

tion of all these. The irritation has been overcome by substituting something else for the foam rubber, using a different finish on the leather of the socket, or through loosening the socket itself.

It would seem the proper conclusion to give the viewpoint of those who have worn b.k. suction sockets. Without exception wearers find this limb light in weight, easy to put on,

free and natural in action, dependable and comfortable. The elimination of belts, lacers, stump socks, and hinges is appreciated by all, but particularly the women. It is clear that sitting and walking are more comfortable. Normal lacer atrophy is eliminated as muscles are reactivated and circulation improved. Finally, free knee action and generally better posture and gait are attained.

Comments on the Galdik B/K Suction Socket

CHARLES O. BECHTOL. M.D.

The below-knee suction socket cases were followed for a period of four years in San Francisco. Our general experience with them during that time was good and no serious complications were encountered in the use of this device. The successful use of the below-knee suction socket depends upon two factors; first, proper fitting and second, proper alignment. Fitting is an extremely critical matter in order to maintain suction. The fit must therefore be done with considerably greater care than usual in order to maintain suction. The use of the cold cream serves two purposes, first it allows the stump to be slid into the socket. If any rotation is necessary for the bony prominences to fit into their proper spots, the cold cream allows this to occur. The slight stickiness of the cold cream also aids considerably in maintaining suction. Although we anticipated the possibility that some skin difficulty might occur following the prolonged use of cold cream in contact with the skin, we saw no such difficulties.

There were two critical factors in the alignment of the leg. The first was the outset of the foot. If the foot was placed directly into the socket during weight-bearing a sideways shift to the

socket occurred tipping the socket against the stump and causing excessive pressure on the inner side of the brim of the socket. This was prevented by a proper amount of outset of the foot, so that the legs have a slightly knock-kneed appearance. This is something that must be determined by a process of trial and error. It is quite critical for proper use of the below-knee suction socket. The other critical phase of alignment is the proper adjustment of the heel bumper and front bumper so that the amputee may allow his knee to bend slightly after heel strike. Before this bend has become so great that his knee becomes unstable, the contact of the front bumper forces the knee back into extension. In this regard the suction socket wearer walks quite differently from the amputee wearing side hinges on a corset. The amputee wearing this conventional type of device does not allow his knee to flex at the moment of heel strike, but keeps his knee locked in extension by thrusting the knee back with the muscles of the hip. The problem of loss of suction has not been a severe one. If suction is lost, the leg falls off the stump immediately. For this reason some wearers use a light strap or a

light elastic knee bandage so that if suction was inadvertently lost, the socket did not fall away from the stump. The replacement of the stump in the socket after loss of suction is merely a matter of forcing the stump firmly into the socket. In this regard loss of suction is not as severe as in the case of the above-knee suction socket, where the stump must again be pulled in by means of a sock.

In summary I should say that no serious complication have been observed in four years of using below knee suction socket. The advantages to the amputee are the same as those of the above-knee suction socket, in that the leg feels lighter, the amputee seems to have better control of it and he is freed of the side hinges and thigh corset.

“Orthopedic Disabilities” — New Guide For Employment Counselors

The Department of Labor has just published a guide book on “Orthopedic Disabilities.” This is for the use of interviewers and counselors in the employment services, who are endeavoring to place persons in jobs, and who need to know about specific disabilities.

The new book lists OALMA and the American Board for Certification as cooperating agencies which may be contacted for information about orthopedic disabilities.

The section describing the disabilities defines the coverage of the term, *Orthopedic Disability*. It lists the various forms of such disabilities, their causes, and their effect on the body; points out that function may be restored or improved through medical and surgical procedures, use of prosthetic and orthopedic aids, and suggests clues for identifying orthopedically disabled persons.

The section on *evaluation of work capacity* lists the factors, which are of significance in counseling and placing persons with orthopedic disabilities. Specific information about an individual related to the factors included in this section, will make possible a more accurate diagnosis of the individual's work capacity.

One of the major accomplishments hoped for by those who prepared the guide is to create a better mutual

understanding of job requirements and individual work capacities between the medical profession, personnel workers, and limb and brace technicians. The findings of a medical examination of a job applicant sometimes lose meaning in the placement process, because the physician's terms are difficult for the placement person to interpret.

The physician and orthotist also have a problem; they cannot be familiar with all the duties and physical demands of the many jobs with which his patients might be involved. The guide on orthopedic disabilities will inform them of the factors related to these disabilities about which placement personnel must have information for suitable placement. It will emphasize the individuality of the physical capacities of persons with such disabilities, and therefore, will tend to broaden the consideration of occupational fields which might be suitable for them. Thus, this guide will alert the physician and the orthotist to those aspects of orthopedic disability which are of special occupational significance. It will also enable the placement person or counselor to translate the medical findings into terms that may be directly related to the demands of jobs. Copies of the new guide may be borrowed from OALMA headquarters.