

RECENT PATENTS ^a

Plastic Prosthetic Tendon: Bruce R. Bodell. A tendon substitute, with improved structure, especially end structure and with improved suture methods, obviates the use of many undesirable and objectionable features and shortcomings of prior art devices and techniques. (Patent No. 3,176,316, Apr. 6, 1965; filed Jan. 7, 1963, Serial No. 249,818; 2 claims.)

Cervical Neck Brace: William L. Bartels. A cervical neck brace which may be adjusted to maintain the head of a wearer in a particular fixed position. (Patent No. 3,177,869, Apr. 13, 1965; filed Nov. 3, 1961, Serial No. 149,994; 3 claims.)

Electrically Propelled Chair with Compartmented Propulsion and Recharging Systems: Richard W. Moran. A single passenger, electrically powered vehicle with the battery, motor, and rectifier for recharging compactly assembled under the seat of the chair. (Patent No. 3,179,199, Apr. 20, 1965; filed July 31, 1963, Serial No. 298,928; 7 claims.)

Obstacle-Climbing Wheel Chair: Otto G. Pikel. A wheelchair that will climb such obstacles as steps and stairways. It is provided with wheels having rims composed of segments that may be selectively collapsed or moved closer to the hub of the wheel in order to conform the rim more closely to the contours of stairway steps. (Patent No. 3,179,431, Apr. 20, 1965; filed Jan. 29, 1963, Serial No. 254,658; 18 claims.)

Stairclimbing Wheelchair: George D. Grogan. A wheelchair adaptable for ascending and descending stairs. Incorporates the use of grousers that are readily extended and retracted as desired, and when extended are weight bearing and suitable for ascending and descending stairs. (Patent No. 3,178,193, Apr. 13, 1965; filed Nov. 21, 1962, Serial No. 239,207; 14 claims.)

Therapeutic or Walking Exercising Vehicle: Donald Lee McCabe. A vehicle which is suitable for walking exercises for post-operative patients. It has a broad base and related features which provide great stability and safety. It is also braked when the user sits on it so that vehicle remains stationary. It has a body-embracing backrest which is readily removable to assure that the user does not fall out on the side or back. (Patent No. 3,180,678, Apr. 27, 1965; filed May 14, 1962, Serial No. 194,570; 2 claims.)

Harness for Control of Upper Extremity Prosthesis: Carl Martin Cooper, William B. Sulmonetti, and Clarence A. Renfro. A type of shoulder harness for BE and AE amputees for the suspension of the prosthesis and controls for operation of the terminal device. It permits control of the terminal device regardless of the position of the normal upper extremity. It also provides a "Delto-Pectoral Scapular Suspension Loop" which has two fixed areas of control with the body for function but which spans across the axilla eliminating any pressure, constricting or binding forces in the axilla, therefore, precluding irritation or cutting of the skin in the axilla. The necessity for padding the axilla is eliminated. (Patent No. 3,188,655, June 15, 1965; filed Apr. 5, 1962, Serial No. 185,419; 2 claims.)

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

Joint Arrangement with Multi-Positional Locking Means for a Prosthetic Surgical Appliance: Candido Reyes Terron, Madrid, Spain. A joint arrangement for prosthetic appliances which is versatile in the range of movements it permits to the two structural members which respectively replace portions of the leg above and below the knee joint. (Patent No. 3,187,347, June 8, 1965; filed May 11, 1962, Serial No. 194,014; claims priority, application Spain, June 9, 1961, 87,656; 9 claims.)

Lock Assemblage for Adjustable Leg Rest: Adolph C. Mommsen, assignor to Metal-Matic, Inc., Minneapolis, Minn. A lock assemblage or mechanism for maintaining an adjustable leg rest at a desired height on a wheelchair. The lever or handle to adjust the leg rest is readily accessible to the occupant of a wheelchair. (Patent No. 3,189,385, June 15, 1965; filed Jan. 6, 1964, Serial No. 335,908; 5 claims.)

Invalid's Leg Rest: Jerome J. Bliss, assignor to Metal-Matic, Inc., Minneapolis, Minn. A resiliently mounted leg rest for wheelchairs which will readily assume a position most suitable for the particular position in which the user's leg is placed. (Patent No. 3,189,384, June 15, 1965; filed Jan. 6, 1964, Serial No. 335,907; 6 claims.)

Collapsible Ramp and Stair Units: Kenneth P. Lovdahl. A novel ramp and stair unit adapted for use with a vehicle for the transportation of handicapped persons. (Patent No. 3,176,334, Apr. 6, 1965; filed Aug. 28, 1961, Serial No. 134,274; 2 claims.)

Walking Aid Device: John H. Drury, Jr. A walking-aid device for invalids that is useful for ascending and descending stairs as well as walking across flat surfaces. (Patent No. 3,176,700, Apr. 6, 1965; filed Jan. 10, 1963, Serial No. 250,653; 4 claims.)

Wheel Chair Driver Attachment: James F. Petersen. A wheelchair driver attachment which will enable quadriplegics and other invalids to propel their own wheelchairs with a minimum of effort and without requiring any finger or hand manipulations. (Patent No. 3,189,368, June 15, 1965; filed Dec. 23, 1963, Serial No. 332,744; 11 claims.)

Walker and Lifting Device: Walter M. Simpson, assignor to Seven E. Corporation, Evansville, Ind. A walking assist and lifting device for supporting, exercising, lifting, and transferring incapacitated or handicapped persons from one place to another. It may be operated manually or automatically by the person attending the patient using the device, or may be operated automatically by the patient. (Patent No. 3,189,345, June 15, 1965; filed Oct. 2, 1962, Serial No. 227,882; 19 claims.)

Shoulder Brace: Henry G. Nelkin, assignor to H. G. Enterprises, Kansas City, Mo. A shoulder brace provided with pull straps, the ends of which are located at the front of the body of the wearer. When the strap ends are pulled, the entire brace will tighten against the body and thus pull back the shoulders of the wearer. (Patent No. 3,182,655, May 11, 1965; filed Nov. 19, 1962, Serial No. 238,453; 8 claims.)

Invalid Chair: William E. Reeves. A chair for use in the prevention and treatment of pressure sores in invalids. More specifically, it provides a device for simultaneously relieving pressure in the ischial, sacral, and trochanteric areas, while the patient is continually in a resting position. (Patent No. 3,186,759, June 1, 1965; filed Feb. 21, 1962, Serial No. 174,812; 2 claims.)

Artificial Limb Cushioning Pad: Bertha E. Miller. An adhesive backed pad for use by amputees who wear a prosthesis. It is placed between the terminal of the stump and the opposing socket surface to reduce friction and relieve pain. Designed for short term use, the pad is easily removed when its purpose has been served. (Patent No. 3,186,006, June 1, 1965; filed July 11, 1962, Serial No. 209,072; 1 claim.)

Swinging Foot Rest: William J. Pivacek, assignor to Mobilaid, Incorporated, Elyria, Ohio. A swingable footrest with improved facility of attachment to and detachment from a wheelchair. (Patent No. 3,185,527, May 25, 1965; filed Nov. 14, 1963, Serial No. 323,703; 13 claims.)

Wheel Chair with Reclining Backrest and Movable Axle Associated Therewith: William J. Pivacek, assignor to Mobilaid, Incorporated, Elyria, Ohio. A wheelchair with a reclining backrest in which the wheelbase automatically changes with the inclination of the backrest thereby shifting the center of gravity to where it is required for more stability and safety. (Patent No. 3,185,495, May 25, 1965; filed Dec. 18, 1963, Serial No. 331,503; 13 claims.)

Method and Apparatus for Improving Hearing: Hans Jechiel Salomon and Leo Herzl Schaudinischky, Haifa, Israel. An apparatus to improve hearing of individuals with deafness in one ear and normal hearing in the other. Sound is transmitted from the deaf side to the normal side so that the wearer hears the sound twice in his normal ear resulting in a mental impression that he is hearing with both ears. (Patent No. 3,183,312, May 11, 1965; filed Sept. 22, 1961, Serial No. 140,083; 9 claims.)

Therapeutic Chair: Kenneth H. Bagnell. A therapeutic chair and electrical system which tilts the chair slightly, and slowly, in several directions, sequentially and at given times, so that certain physiological advantages may be obtained. (Patent No. 3,191,594, June 29, 1965; filed Jan. 10, 1963, Serial No. 250,683; 3 claims.)

Stair Climbing Wheelchair: Edward M. Aysta. A wheelchair capable of passing over curbs and ascending and descending stairs by means of an endless track system which can be disengaged for use on level surfaces. (Patent No. 3,191,953, June 29, 1965; filed Dec. 28, 1962, Serial No. 248,107; 10 claims.)

Reclining Mechanism for Wheelchairs and the Like: Donald Edwin Rugg and William R. Orr. A wheelchair or wheelchair mechanism which permits the occupant to vary or change position between an upright and a full reclining position in an effective and improved manner. (Patent No. 3,191,990, filed May 31, 1962; Serial No. 199,089; 12 claims.)

Stair-Climbing Wheel Chair: Dale E. Brenner. A powered wheelchair designed to ascend and descend stairways of varied tread widths and heights. The wheelchair can be collapsed, to a limited extent, transversely. In normal horizontal movement, the chair is propelled by hand. (Patent No. 3,196,970, July 27, 1965; filed May 17, 1963, Serial No. 281,163; 10 claims.)

Ankle Joint for Artificial Limb: Clayton S. Farneth. A flexible coupling for connecting an artificial foot to an artificial leg. The coupling is resilient, adjustable, and functions as a universal ankle joint allowing the foot to move, within limits, in any direction relative to the leg. (Patent No. 3,196,463, July 27, 1965; filed May 23, 1962, Serial No. 196,976; 5 claims.)

Stair-Climbing Vehicle: Alois Steiner. A vehicle propelled over ground by a traction belt arrangement. This vehicle, which is controlled and propelled by the occupant, can climb and descend obstructions such as stairways. Adjustment facilities are provided for maintaining the occupant in a level position at all times. Also provided is a footrest arrangement for adjusting the position of the occupant's feet under all operative conditions of the vehicle. (Patent No. 3,195,910, July 20, 1965; filed Feb. 12, 1964, Serial No. 344,496; 9 claims.)

Stair Climbing Wheel Chair: Than Robinson Porter. An invalid chair which can be propelled by the occupant on level flat surfaces without marring floors, rugs, or other surfaces. This chair, by means of endless track-type tires, is capable of negoti-

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ating street curbings and average stairs. (Patent No. 3,198,534, Aug. 3, 1965; filed Oct. 18, 1963, Serial No. 326,313; 18 claims.)

Photosensitive Obstacle and Curb Detection Device for the Blind: Thomas A. Benham and Joel Malvern Benjamin, Jr., assignors to The Corporation of Haverford College, Philadelphia, Pa. Devices for use by the blind for the detection of obstacles and curbs. They employ visible or near visible light in a triangulation system. Included are light sources and light detectors sensitive to non-specular reflections of light from the source together with various optical, mechanical, and/or electronic means. (Patent No. 3,198,952, Aug. 3, 1965; filed Sept. 15, 1961, Serial No. 138,524; 25 claims.)

Crutches: Carmen Gottman. A knee crutch which incorporates a leg rest and may be used as a prosthetic leg extension for below-knee amputees. (Patent No. 3,205,905, Sept. 14, 1965; filed Mar. 1, 1963, Serial No. 262,123; 1 claim.)

Convertible Cane-Equipped Crutch: Maurice M. Irwin. A crutch constructed with a built-in cane. The cane is used as part of the overall crutch and is capable of independent use as a regular walking cane. (Patent No. 3,208,461, Sept. 28, 1965; filed Aug. 9, 1963, Serial No. 301,006; 2 claims.)

Patient Lifting Device: James Camper. A lifting device which is easily assembled and taken apart. (Patent No. 3,205,512, Sept. 14, 1965; filed Aug. 8, 1963, Serial No. 300,839; 2 claims.)

Patient Lift: Olaf Alfred Lundberg. A patient lift which is capable of providing substantial longitudinal support to the patient's body as well as carry and lower him with maximum ease and safety. (Patent No. 3,203,009, Aug. 31, 1965; filed Dec. 4, 1963, Serial No. 327, 895; 4 claims.)

Stair Climbing Vehicle: Robert L. Phillips and Harley L. Sheets. A self-propelled vehicle which can be controlled by either the occupant or an attendant. It is useful for transporting a person or goods and is particularly adapted for movement on stairs. In addition, the passenger seat is removable and can be used as a separate wheelchair. (Patent No. 3,204,716, Sept. 7, 1965; filed Oct. 26, 1962, Serial No. 233,485; 8 claims.)

Motor Powered Vehicle for Handicapped Persons: Claude E. Williams. A motor powered vehicle suitable for use, without assistance, by a handicapped person. It has a variable speed arrangement coordinated with a braking system. (Patent No. 3,204,791, Sept. 7, 1965; filed Jan. 20, 1964, Serial No. 338,928; 4 claims.)