, Fond du Lac, Wis., San Antonio, Chicago, Oak Park, Ill., Pittsburgh, Cincinnati, Dallas, Indianapolis, Oklahoma City, Peoria, Ill., and St. Louis.

The course of instruction requires sixteen hours for completion and consists of the most practical approach we know: the actual fabrication, according to specifications, of a below-knee prosthesis with the plastic soft socket. The process is carried out from start to finish under our instruction and supervision.

The sequence of operations has been detailed in a set of instructions which, along with the actual job experience, serve adequately as a guide during instruction and as a memorandum of procedures once the prosthetist undertakes the operation on his own. For this service we charge what we believe to be a reasonable fee.

Members of the profession are cordially invited to communicate whatever inquiries they may have regarding this development which, in the opinion of many, is a significant advance not only in simplifying the fitting of below-knee prostheses, but also in keeping the wearer happy and satisfied.

## Notes

 Schoene, Waldemar, "A New Plastic Soft Socket for Below-Knee Prosthesis," Orthopedic and Prosthetic Appliance Journal, Dec., 1957, Page 33.

2. Name furnished on request.

## NEW PUBLICATION

"NAPH News" is a new monthly bulletin in the field of rehabilitation. It is published by The Nation's Capital Chapter of the National Association of the Physically Handicapped, Inc. J. Roland Hays of the President's Committee to Employ the Physically Handicapped, serves as editor. George Zetts, C. O., is contributing his services as Advertising Consultant. The May 1959 issue reprints by permission an article from this Journal, "Functional Fashions for the Physically Handicapped" by Dr. Howard A. Rusk.

## **PERSONALS**

Regional Director Herbert Hart and Mrs. Hart of Oakland, California, announce the engagement of their daughter, Joyce, to Mr. John Hertz. The wedding will be held November 29. Joyce, with her brother Barry, attended the 1957 Assembly in Washington.