RECENT PATENTS[a]

Adjustable Alignment Coupling for Lower Extremity Prostheses: Henry F. Gardner and Anthony Staros, assignors to the United States of America as represented by the Secretary of the Army or the Administrator of Veterans Affairs. An alignment means in a temporary or unfinished prosthesis which would allow simulation of all physical, permanent characteristics of the permanent prosthesis. The coupling provides the following alignment adjustment means: anteroposterior, mediolateral, tilting and rotational adjustments and alignment. (Patent No. 3,273,168, Sept. 20, 1966; filed June 21, 1963, Serial No. 289,764; 8 claims.)

Adjustable Base Unit for Invalid Lifts: Gilbert I. Stewart and Kenneth H. Teeter. An adjustable base unit provided with worm gear actuated legs that are selectively movable in a wide range toward and away from each other. (Patent No. 3,270,574, Sept. 6, 1966; Continuation of Application Serial No. 189,602, Apr. 23, 1962. This application filed May 10, 1965, Serial No. 454,268; 2 claims.)

Adjustable Legrest for Wheelchairs: Harry C. Jennings, deceased, by Harry C. Jennings, Jr., executor, assignor to Everest & Jennings, Inc., Los Angeles, California. An adjustable legrest for a wheelchair that supports the intermediate portion of the lower leg as well as the foot and which can be swung out of a leg-supporting position and can be adjusted longitudinally for varied positions of leg support. (Patent No. 3,301,595, Jan. 31, 1967; original application Dec. 23, 1963, Serial No. 332,686. Divided and this application Mar. 9, 1966, Serial No. 534,298; 2 claims.)

Apparatus for Detecting Motion and Objects: Peter Laakmann, assignor to American District Telegraph Company, Jersey City, N.J. An apparatus designed to detect motion and objects in a limited space through the use of acoustic energy. The device is lightweight and especially adaptable for portable use such as a personal guidance system to assist blind persons. (Patent No. 3,260,991, July 12, 1966; filed Mar. 20, 1963, Serial No. 266,573; 7 claims.)

Back Brace: Nicholas C. Connelly, assignor to S. H. Camp & Company, Jackson, Mich. A body brace incorporating a substantially rigid frame within a padded cover wherein the cover may be easily removed from the frame and replaced or cleaned. (Patent No. 3,282,264, Nov. 1, 1966; filed Feb. 3, 1964, Serial No. 341,915; 6 claims.)

Bath Seat Lift: Francis P. Glover. An apparatus for maneuvering an invalid in and out of a tub. It may be mounted on the edge of a tub, and it contains a seat that is horizontally rotatable from a first loading and unloading position over the edge of a tub to a second position in which it may be lowered into the tub and raised again. (Patent No. 3,289,217, Dec. 6, 1966; filed May 13, 1964, Serial No. 366,996; 7 claims.)

[a] Patents may be ordered by number from the Commissioner of Patents, Washington, D.C. 20231, at 50 cents each.

Bathtub Elevating Seat: Forest M. Sarff. A device for lowering a person who is in a sitting position into and out of a bathtub. The seat can be folded out of the way when not needed or can easily be removed completely. (Patent No. 3,271,791, Sept. 13, 1966; filed July 10, 1964, Serial No. 381,849; 2 claims.)

Bed-Wheelchair: Salvatore J. Piazza. A convertible device with power-driven means for transition between bed and wheelchair. Effort on the part of the attendant and disturbance of the patient are minimized. (Patent No. 3,284,126, Nov. 8, 1966; filed May 14, 1964, Serial No. 367,310; 3 claims.)

Cervical Collar: George W. Cottrell. A cervical collar with inflatable pneumatic means applied to certain edges of the collar. The user applies pneumatic pressure as he desires to provide maximum comfort commensurate with the degree of rigidity required. (Patent No. 3,285,244, Nov. 15, 1966; filed June 8, 1964, Serial No. 373,302; 1 claim.)

Cervical Collar: Simon Grassl. A cervical collar that may be adjusted to several positions while maintaining a fixed position once adjusted. It consists of a double-frame collar in which the bottom member is substantially flat permitting it to lie against the chest of the wearer. The upper frame has a semi-rounded upward shape providing a support to the chin. (Patent No. 3,295,516, Jan. 3, 1967; filed Jan. 27, 1964, Serial No. 340,154; 6 claims.)

Cervical Collar: Louis Yellin. An adjustable cervical collar for various neck sizes and various positions which includes a posterior bar to prevent rotation of the head and maintain front to rear stability. The device can be easily donned and removed. (Patent No. 3,285,243, Nov. 15, 1966; filed Jan. 2, 1964, Serial No. 335,011; 3 claims.)

Chair Lift: Albert N. Engelmeier. A novel chair lift, which may be quickly and simply operated, for transporting patients in their chairs from one place to another. (Patent No. 3,284,093, Nov. 8, 1966; filed Mar. 19, 1964, Serial No. 353,062; 3 claims.)

Combination Invalid's Chair and Safety Belt: Frederick V. Shelton. A wheelchair with a safety belt to reliably secure an occupant from either falling from or leaving the chair. The belt is placed so that it cannot be reached by the occupant. (Patent No. 3,298,740, Jan. 17, 1967; filed Aug. 24, 1965, Serial No. 482,099; 4 claims.)

Combined Handle and Hand Grip for Crutches: Alfred A. Smith. A handle or hand grip on crutches sufficiently strong to support the weight of the user and sufficiently soft to provide greater comfort than the conventional crutch hand grip. Also, the contour of the gripped portion can be substantially altered manually by applying pressure. This causes the hand grip to conform to the contour and size of the user's hand and thereby provides a more comfortable and secure grip. (Patent No. 3,269,399, Aug. 30, 1966; filed Aug. 3, 1964, Serial No. 386,827; 4 claims.)

Corrrective Shoe: Donald J. Friedman. An adjustable splint for footwear which maintains the wearer's feet at a fixed minimum angle with respect to each other while permitting limited movement in other directions. Flexible or rigid splints may be used and each is quickly detachable from the shoes permitting normal wear when desired. (Patent No. 3,265,063, Aug. 9, 1966; filed Aug. 8, 1962, Serial No. 215,630; 16 claims.)

Crutch Pad: Alfred A. Smith and Howard C. Lien. A crutch pad designed to resist wear and deteriorization. The pad is reinforced, particularly at the ends, with an elastomer of greater tensile strength than the rest of the pad. In addition to resisting wear, this material may reduce the deterioration from oxidation which commonly occurs with foam rubber materials. (Patent No. 3,269,400, Aug. 30, 1966; filed Feb. 28, 1963, Serial No. 261,799; 1 claim.)

Crutches: Richard R. Tryon. A telescoping crutch with a pivotable hand grip that when not in normal position informs the user by his sense of touch that the crutch is not locked in position and when the hand grip is in normal position, the crutch is positively locked in position. (Patent No. 3,301,268, Jan. 31, 1967; filed May 3, 1965, Serial No. 452,694; 5 claims.)

Goniometer: Wayne A. Simril. A device for measuring the angle of a spine curvature shown on an X-ray film in a fast, simple, efficient manner without marring the film. The inventor claims that the present method requires marking the film which is time consuming, destroys the film, and provides more chance for inaccuracy. (Patent No. 3,270,420, Sept. 6, 1966; filed Mar. 13, 1964, Serial No. 351,685; 1 claim.)

Invalid Lifting Apparatus: Frederick Albert Batty and Peter Lawrence Batty. An invalid lifting device intended for transferring a patient to and from a bath. The apparatus comprises a stationary support and a lift with a two-pronged fork-type arrangement connected together by crossbars. The fork-lift arrangement is adaptable for a removable seat and can also engage a wheeled chair as described in Patent No. 3,220,575, dated Nov. 30, 1965. (Patent No. 3,268,918, Aug. 30, 1966; filed Sept. 6, 1963, Serial No. 307,192; 6 claims.)

Method of Applying a Polyurethane Foam Splint: James D. Mahoney, Jr. A spray method of applying polyurethane foam formulation to a gauze covered area that requires splinting or supporting. The polyurethane formulation is of a non-toxic composition. (Patent No. 3,301,252, Jan. 31, 1967; filed Dec. 5, 1963, Serial No. 328,304; 1 claim.)

Pulsating Body Supporting Pad With Alternately Inflatable, Superposed Cells: Kenneth C. Foley, assignor, by mesne assignments, to Affiliated Hospital Products, Inc., St. Louis, Mo. A pulsating body supporting pad having a series of cells which are alternately inflatable and deflatable. The object of this invention is to maintain all areas of a person's body out of pressing engagement with a hard surface so that circulation is not impaired. Another object is to provide a massaging action to promote circulation and the further prevention of decubital scores. (Patent No. 3,297,023, Jan. 10, 1967; filed June 9, 1964, Serial No. 373,691; 8 claims.)

Remote Alternator for Selective Actuation of Prosthetic Limbs and Surgical Appliances: Alfred Henry Taylor, Alfred Charles William Ford, and Charles Philip Steeper, assignors to Hugh Steeper Limited, London, England. A mechanism for remote actuation of alternate functions, especially the locking and unlocking of a device for the angular adjustment of the members of a prosthesis. According to the inventors the device is small, light, and compact. (Patent No. 3,273,169, Sept. 20, 1966; filed Aug. 6, 1963, Serial No. 300,214, claims priority, application Great Britain, Aug. 9, 1962, 30,597/62; 10 claims.)

Runabout Wheelchair: Russell E. Nihlean and Fred A. Sass. A runabout wheelchair with an improved footrest and three sets of wheels on a spring wheel suspen-

sion for a softer ride. The chair may be made of tubular aluminum for light weight, and the backrest and seat may be provided with foam rubber covered with naugahide for comfort. (Patent No. 3,282,605, Nov. 1, 1966; filed Jan. 8, 1965, Serial No. 424,374; 5 claims.)

Servo Controlled Manipulator Device: Leon Jones and John L. Thousand, assignors to Northrop Corporation, Beverly Hills, Calif. A servo controlled manipulator device for precisely controlling gripping action in response to the hand of the operator. An object of this invention is to provide such a device which will give more natural tactile and kinesthetic sensations to the operator. (Patent No. 3,263,824, Aug. 2, 1966; filed Dec. 20, 1963, Serial No. 332,221; 16 claims.)

Stair Climbing Wheel Chair: Donald E. Joslyn. A stair-climbing wheelchair designed to be operated by the user to negotiate stairs or steep slopes which cannot be accomplished by conventional wheelchairs. The climbing mechanism comprises lifting legs and power cylinders for positioning and moving the chair up or down stairs. (Patent No. 3,269,478, Aug. 30, 1966; filed Dec. 6, 1965, Serial No. 511,741; 9 claims.)

Stair-Climbing Wheelchair: Ronald K. Brown and James G. Beneke. A wheelchair consisting of an arrangement of a plurality of wheels to enable the chair to ascend or descend stairs. This invention allows one wheel to rest on each stair tread as the device climbs or descends. The same means for climbing may be used for advancing the chair on level ground. (Patent No. 3,283,839, Nov. 8, 1966; filed Mar. 2, 1965, Serial No. 436,478; 17 claims.)

Step Stick Walking Aid: Alene McCall Parker. A walking aid that can be extended or shortened as needed quickly and without the use of tools and when adjusted remains in position firmly. The aid has two vertically spaced hand grips which are useful under certain conditions of walking. (Patent No. 3,289,685, Dec. 6, 1966; filed Oct. 5, 1964, Serial No. 401,452; 2 claims.)

Step Walker: Alene McCall Parker. A versatile walking aid that provides several hand grips at different elevations for varied situations, such as: regular walking, ascending and descending stairs and ramps, and to assist in sitting down and arising from a seat and maintaining balance while stooping over as in picking up articles. (Patent No. 3,280,831, Oct. 25, 1966; filed Aug. 31, 1964, Serial No. 393,230; 11 claims.)

Wheel Chair: John V. Kitrell, assignor to Lincoln Carriage Corporation, Maricopa, Ariz. A novel wheelchair particularly adapted for transferring patients to and from a bed without lifting him. The wheels can be placed under the bed while a vertically swiveled cantilevered seat passes over the bed. The backrest can be lowered into a horizontal position and the whole seat pivots on a vertical axis so that the patient may lie in a horizontal position directly over the center of the bed where he can be easily rolled on to it. (Patent No. 3,264,658, Aug. 9, 1966; filed Dec. 20, 1962, Serial No. 246,131; 6 claims.)