

THE STORY OF BRETT CUNNINGHAM

H. P. Barghausen Reports Successful BK

Fitting of 14 Month Old Boy

Herman Barghausen, of the J. E. Hanger Company of Pittsburgh, has sent us a very interesting account of fitting a 14 month old boy, Brett Cunningham, with a below-knee prosthesis. We feel sure our readers will be interested in the details of the case, and will be pleased to know how successfully Brett has adapted himself to using the prosthesis.

Brett's case was a referral for rehabilitation by Dr. William S. Donaldson of Children's Hospital in Pittsburgh. A copy of Dr. Donaldson's letter to Mr. Barghausen states:

"My examination revealed there is approximately $1\frac{3}{8}$ " of tibial shaft extending distally from the medial tibial plateau. Also has full flexion and extension of the knee with sufficient muscle control in both flexion and extension of the knee to control a BK prosthesis. Obviously range of motion of both knee and hip are sufficient."

Brett's amputation, Mr. Barghausen writes,

". . . is a congenital case having at the most $1\frac{3}{8}$ " of stump from the center of knee to the end. After discussing the type of prosthesis with the doctor, it was decided to furnish a BK prosthesis, fitting the stump up to the patella. The leather corset was coated with nylon coating and lined inside with naugahide for obvious reasons.

"You will note we did not furnish a foot with this prosthesis because the shoe size would change too rapidly. Instead of a foot we finished the end of the prosthesis with a $\frac{3}{8}$ " neoprene crepe rubber.



"To eliminate taking the prosthesis from the child for lengthening, we furnished the parents with three oblong disks and instructed the father to remove the crepe rubber and screw the disks against the bottom or end of the prosthesis and then to cement the cushion to the end of the prosthesis.

"This method of lengthening the prosthesis was acceptable to the doctor as it eliminated the costs of lengthening the prosthesis in the shop."

To complete the story of Brett Cunningham, Mr. Barghausen asked for further details from the Home for Crippled Children where the boy received therapy. The Home is a voluntary, non-profit corporation providing rehabilitation services for one hundred children. It recognizes no restrictions because of race or creed, nor for monetary reasons. Mr. Ted Hipkins, Executive Director, and Miss Whitfield, P.T., give the following detailed and interesting description of Brett's therapy at the Home:

"Brett was admitted to the Home for Crippled Children on October 4, 1959, with a congenital below knee amputation of the right leg. The patient was fitted with a below knee type of prosthesis and gait training was ordered by the doctor. Since the patient had never worn any type of appliance before, the first step consisted of building up a tolerance for the prosthesis. He began by wearing the leg daily for an hour in the morning and afternoon in addition to a half hour during his therapy period. Because the child was so young it was important to protect the prosthesis from periods of incontinence, prevent his tampering with the leg and maintain it in a securely fastened position. This was achieved by covering the prosthesis with a piece of 3 inch stockinette sewed at one end and pinned to the diaper both front and back. The patient was then placed in a playpen for morning and afternoon periods wearing the leg. In the matter of a few days he began to pull himself to a standing position and bear weight on the prosthesis. He adapted so well to the prosthesis that he was permitted to wear it all day. In therapy, training started with teaching the patient to crawl. In a week he was pulling his prosthesis through as well as his normal leg in an effective reciprocal pattern. The patient had also begun to pull himself to a standing position with the aid of gym furniture such as stall bars and graduated steps.

"Brett became quite skillful at manipulating his prosthesis to get up and down from the floor. Starting from a kneeling position, he held on to something, put his normal leg ahead, and then straightened up, pulling his prosthesis up after him. To get down he would bend the prosthesis at the knee, place it on the floor, and then place his other knee on the floor beside it.

"After about 10 days of practicing crawling and pulling to a standing position, he was placed in the parallel bars. Up to this point the only steps he had taken were side steps around furniture and in his playpen. With some prodding, such as presentation of a toy, he would take three or four steps forward. In addition to this he was walked back to his room after every therapy period with the therapist beside him holding on to his hand. The patient learned to use his prosthesis well considering his age. When taking a step he would bend the knee of the prosthesis and then transfer his weight to the prosthesis, bringing his left leg through. In order to encourage the patient to practice walking as much as possible he was given a toy baby carriage weighted with 10 pounds to prevent tipping. He held on to the handle bar and pushed the carriage up and down the halls. This worked quite well.

"The patient was discharged on November 20 after a month of training. Home instructions were given his parents. They were told to have the patient continue to wear the prosthesis and to encourage him to walk as much as possible. The idea of the baby carriage was recommended to them. It is hoped that as he continues to become more adept in the use of the prosthesis he will eventually walk alone."

The latest report on Brett's progress comes from a letter from Mr. Barghausen, dated February 24, 1960.

"At this date little Brett is pushing anything with wheels on it and is doing quite well in handling his prosthesis."

Our congratulations to Mr. Barghausen and to all concerned in the rehabilitation of this 14 month old youngster. And our thanks for his making the report available to us—we need more of these case histories in our literature.

HOSMER CORPORATION OPENS EASTERN OFFICE IN CINCINNATI

The A. J. Hosmer Corporation recently announced the opening of their new Eastern Division in Cincinnati, Ohio. Mr. Ray Crowell, formerly with Truform, has joined the Hosmer Organization and will manage the new Division.

The new facility will be known as the Hosmer Eastern Division. All stock items shown in Hosmer's new 5th Edition Catalog will be carried in stock. Lloyd Brown, president of Hosmer, says the main reason for this Eastern Division is the opportunity to better serve the many Hosmer friends who are located at great distances from the California plant. Considerable savings in time and transportation costs will be realized by Hosmer customers located East of Denver.

The Hosmer home office and complete manufacturing facilities will continue operations at Santa Clara, Calif. Fabricating jobs and requests for other special manufactured items should be directed to the main plant at Santa Clara. All orders for standard cataloged items should be sent to the division closest to your operation.

The mailing address for the new Hosmer Eastern Division is P. O. Box 117, Cincinnati 6, Ohio. Street address is 615 East McMillan St., and the telephone number is AVon 1-8872.



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