

NOTES AND NEWS

CELEBRATION OF 25th ANNIVERSARIES

During the week of October 12-16, 1970, a series of events were held at the Mayflower Hotel in Washington, D.C., to celebrate the 25th anniversaries of the Prosthetics Research Program and the Prosthetic and Sensory Aids Service of the Veterans Administration. The Committee on Prosthetics Research and Development conducted a number of meetings on October 12 and 13; on the following two days, the Prosthetic and Sensory Aids Service presented a series of technical programs. The last day of the program, October 16th, was devoted to a review of progress made during the past 25 years. The Hon. Donald E. Johnson, Administrator of Veterans Affairs, delivered the opening address on this day. The program was highlighted by the presentation of amputees, brace-wearers, and other seriously disabled adults and children, using a variety of prosthetic, orthotic, and rehabilitative aids.

Over 200 people attended a banquet on Thursday evening October 15. Specially bound copies of the newly published Selected Articles from *ARTIFICIAL LIMBS* were presented to the chairmen of the Committee on Prosthetics Research and Development and its predecessor committees. The present director of the Prosthetic and Sensory Aids Service, Dr. Robert E. Stewart, and the two previous directors, Dr. Augustus Thorndike (in absentia) and Mr. Walter M. Bura were honored by awards presented by Dr. Benjamin B. Wells, Deputy Chief Medical Director of the Veterans Administration. Dr. Stewart's Meritorious Service Award read as follows (Fig. 1):

This Certificate is awarded to ROBERT E. STEWART, D.D.S. on the 25th Anniversary of the VA Prosthetics Program, in recognition of his outstanding contributions to the continuing success of that Program. As Director of this unique and complex program during the past 15 years, Doctor Stewart has been particularly effective in expanding and improving the Prosthetics Research, Development, and Education Programs for the benefit of all disabled persons; in refining and improving direct prosthetics services to disabled veterans; and in planning and establishing the Prosthetics Treatment Center concept. Under his able leadership, the VA Prosthetics Program has gained both national and international recognition.

Dr. Thorndike and Mr. Bura received the following Commendation Awards (Fig. 2):

This Certificate is awarded to Augustus Thorndike, M.D., on the 25th Anniversary of the VA Prosthetics Program, in recognition of his outstanding contributions to the success of that program during his tenure as its Director from July, 1948, through June, 1955. Primarily through his efforts the program gained much needed recognition and support from the Medical Profession.

This Certificate is awarded to Walter M. Bura, on the 25th Anniversary of the VA Prosthetics Program, in recognition of his outstanding contributions to the establishment and early operation of that program during his tenure as its first Director. Through his vision and sound planning he laid a firm foundation on which the Program has been built during the past 25 years.

PSAS EMPLOYEE RECEIVES N.Y. STATE AWARD

Carol Ann Ross, who recently joined the staff of the R&D Division, Prosthetic and Sensory Aids Service, VA, has been named "Outstanding Young Woman for 1970" in New York State. She received this award for "outstanding contributions to the betterment of her community, state, and professional field." Her nomination for this honor was made by Ithaca College, and she was selected from hundreds named in the 1970 awards volume of Outstanding Young Women of America.

Carol works as a prosthetics research and education specialist, and she is especially suited for the job because she is a bilateral amputee. While still in her teens, Carol made the decision to have both her



FIGURE 1.—Dr. Robert E. Stewart holding his Meritorious Service Award.



FIGURE 2.—Commendation award being presented by Dr. Benjamin B. Wells to Mr. Walter M. Bura.

congenitally deformed legs and feet amputated just below the knee. Fitted with artificial limbs, she then returned to Ithaca College—Albert Einstein College of Medicine where she completed her schooling in physical therapy and began to lead a more active life.

As a graduate physical therapist Carol worked for the Nassau County Department of Health and the VA Prosthetics Center in New York City before coming to PSAS. She is now an active participant in many sports and intends to learn skiing as her next accomplishment. She is also kept busy by numerous speaking engagements and active membership in several amputee organizations.

MOBILE LIFE SUPPORT SYSTEM DEVELOPED FOR SPINE AND BRAIN INJURY VICTIMS

The National Institute for Rehabilitation Engineering (N.I.R.E.) with facilities in Pompton Lakes, Paterson, and Newfoundland, New Jersey, has developed a mobile life support system for totally paralyzed spinal cord and brain injury victims.

One of these units was recently fitted to Billy White, a 21-year-old quadriplegic in Rochester, New York. Billy White broke his neck just below the base of the skull in a gymnasium accident during his senior year in high school, at the age of 17. He was immediately rendered unable to breathe and totally paralyzed, but an alert teacher gave him artificial respiration until an ambulance arrived and brought him to a hospital where he was placed in a respirator.

Billy was transferred to Goldwater Hospital in New York City, to be fitted with a portable respirator and for access to the staff of N.I.R.E. who had been asked to develop a mobile life support system for him so that he could eventually attend college, graduate, and then work to support himself.

After spending a few months in New York City, Billy was returned to the Strong Memorial Hospital's rehabilitation department in Rochester. In the meantime, N.I.R.E. completed development work and constructed the mobile life support system for Billy in cooperation with the rehabilitation staffs at Goldwater Hospital in New York and at Strong Memorial Hospital in Rochester, and in cooperation with the Rochester Dept. of Health and the Rochester office of the N.Y. State Division of Vocational Rehabilitation.

Billy White received his mobile life support system, delivered and fitted to him, at Strong Memorial Hospital. He has learned to use the equipment and has been able to get about, both in the hospital and outside, for the first time since his accident almost 3 years ago. He is looking forward to making a new future for himself now, even though he is still totally paralyzed and still dependent upon a mechanical respirator.

The mobile life support system consists of an electric wheelchair with reclining back, elevating legrests, and an electronic guidance system which enables Billy to drive and steer it by means of coded puffs and sucks on a small plastic tube near his lips. A miniature electrically operated respirator is mounted on the back of the wheelchair which is coupled by means of an air tube to a special corset around Billy's abdomen. The corset alternately inflates and deflates, forcing his diaphragm to move up and down, causing Billy to breathe despite the fact that his breathing muscles are paralyzed (Fig. 3).

Special storage batteries, the same size as auto batteries but with double the power capacity (and running time), operate both the respirator and the wheelchair motors. The batteries, when fully charged, will operate the respirator and wheelchair for about 10 hours.

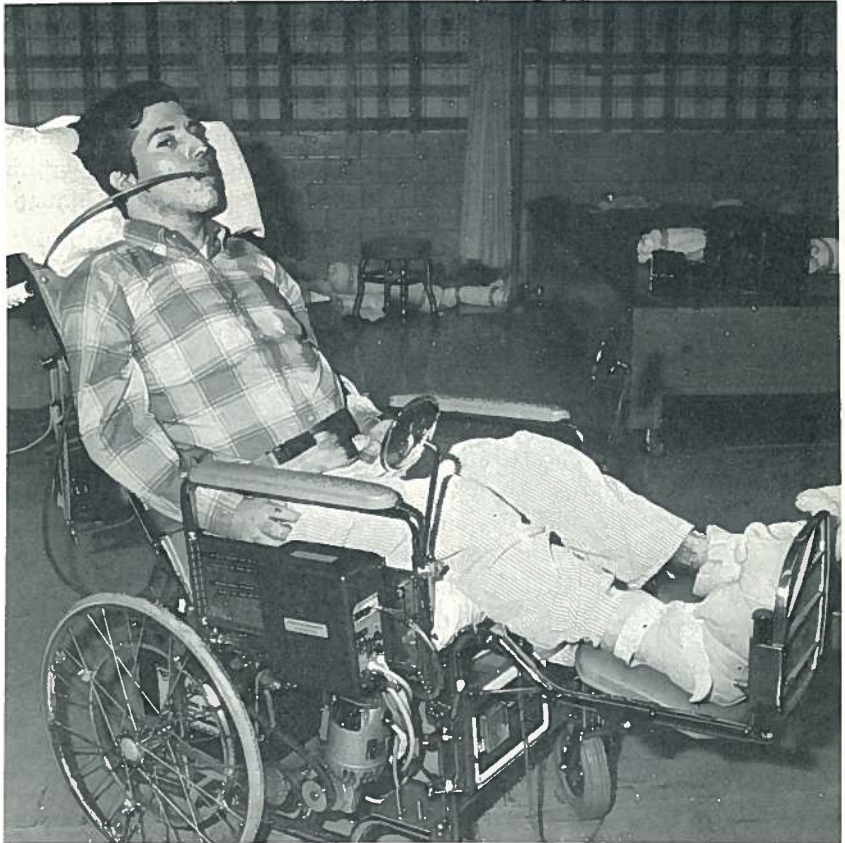


FIGURE 3.—Mr. White seated in his mobile life support system.

A charger and reel-type charging cord are built into the chair. Special safety features are built in or available for later addition when needed. These include two-way radio, automatic power failure alarms, alternating pressure seat to prevent bedsores, motor operated back and/or leg-rests, and automatic sealed waste collection and storage facilities.

Unlike post-polio, cerebral palsy, and muscular dystrophy patients, spinal cord and brain injury quadriplegics are not simply paralyzed; they are paralyzed but are also troubled by recurring bladder, bowel, and skin problems which require that many or all of these special functions be provided if the patient is to have any independence and mobility at all.

The equipment is so very complex that it cannot be serviced by conventional wheelchair or surgical supply dealers. As N.I.R.E. does not at this time have any facilities in the Rochester/Buffalo area, arrangements were made with a Rochester area engineer, Bill Clements of Webster, N.Y., to service and maintain his unit. Mr. Clements is an engineer employed full time by Xerox Corp. who has been specially trained by N.I.R.E. to service this unit, when needed, in his spare time.

AAOS SPONSORS 3-DAY COURSE ON UPPER EXTREMITY

The American Academy of Orthopaedic Surgeons will sponsor a 3-day postgraduate course on the upper extremity May 6-8, 1971, at the Holiday Inn Vanderbilt, Nashville, Tennessee.

Invited to attend are orthopaedic surgeons, general surgeons, physiatrists, and interested physicians and rehabilitation personnel. The course will be held in cooperation with the Continuing Education Department of Vanderbilt University School of Medicine and will deal with current concepts in the management of difficult reconstructive problems of the upper limb.

The faculty of 26 physicians includes members of the school's staff and guest lecturers from other universities. Faculty members include Dr. Sydney Sunderland, Professor of Experimental Neurology, University of Melbourne, Australia, and author of the text *Nerves and Nerve Injuries*.

The first day of the course will be devoted to basic physiology and management of arterial, tendon, and nerve injuries. The second and third days will concentrate on a variety of reconstructive problems of the hand, elbow, and shoulder, ranging from finger amputations to brachial plexus injuries.

For information contact the director of the 3-day course of lectures and panel discussions, John Connolly, M.D., Assistant Professor of Orthopedic Surgery, Orthopedic Surgery Department, Vanderbilt University Hospital, Nashville, Tennessee 37203.

**NORTH AMERICAN EXHIBIT WINS
1st PRIZE AT APTA CONVENTION**

The exhibit, "Prosthetics and Orthotics in North America," a cooperative effort of the Veterans Administration; Department of Health, Education and Welfare; Committee on Prosthetics Research and Development; and the American Orthotics and Prosthetics Association won first prize at the annual convention of the American Physical Therapy Association in Washington, D.C., July 1970 for a scientific exhibit in the fields of Education and Research.

The next scheduled showing of the exhibit will be at the American Academy of Orthopaedic Surgeons Convention in San Francisco, California, March 1971.

When not being displayed at professional meetings, the exhibit is on display at the VA's Prosthetic and Sensory Aids Service permanent prosthetics and orthotics exhibit in New York City.

DR. GUSTAV RUBIN JOINS VAPC STAFF

Gustav Rubin, M.D., F.A.C.S., became full-time consultant to the Director of the VA Prosthetics Center, effective July 27, 1970. He is Chief of a VAPC Special Clinic Team which prescribes and checks the prosthetics needs of entitled VA beneficiaries throughout the VA.

Dr. Rubin, an orthopedic surgeon, received his M.D. degree from Downstate Medical School, Brooklyn, N.Y., in 1939. He served his rotating internship at Maimonides Hospital, Brooklyn, from 1939 to 1941 and was Orthopedic Resident at the Hospital for Joint Diseases, New York, from 1941 to 1942. During World War II he served as Chief, Orthopedic Surgery, at the 103rd Station Hospital North Africa and Italy from 1943 to 1946. After discharge, he returned to the Hospital for Joint Diseases, New York, as Orthopedic Resident from January 1946 to December 1946.

Dr. Rubin engaged in the private practice of orthopedic surgery from 1947 to 1956. He has since served full time with the Veterans Administration, initially as Orthopedic Surgeon, Brooklyn Outpatient Clinic, then Chief of Surgery, and finally as Acting Director.

Dr. Rubin is a member of American Board of Orthopedic Surgery; Fellow, American Academy of Orthopaedic Surgeons; Fellow, American College of Surgeons; full member, The Society of the Sigma Xi, American Medical Association, and Association of Veterans Administration Surgeons.

MYOELECTRIC PROSTHESIS DEVELOPED BY UNB'S BIO-ENGINEERING INSTITUTE

A myoelectric artificial limb developed by University of New Brunswick's Bio-Engineering Institute generated considerable interest at a recent meeting of Chiefs of Child Amputee Clinics.

As a result of an amputee presentation of UNB's electrically controlled fitting, negotiations are now under way for the installation of the UNB equipment in several U.S. amputee clinics.

The group of 29 amputee clinics, principally in the United States, met for the first time in Canada at the Ontario Crippled Children's Centre in Toronto early in June 1970. As part of the itinerary, the visiting Clinic Chiefs and other guests attended the regular weekly amputee clinic at the Ontario Crippled Children's Centre. Of the nine amputee case studies presented, one was 14-year-old Darlene DeCaire from Bala, Ontario. In April 1970, Miss DeCaire was fitted with an electrically powered hand at the Bio-Engineering Institute.

Miss DeCaire, who has an amputation $2\frac{3}{4}$ in. below her left elbow joint, became dissatisfied with her conventionally fitted prosthesis which required straps across her chest and shoulder. The straps were necessary to operate the artificial hand as well as to hold in in place. The UNB Myoelectric Prosthesis eliminated all of this harnessing with operation of the electric hand controlled by contraction of the muscles inside the socket of the prosthesis.

The Bio-Engineering Institute provides an interdisciplinary research program and emphasizes work on important practical problems. The development of electronic controls for artificial limbs has been a topic of research for several years.

23rd ANNUAL CONFERENCE ON ENGINEERING IN MEDICINE AND BIOLOGY

Health care systems, cardiovascular instrumentation, patient monitoring, prosthetics, reliability and safety, and artificial internal organs were among the topics discussed at the 23rd Annual Conference on Engineering in Medicine and Biology held at the Washington Hilton Hotel, Washington, D.C., November 15-19, 1970.

Some 2000 engineers and biomedical researchers gathered to hear over 200 reports from engineers and physicists, biologists, and physicians.

Dr. Roger O. Egeberg, Assistant Secretary for Health and Scientific Affairs, Department of Health, Education, and Welfare, was the keynote speaker on November 16. Dr. Robert Q. Marston, Director, National Institutes of Health, was the guest of honor at a banquet on November 17.

The Conference demonstrated the interaction of engineering with clinical medicine, with health care systems, and with biomedical research.

The 23rd ACEMB was sponsored by the Alliance for Engineering in Medicine and Biology (AEMB). The Alliance is an association of national scientific, medical, and engineering organizations, and was established to promote cooperation among its constituents. These constituents share a common interest in enhancing biological knowledge and health care through cooperation among their many varied disciplines.

**"SELECTED ARTICLES FROM ARTIFICIAL LIMBS"
SALES PROGRESSING**

The sales of the new book encompassing 22 selected articles from the journal "ARTIFICIAL LIMBS" have been progressing rapidly. Many physicians, therapists, prosthetists, counselors, psychologists, and other clinicians have purchased copies for their libraries.

The articles contained in the book, entitled "Selected Articles from ARTIFICIAL LIMBS," are considered timeless and fundamental in nature in the field of prosthetics since the January 1954 issue of ARTIFICIAL LIMBS was published.

The price of the book is \$17.00 and it may be purchased from:

Krieger Publishing Co., Inc.
P. O. Box 542
Huntington, N.Y. 11743

Prepaid orders will be sent postpaid.

3-DAY COURSE ON LOWER EXTREMITY AT U. OF MIAMI

The Committee on Injuries of the American Academy of Orthopaedic Surgeons sponsored a 3-day postgraduate course on the Lower Extremity December 7-9, 1970, at the Americana Hotel, Miami Beach, Florida.

In attendance were orthopedic and general surgeons, physiatrists, and rehabilitation personnel. The course was held in cooperation with the University of Miami School of Medicine and dealt with current concepts in the management of major bone and joint injuries of the lower extremity.

The faculty of 32 physicians included members of the school's staff and guest lecturers from 13 states and Canada.

The first day of the course was devoted to basic sciences and pathophysiology of trauma according to various anatomical and functional areas. The second and third days dealt with major trauma of the knee joint, tibia and foot, the hip, and the femur.

The director of the 3-day course of lectures and panel discussions was Dr. Augusto Sarmiento, Professor of Orthopaedics and Rehabilitation,

University of Miami School of Medicine and Chief, Orthopedic Surgery, at the VA Hospital in Miami.

"HUMAN LIMBS AND THEIR SUBSTITUTES" STILL AVAILABLE

The reprint edition of "Human Limbs and Their Substitutes" by Klopsteg and Wilson is still available for purchase from the following:

Hafner Publishing Co.
c/o Collier Macmillan Distribution Center
Riverside, New Jersey 08075
ATTN: Grace Barr

The price is now \$21.50 with a 10 percent discount if purchased directly from the above address. The reprint edition was a "best seller," and there are just a limited number of copies remaining for sale.

VA-SPONSORED TRAINING PROGRAM IN PROSTHETICS AND ORTHOTICS

The Prosthetic and Sensory Aids Service conducted a regional training program in prosthetics and orthotics in Richmond, Virginia, September 23-25, 1970. A total of 243 people from 21 states attended part or all of the program. Approximately two-thirds of the attendees were from the non-VA medical community. This is in line with the mission of the Service to disseminate the results of research so that all disabled people may benefit.

The latest advances in prosthetics and orthotics were presented to an audience of physicians, therapists, prosthetists, orthotists, and VA Prosthetic Representatives. The faculty consisted of both VA and non-VA experts.

1970 MIGEL MEDAL WINNERS ARE DR. HOOVER AND ROY KUMPE

The Migel Medal, presented annually for outstanding service in work for the blind, was awarded this year to Dr. Richard E. Hoover, Baltimore ophthalmologist, and Roy Kumpe, long-time worker and administrator in the field of blindness.

Dr. Hoover, who is chief of ophthalmology at the Greater Baltimore Medical Center, is creator of the long-cane travel technique used widely by blind persons. Mr. Kumpe is executive director of the Arkansas Enterprises for the Blind, a rehabilitation center located in Little Rock. Dr. Hoover was named for his work on the voluntary level, Mr. Kumpe on the professional level.

The awards were announced by the American Foundation for the Blind, the national consultative organization serving agencies for the

blind. The medal is named for the late M. C. Migel, the Foundation's first president. Dr. Hoover and Mr. Kumpe were officially presented with the Migel Medal at formal ceremonies held at the Foundation in New York City on October 22, 1970.

18th ANNUAL MEETING OF AMERICAN ACADEMY OF MAXILLOFACIAL PROSTHETICS

The 18th Annual Meeting of the American Academy of Maxillofacial Prosthetics took place at the Desert Inn in Las Vegas, November 3-5, 1970. Among the topics discussed were the relationship of the Dentist and Radiotherapist in treatment of the oral cancer patient, the latest in materials and techniques utilized in prosthetic and surgical rehabilitation, and the social and psychological implications of prosthetic rehabilitation.

Also accomplished at the November meeting was the unanimous election by the Board of Directors of Donald F. Gearhart, D.M.D., of the VA Prosthetics Center, to active membership in the Academy.

THERAPIST TRAINING SEMINAR SPONSORED JOINTLY BY HEW AND AFB

A training seminar for occupational therapists, who will work with blind and visually handicapped persons, was held this fall for the first time by the American Foundation for the Blind.

Therapists participated in the October 28-30, 1970, sessions at the Good Samaritan Hospital, Baltimore, in a program jointly funded by a Federal grant and the Foundation.

The training program, which utilized lectures and demonstrations, included faculty professionals in the behavioral and social sciences and medicine. Subjects covered encompassed such areas as orientation and mobility, eye diseases, psycho-social aspects of blindness, and the role of the rehabilitation teacher.

A recent survey of therapists showed that most had occasion to work with blind persons, but had little knowledge about blindness. The Baltimore seminar was designed to remedy this deficiency.

Dr. Richard E. Hoover, chief of ophthalmology, Greater Baltimore Medical Center, discussed the medical aspects of blindness. Mrs. Frances Silverstein, chief occupational therapist at Good Samaritan Hospital, and George W. Keller, director of services for the state of Maryland, worked closely in selecting the rehabilitants for the "role-playing." Mrs. Frances Dover, associate director of the Jewish Guild for the Blind in New York, drawing on her experience as a social worker, presented material on the psycho-social impact of blindness. Roy Ward, supervisor

of the rehabilitation teachers for the Virginia Commission for the Blind, explained the role of the rehabilitation teacher.

The overall director of the project was Mrs. Doris P. Sausser, who heads the Foundation's community services division. Miss A. Marie Morrison, the Foundation's consultant in community services, and Stanley Suterko, assistant professor at the Institute of Blind Rehabilitation, Western Michigan University, also participated in the program.

9th INTERNATIONAL CONGRESS ON MEDICAL AND BIOLOGICAL ENGINEERING TO BE HELD IN MELBOURNE

From August 23 through 27, 1971, the Australian Federation of Medical and Biological Engineering is sponsoring the 9th International Congress, to be held at the Medical Centre, University of Melbourne in Australia.

Sir Robert Menzies will be Patron of the Conference, and the President is Professor R. Douglas Wright, Professor of Physiology, University of Melbourne. The oration will be given by Sir Bernard Katz, this year's Nobel Prize Winner in Physiology.

The highlights of the Conference will be the workshop sessions and they will be held in one of the main lecture theaters in the Medical Center, seating about 300 people. Each will be on a topic of current interest and importance and will be chaired by a world authority on the subject.

The proposed titles are as follows:

- A. Electrical Safety in Diagnostic and Intensive Care Areas and the Operating Theater.
- B. Control of Powered Prostheses.
- C. Non-invasive Measurement of Blood Pressure and Flow.
- D. Monitoring of Perinatal Cardiovascular Parameters.
- E. Visual Display of Biomedical Data.
- F. Electronic Instrumentation in Dentistry.
- G. Implanted Cardiac Pacemakers.

In addition, individual papers will be presented concurrently in other lecture theaters on many other related subjects.

For further information and application forms write to the Secretary-General of the Congress:

Dr. David Dewhurst
Department of Physiology
University of Melbourne
Parkville, Victoria, Australia, 3052

ORTHOTICS CONFERENCE AT UNIVERSITY OF DUNDEE

A conference on the advance in orthotics will be held at the University of Dundee, June 21 to 25, 1971, sponsored by the Eastern Regional

Hospital Board and in association with the Scottish Home and Health Department and the University of Dundee. The Conference will outline and review the various locomotor and functional disabilities which may require prescription of orthotic devices.

Emphasis will be placed on the assessment and description of functional incapacity, prescription techniques, a realistic appreciation of the functional advantages and disadvantages of the presently accepted apparatus, description and demonstration of new and advanced designs, and the formulation of guidelines for research, development, and design for the future. At the same time the place of orthotic management vis-a-vis surgical treatment, in certain specified conditions and in relation to the growth period, will be explored. An international team of experts representing all relevant disciplines has been assembled to ensure comprehensive discussion.

The Conference is properly multidisciplinary and is intended for general and orthopedic surgeons, physical medicine specialists, prosthetists, orthotists or orthopedic technicians, therapists and remedial gymnasts, biomedical engineers, and others with a stated interest in the field.

Excellent accommodations are available; details may be obtained from the Dundee Limb Fitting Centre, 133 Queen Street, Broughty Ferry, Dundee, Scotland.

DANISH DOCTOR REALIZES 17-YEAR-OLD DREAM

For 17 years Dr. Knud Jansen of Copenhagen has been organizing the efforts of his colleagues through a special committee of I.S.R.D., the International Society for Rehabilitation of the Disabled. The work that has been done by this committee in improving the quality of artificial limbs and braces throughout the world has now been recognized by the formation of a new Society. Rehabilitation experts from 13 nations today signed a document to establish "The International Society for Prosthetics and Orthotics." Nine-year-old Ulla Anderson who was stricken with polio at 6 months concluded the brief ceremony by affixing the seal to the official document (Fig. 4).

It is only in recent years that attempts have been made to apply modern scientific methods to the design of limbs, braces, and other aids for disabled persons. The need for these appliances far exceeds the meager resources that exist, and it is the aim of the Society to harness the efforts of all those engaged in the training of medical and technical experts and to coordinate and exploit research activities on a global basis.

There are but a few examples in the world today where professional knowledge is so freely shared either on a personal basis or through the



FIGURE 4.—Ulla Anderson, nine-year-old polio victim, affixes seal on official document forming "The International Society for Prosthetics and Orthotics."

many affiliated organizations, and it is expected that the leadership provided by Dr. Jansen and other officers of the Society will greatly enhance the possibility of services to the millions of disabled individuals wherever they may be.

Further information may be obtained from:

The Secretariat
International Society for Prosthetics and Orthotics,
3 Hans Knudsens Plads,
DK- 2100 Copenhagen Ø, Denmark-

Those signing the document include:

Andre Bähler, Chief Prosthetist/Orthotist
Chairman, of the INTERBOR,
Zürich, Switzerland

Colin A. McLaurin, D.Sc. Project Director,
Prosthetic Research & Training Unit,
Toronto, Canada

- Gotz Gerd Kuhn, Professor, M.D., Clinic for
Technical Orthopaedics of the University
of Münster (Westph.), Münster, Germany.
- Anthony Staros, Director, Veterans Administration
Prosthetics Center, New York, USA
- A. Bennett Wilson, Jr., Executive Director, Committee
on Prosthetics Research and Development,
National Research Council, Washington, D.C., USA
- D. S. McKenzie, Director, Biomechanical Research and
Development Unit, Department of Health and
Social Security, Roehampton, England
- Jørgen Kjølbye, M.D., Asst. Chief Surgeon, Orthopaedic
Hospital, Copenhagen, Denmark
- George Murdoch, F.R.C.S., Surgeon in Charge, Dundee
Limb Fitting Centre, Dundee, Scotland
- Anthony W. McQuirk, F.I.B.S.T., Asst. Chief Prosthetist,
J. E. Hanger & Co., Ltd., Roehampton, England
- Knud Jansen, M.D., Chief, Orthopaedic Department,
Copenhagen County Hospital, Denmark

FREE FACT PAMPHLET ON BLINDNESS BY AFB

Some salient statistics are brought out by the American Foundation for the Blind in a new pamphlet, "Facts About Blindness," which covers a broad spectrum of information on blindness for public consumption. The pamphlet is distributed free upon request to the Publications Division, American Foundation for the Blind, 15 West 16th Street, New York, N.Y. 10011.

"Facts About Blindness" notes that blindness is variously defined as ranging from complete loss of sight to possession of varying degrees of residual vision. The publication indicates that figures on blindness in the United States are inconclusive because of the inconsistency in determining what is legal blindness.

A number of states vary in their determination. However, as the pamphlet explains, the most commonly accepted standard is that the central visual acuity in the better eye must not exceed 20/200. Thus, a person is said to be blind if he can see no more at a distance of 20 feet than what a normally sighted person can see at 200 feet. Based on this statistic, there are an estimated 430,000 "legally" blind persons in the United States.

The pamphlet also notes that blind people in the United States receive a number of economic and other benefits through legislation. These benefits cover such areas as rehabilitation, education, Library of Congress recorded books and periodicals, free braille materials, and income

tax exemptions. The publication also tells of the first schools for the blind and the early days of rehabilitation services. Additionally, it offers a medical insight into the causes of blindness.

NYU PRESENTS UPPER-EXTREMITY PROSTHETICS COURSE IN PORTUGAL

New York University Post-Graduate Medical School, Prosthetics and Orthotics, organized and taught a course in upper-extremity prosthetics for prosthetists at the leading rehabilitation facility of Portugal. The course was presented upon invitation from Dr. Victor M. Santana Carlos, Director of the Centro de Medicina de Reabilitacao at Alcoitao-Estoril, Portugal.

Lectures were in English with simultaneous Portuguese translation. The basic purpose of the 5-week course, which met from July 27 to August 28, 1970, and for which a prosthetics manual in Portuguese was specially prepared, was to train Portuguese prosthetists in modern methods of fabricating, fitting, and harnessing prostheses for use with upper-limb amputations from wrist disarticulation through shoulder disarticulation. Also included were lectures on anatomy, prosthetic components, and checkout and training procedures. In 1968 and 1969 courses in above-knee and below-knee prosthetics were also taught. As an outgrowth of this teaching program, NYU Prosthetics and Orthotics has been requested to assist in the formation of a national prosthetic association in Portugal.

Dr. Sidney Fishman and Norman Berger, senior staff members, accompanied by two prosthetists, Ivan Dillee and George Hartmann, made up the visiting faculty.

Prosthetics and Orthotics, New York University Post-Graduate Medical School—a leading center for research, evaluation, and development of artificial limbs and braces—offers under-graduate and post-graduate programs for physicians, surgeons, prosthetists, orthotists, rehabilitation counselors, and therapists at its New York City facilities.

INTRA-VA TRAINING CONFERENCE FOR PLASTIC EYE AND RESTORATIONS CLINIC CHIEFS

During the week of November 16–20, 1970, a conference was held at the New York office of the Prosthetic and Sensory Aids Service for VA Plastic Eye and Restorations Clinic Chiefs (Fig. 5). The conference was prepared and organized by Thomas E. Knox, D.D.S., Chief, Restoration and Sensory Aids Division, Prosthetic and Sensory Aids Service, Central Office, Washington, D. C.

The following Chiefs attended and presented papers: Lawrence P. Cerullo, OPC, Philadelphia, Pa.; Alex Goldstein, VAC, Los Angeles, California; Marvin H. Maurer, VAH, Hines, Illinois; Bernard A.



FIGURE 5.—Plastic Eye and Restorations Clinic Chiefs attending conference at PSAS in N.Y.C.

Maloney, VAH, Portland, Oregon; Robert H. McKeever, VAH, Memphis, Tenn.; Earl H. Peterson, VAH, Washington, D.C.; Ralph D. Reiff, VAH, Minneapolis, Minn.; Fred G. Rollins, Jr., VAH, Boston, Mass.; Walter G. Spohn, VAH, San Francisco, Calif.; William G. Schweitzer, VAH, Cleveland, Ohio; Roy T. Tarantino, VAH, Atlanta, Georgia; Joseph F. Wilson, VAH, Jefferson Barracks, St. Louis, Mo.

Some of the topics covered in the papers presented were Cosmetic Scleral Contact Lenses, Fabrication of Cranial Plates, Fabrication of Wire Armatures and Passive Hand Forms, Tinting and Coloring Cosmetic Gloves, etc. Many of these papers will be printed in a future issue of the Bulletin.

Also in attendance were representatives from: Prosthetic and Sensory Aids Service, Central Office in Washington, D. C., and New York City; the VAH in New York City, and the VA Prosthetics Center in New York City.

ENGINEERING FOUNDATION RESEARCH CONFERENCE "INTRODUCTION TO PROSTHETIC AND SENSORY AIDS"

Figure 6 shows some of the people who gathered at Proctor Academy, Andover, New Hampshire, during the week of August 17–21, 1970, to



FIGURE 6.—Attendees of the Engineering Foundation Research Conference "Introduction to Prosthetic and Sensory Aids." Starting from the top and going from left right: C. W. Radcliffe, Harold de Souza, Paul Newell, Richard Simpson, David Grosvenor, Russell Haynes, Ralph Storrs, Elwyn Saunders, Joseph Traub, John Glancy, Charles Fryer, Lonnie Von Renner, C. G. Warren, David Sonstegard, Augustus White, Donald Kettelkamp, Frank Clippinger, Jr., James Schuster, Abraham Jacob, James Cockrell, Cairbre McCann, William Fortune, Wen H. Ko, S. N. Banerjee, Arthur MacNeill, I. M. Neou, Howard Freiberger, Ronald Blecher, Lafayette Irwin, Richard Olson, C. M. Godfrey, Wilfred Holsberg, Eugene F. Murphy, A. Bennett Wilson, Jr., Philip Deffer, J. Thomas Mortimer.

attend the first conference on prosthetics and sensory aids held under the aegis of the Engineering Foundation. Dr. Eugene F. Murphy, Chief, Research and Development Division, Prosthetic and Sensory Aids Service, Veterans Administration, and Mr. A. Bennett Wilson, Jr., Executive Director, Committee on Prosthetics Research and Development, National Research Council, served as cochairmen.

The speakers included representatives from the National Research Council, from government, and from the universities.

An attempt was made in the talks, the ensuing discussion periods, and in the concurrent panel sessions to present a body of knowledge about prosthetics equivalent to an in-depth broad introduction to the subject. The unique setting and scheduling found at Andover and other similar facilities allowed for very productive interchanges between participants.