### NOTES AND NEWS

# VERNON L. NICKEL, M.D., APPOINTED DIRECTOR OF VA REHABILITATIVE ENGINEERING SERVICE

Dr. Vernon L. Nickel has been appointed director of the Veterans Administration Rehabilitative Engineering Research and Development Service. He assumed the new position in Washington, D.C., on October 1, 1977.

Dr. Nickel, a diplomate of the American Board of Orthopaedic Surgery, is well known for his work with the handicapped and in the application of engineering science and technology to their problems. He comes to the VA from Rancho Los Amigos Hospital, Downey, California, where he was Chief of Surgical Services from 1953, Medical Director from 1964 to 1970, and co-director of the hospital's Rehabilitation Engineering Center since 1970. His program at Rancho Los Amigos was listed in 1973 among the Top Ten Engineering Achievements in the United States.

Dr. Nickel will have administrative responsibility for the entire program of the Veterans Administration's Rehabilitative Engineering Research and Development Service, which was organized in 1975. The service, one of the three components of the VA's Research and Development Office, grew out of the VA Prosthetic and Sensory Aids Service, formed in 1948. Research is sponsored at VA hospitals, at the VA Prosthetics Center in New York City, and through contracts with private organizations.

### DR. ROSALYN S. YALOW AND DR. ANDREW V. SCHALLY OF THE VA ARE NOBEL PRIZE WINNERS IN MEDICINE

Dr. Rosalyn S. Yalow of VAH, Bronx, New York, and Dr. Andrew V. Schally of VAH, New Orleans, Louisiana, were 1977 Nobel Prize winners in medicine. Both are VA career doctors and senior medical investigators. Dr. Yalow, who was awarded one-half of the \$145,000 prize, is the second woman ever to win a Nobel Prize in medicine.

Dr. Yalow's award honored her development of radioimmunoassays of peptide hormones. The Nobel citation said she and her coworkers had directed diabetes research "into new tracks" and given such research "a new dimension ... this modern endocrinology con-

tinues to develop and gives us continuously new outlooks on the causes and nature of diseases within the whole spectrum of medicine."

The remaining half of the Nobel Prize in medicine was shared by Dr. Schally and Dr. Roger Guillemin, of the Salk Institute in San Diego, California, for discoveries concerning the peptide hormone production of the brain.

### MAX CLELAND AND HOWARD A. RUSK HONORED IN 1977 JEFFERSON AWARDS

The 1977 Jefferson Awards presented by the American Institute for Public Service were given to Max Cleland, Administrator of the Veterans Administration, for "the greatest public service by an individual under 35," and to Dr. Howard A. Rusk, Director, Institute of Rehabilitation Medicine, New York, for "greatest public service benefiting the disadvantaged."

## NEW REHABILITATIVE ENGINEERING RESEARCH AND DEVELOPMENT CENTER ESTABLISHED AT VAH, HINES, ILLINOIS

A new facility, which is expected to employ about 30 engineers and scientists by 1979, has been opened at the Hines VA Hospital, near Chicago. According to the announcement of the new center's opening by VA Administrator Max Cleland, its program will emphasize work on a full range of projects designed to restore mobility to injured veterans, including restoration of "at least some mobility" to patients now considered permanently paralyzed.

Among the new Rehabilitative Engineering Research and Development Center's goals is the achievement of new levels of effectiveness in bringing together the skills of various scientific and professional disciplines, and focusing them together upon the problems of the injured veteran. A related goal will be to make extensive use of new products, and of techniques such as electronic miniaturization, many of which are developments of the Nation's space program.

# PCEH "PHYSICIAN OF THE YEAR" AWARD FOR 1977 GOES TO ROBERT L. BENNETT, JR., OF ATLANTA

The Physician of the Year Award, of the President's Committee on Employment of the Handicapped, was awarded to Robert L. Bennett, Jr., M.D., who is Professor of Rehabilitation Medicine at Emory University School of Medicine, Atlanta, Georgia. The award, presented during the 37th Annual American Medical Association Congress of Occupational Health in St. Louis, Missouri, honors the physician who has made the "most significant contribution to the employment of handicapped persons during the previous year."

Dr. Bennett is responsible for the design and refinement of numerous orthotic devices. He is particularly noted for his management of the post-polio patient. He has also been a major force in development of the Georgia Rehabilitation Center by the State of Georgia, on lands given to the state by the Georgia Warm Springs Foundation in 1962.

### HELEN KELLER NATIONAL CENTER DEDICATED

The new Helen Keller National Center, for deaf-blind youths and adults, at Sands Point on the North Shore of Long Island, New York, was dedicated in the Fall of 1977. The Center is operated by the Industrial Home for the Blind, Brooklyn, N.Y., under what is described as "a definitive agreement" with the Federal Government. Harry Spar is Director of the Center.

Design of the Center features such details as bed vibrators to awaken residents, flashing light alarms for those with residual vision; an emergency "chute" exit; electrical defrosting of paths between residence and training buildings; and electric fans which move air to tell an occupant that a doorbell button has been pressed.

The Helen Keller National Center reported that it had eight regional offices and representatives, to screen potential trainees and to follow up on their job training and placement. Locations were listed at Sands Point, Long Island, N.Y., Philadelphia, Pa., Atlanta, Ga., Chicago, Ill., Dallas, Texas, Denver, Colo., Seattle, Wash., and Glendale, Ca.

### DECLARATION OF RIGHTS FOR THE DEAF-BLIND ADOPTED BY HELEN KELLER WORLD CONFERENCE

A declaration asserting the rights of all deaf-blind persons was adopted by the Helen Keller World Conference on Services to Deaf-Blind Youth and Adults, held in September 1977 in New York.

The Declaration adopted by the Conference refers first to those rights described in the United Nations Declaration of Human Rights, and the United Nations Declaration on the Rights of Disabled Persons. It also specifies the following: the right to lead a normal life in the community, to receive the best possible medical treatment,

to economic security, to marry and raise a family, to secure work commensurate with capabilities, to the services of an interpreter at no cost, to current news, to recreational activities, to be consulted on all matters of direct concern, and to receive legal advice and protection against abridgement of these rights.

Copies of the Declaration are reported to be available from the sponsor of the Conference, the World Council for the Welfare of the Blind, 57 Avenue Bosquet, 75007 Paris, France.

### "INDEPENDENCE WITH DIGNITY: ACTION '78" IS THEME OF 2nd NATIONAL CONFERENCE ON AGING AND BLINDNESS

The 2nd National Conference on Aging and Blindness will be held in Atlanta, Georgia, March 27-30, 1978. Among conference goals are development of information and recommendations for the White House Conference on Aging in 1981.

Conference co-chairmen are Roy Kumpe, who has retired as executive director of the Arkansas Enterprises for the Blind, and Harry F. Walker, deputy director of the State of Maryland Office on Aging, and also chairman of the Advisory Committee on Aging of the American Foundation for the Blind. Conference coordinator is Dorothy Demby, AFB specialist on aging.

Joint sponsors of the conference are the American Foundation for the Blind, and the Department of Health, Education, and Welfare (DHEW) Administration on Aging, and Office for the Blind and Visually Handicapped.

### **GLOWING CANE FOR THE BLIND TRAVELER**

Figure 1 illustrates three views of the LouChek Night Cane. At "B" the tip end is shown with its replaceable nylon tip and, above it, the clear "window" section of the cane. Within the transparent section can be seen a length of the translucent light-carrying and light-emitting rod which runs through the cane from the inner end of the tip to the bottom of the handle.

At "A" a nearly full-length view of the cane is shown.

At "C" an enlarged view shows the part of the handle where the on-off light switch is mounted.

The cane has a No. 22 miniature lamp powered by two Size AA batteries. Its light, carried by the central translucent rod, is emitted at the clear "window" section of the cane and also causes the white polyolefin-covered shaft to glow in the dark.

#### **Notes and News**

This cane is considered an optional item in the armamentarium of the blind traveler. The manufacturer, LouChek Products of 870 S. Gramercy Place, Los Angeles, California 90005, feels that the cane gives an extra measure of safety for a blind person because it glows visibly in the dark.

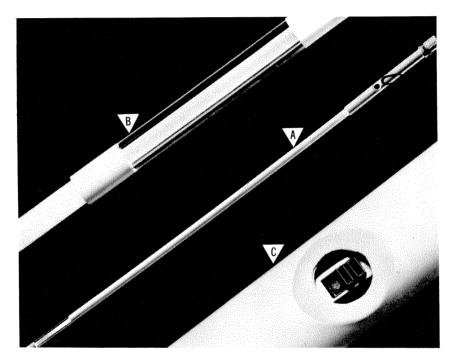


FIGURE 1.-Three views of the LouChek Night Cane.

### NOW, "HEARING-EAR DOGS" FOR THE DEAF

The Journal of the American Speech and Hearing Association reports an innovative program, by the American Humane Association, in which dogs are being trained to assist deaf and hearingimpaired individuals.

The dogs, chosen for intelligence and disposition, are trained to alert their owners to specific sounds such as the crying of an infant, a knock on the door, clock alarms, and smoke detector signals. They are also trained to respond to hand signals.

The "hearing-dog" program originated with the AHA Minnesota branch but has been moved to AHA headquarters in Denver, Colorado, where it is under the direction of Robert White. He is described as a

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professional educator of the deaf who is also an experienced animal trainer. Mr. White was quoted as saying that he expected "hearing dogs" to someday outnumber dogs trained to assist the blind.

AHA is reported to be seeking financial assistance for a major enlargement in the dog training program, with 10 regional centers to be opened. About 50 dogs have been provided at no cost to recipients, but the cost of the 3-to-4 month training program for each animal was said to be "around \$1,400."

## AAAS PROJECT ON THE HANDICAPPED IN SCIENCE EMPLOYS CHERYL A. DAVIS AND RECEIVES \$185,000 IN GRANTS

Activities aimed at an early practical payoff for the handicapped college-age student who wants a scientific education and a career in science are in the works for the AAAS Project on the Handicapped in Science. New funds, from a combination of federal and corporate sources, have enabled the project to add to its staff and undertake some new efforts.

Staff additions include Cheryl A. Davis, as a new program associate. She is a wheelchair user who in 1977 completed a year as a Loeb Fellow in Advanced Environmental Studies at Harvard University. A planner and specialist in design of housing and other environments for handicapped persons, she has published widely on such topics as facilitating employment of the handicapped, the role of housing in rehabilitation, and the 1973 Rehabilitation Act.

Cheryl Davis is assisting in the development of a variety of the new AAAS projects. Among them is an inventory of teachers and school administrators who have successfully taught science to handicapped students. A newsletter, Access to Science, is intended to serve as a vehicle of communication among college and university administrators, science departments, guidance counselors, and handicapped students. Studies that are planned include one of the "coping strategies" of handicapped scientists who have successfully acquired an education and achieved a career in their fields.

To carry the message in a manner more personal than is possible on the printed page, they have sent Robert Menchel, a physicist who is deaf, on a 20-state lecture tour.

Funds for these and other new projects of the AAAS Project on the Handicapped in Science (a part of the AAAS Office of Opportunities in Science) were provided by grants from the following sources: the National Science Foundation, the W. T. Grant Foundation, the Bureau of Education for the Handicapped, the Xerox Corp., and the Exxon Corp.

# PREVENTION OF DISABILITY, AND INTEGRATION OF THE DISABLED INTO COMMUNITY, HEAD LIST OF PROFESSIONALS' PRIORITIES

The opinions of rehabilitation professionals, international organization representatives, and service providers in 47 countries showed a "consistently clear" pattern of priorities when they were surveyed by Rehabilitation International as part of the groundwork for the organization's 14th World Congress in June 1980.

Prevention of disability was ranked as the single subject of highest priority. Integration of disabled people within the community, the participation of the disabled in the rehabilitation process, and improved delivery of care and services were seen as the next most important areas of concern.

Disability and the family was ranked as the area of next greatest importance.

Both the theme and the scientific program of the World Congress, to be held in Winnipeg, Canada, have been formed in response to the viewpoint revealed in the survey. Features of the program already announced include parallel day-long workshops on the subjects of Disability and the Family, and Participation of Disabled People in the Rehabilitation Process. Roundtable discussions prior to the Congress will seek a draft text of "A Plan of Action for the 80's", which could serve as a blueprint for world action during the decade.

Also planned is a "special event" to memorialize the Decade of Rehabilitation (1970-1980) and concurrently launch the International Year for Disabled Persons proclaimed for 1981 by the United Nations General Assembly.

The president of Rehabilitation International's 14th World Congress is Patricia Harris (Mrs. C. E. C. Harris) who is president of the host organization for the Winnipeg event, the Canadian Rehabilitation Council for the Disabled.

### "... AND I SAY TO YOU TONIGHT THAT THE TIME FOR DISCRIMINATION AGAINST THE HANDICAPPED ... IS OVER"

Very well informed observers called the 5-day White House Conference on Handicapped Individuals the largest-ever assembly of handicapped people, and it must also have been the most-varied very large assembly of its kind in terms of handicaps represented in a large group in a non-institutional situation.

President Carter, in addition to declaring that "... the time for discrimination against the handicapped in the United States is over," conveyed in his address a very strong sense of his personal awareness of the Conference's importance and the effects of its recommendations on the lives of many millions of people, now and in the future. He also spoke of the fact that Congress has given him the reorganization authority he had sought: one of the very good benefits of the reorganization authority, he said, is to bring together into one agency all of the more than 100 different programs the Federal Government already has for the handicapped.

He commented that "... we are not just concerned about the correction of an existing handicap, or an opportunity for those who are handicapped; we want to prevent the handicap that might occur in the future." In this connection he promised to get immunization or innoculation of children against preventable diseases back to a level approaching the 100 percent level again, instead of the 65 percent he said is current.

Among Conference statements by Federal officials there was the comment by Patricia R. Harris, Secretary of the U.S. Department of Housing and Urban Development, that "5 percent of all new family units and public housing programs will be designed for use by the handicapped." She also noted formation within HUD of a new Office of Independent Living for the Disabled, intended to "sensitize" the agency to housing and environmental needs of physically and mentally disabled persons.

Secretary of Transportation, Brock Adams, had announced, just before the Conference, a new policy under which all public buses purchased with DOT grants must be designed for easy access by handicapped and elderly persons. It was estimated that the ruling would cover more than 90 percent of full-size transit buses in operation in the United States.

# MORE CONCERN FOR NEEDS OF PHYSICALLY HANDICAPPED LIKELY IN INTERNATIONAL TECHNICAL STANDARDS

The International Organization for Standardization (ISO), a nongovernmental body which develops technical standards which can then be adopted by member organizations in 82 countries, is reported moving toward more formal arrangements for making allowances for disabled people's needs in the technical standards it develops.

ISO is reported considering creating a technical committee on the physically handicapped, which would deal with the subject where it falls outside the scope of other ISO technical committees, and could coordinate the effort where provisions for the handicapped require the involvement of its existing committees in fields ranging from building construction to the design of signs. Continuing growth of ISO's interest in the needs of the handicapped was reported following a September 1977 meeting of the Rehabilitation International Commission on Technical Aids, Housing, and Transportation, in France. At that meeting, cooperation with ISO was reported to have been one of the main topics of discussion.

### AMPUTEE'S MANUAL . . . MAUCH S-N-S KNEE

A pocket-size 21-page illustrated "Amputee's Manual . . . Mauch S-N-S Knee," is now available from Medic Publishing Co., P.O. Box 1636, Bellevue, Washington 98009. The authors are Bernice Kegel, R.P.T., and James L. Byers, C.P., of the Prosthetics Research Study, Seattle, Washington.

Intended as a supplement to physical therapy training with prostheses incorporating the Mauch S-N-S hydraulically controlled knee, the manual provides detailed practical instructions and suggestions intended to help the user continue to obtain maximum satisfaction and function from the unique features of the device. There are 56 illustrations and a drawing.

The Amputee's Manual was originally published in 1977 for the Veterans Administration Prosthetics Center, 252 Seventh Ave., New York, N.Y. 10001, in cooperation with the Prosthetics Research Study of Seattle, Washington, under VA contract. (VA facilities should continue to request copies from VAPC at the New York City address.)

#### ROBERT W. MANN, Sc.D., RECEIVES ASME MEDAL

Robert W. Mann, Sc.D., distinguished Whitaker Professor of Biomedical Engineering at Massachusetts Institute of Technology, Boston, Mass., was presented with the ASME Medal for his outstanding contributions to bioengineering research and education. The ASME Medal has symbolized eminent engineering achievements for many years.

Dr. Mann was presented with the medal at the 1977 American Society of Mechanical Engineering (ASME) Winter Annual Meeting, Atlanta, Georgia.

Dr. Mann is well known for his contributions in engineering research and development in the field of rehabilitation engineering.

### **TONNES DENNISON, 1894-1976**

Tonnés "Ted" Dennison, formerly Executive Director of the Committee on Prosthetics Research and Development of the National Research Council which advised the Veterans Administration and other agencies, died of a heart attack in Tucumcari, New Mexico on November 11, 1976. He and his wife were en route from their retirement home in Santa Barbara, California to visit relatives in Oklahoma. He was buried, with a military funeral, in Oklahoma City.

Mr. Dennison was born in Brooklyn, N.Y., September 11, 1894. The family later lived in Plainfield, N.J. Mr. Dennison studied electrical engineering at Cooper Union and Columbia University, and he worked for the New York Edison Company.

After serving as an officer in World War I, Ted was a recruiting officer for the Army. He had amusing anecdotes of his adventures while travelling with a Field Artillery gun and crew to recruit local young men. In the period immediately after the expensive World War I, government accounting became unexpectedly meticulous. He had some problems in explaining that the brass shell cases of surplus saluting shells, which had been discharged to attract audiences for his recruiting speeches, had disappeared as souvenirs.

In later years he engaged in civilian engineering activities including building of power plants and transmission systems. He was involved in numerous developments bringing electric power for the first time to small communities, ranches, and farms scattered throughout the Middle West and South, particularly during the vigorous rural electrification movement in the Thirties.

During World War II he was a civilian engineer for the Army Corps of Engineers supervising the building of various bases. At one base his work was investigated by the then Senator Truman, fresh from a major and prolonged investigation which had uncovered numerous scandals at a nearby base. After only half a day of review, the Truman Committee congratulated Mr. Dennison for his integrity and prudence. His "quarters," originally rumored to be palatial, were in the back of his office and had only an inexpensive cot and shower stall, used when he voluntarily worked overtime. The only cost over-run was entirely explained by an unexpected tropical storm which washed dirt back into miles of ditches which had just been excavated.

Later in his engineering career he served under General F. S. Strong, Jr., a distinguished military engineer then in command of the Alcan Highway, the inland route to Alaska. (By coincidence, Ted had served under General Strong's father in the 40th Division at Camp Kearney, California, in 1918.) Ted's common sense, honesty, and ability appealed to General Strong, and they worked closely together. In 1946, after both had left the service, General Strong became Executive Director of the National Academy of Sciences—National Research Council's Committee on Artificial Limbs. He asked Ted to rejoin him January 1, 1947, on the Committee staff, where I was then Staff Engineer.

During a crucial period involving coordination of major projects, and the launching of the suction socket schools and followup program, we had an effective team of engineers at the Committee headquarters. General Strong was literally a strong yet flexible administrator. Ted Dennison was an effective planner, organizer, and expediter. The late Major (later Colonel) Gordon Kjolsrud, loaned by the Army first to the Committee and later for a year to the Veterans Administration, was an able diplomat. He promoted the cooperation of many persons and diverse groups including the rugged individualists who operated several hundred small artificial limb shops and their trade association.

Service in a variety of posts for variously named groups in the NAS-NRC structure led ultimately to Mr. Dennison's appointment on July 1, 1959, as Executive Director of the CPRD. Ted retired July 31, 1962, returning to his former home in Santa Barbara, where some of us occasionally visited him. Those who were privileged to know this thoughtful and warm human being will miss his wise counsel, twinkling smile, and generous concern for others.

Eugene F. Murphy

#### DONALD A. COVALT, M.D., 1906-1977

Doctor Donald A. Covalt, Associate Director, Institute of Rehabilitation Medicine, New York University Medical Center, passed away October 28, 1977.

Dr. Covalt was one of few who are the right people in the right place at the right time. He began his career as a young general practitioner in Muncie, in his beloved State of Indiana, and had been out of Indiana University (B.S. 1932, M.D. 1934) for less than a decade when World War II erupted. He joined the Air Corps and was assigned to organize that service's first rehabilitation center in a pair of commandeered Florida hotels. He did it so well that his commanding officer, Dr. Howard A. Rusk, brought Dr. Covalt to Washington as his Deputy Director. This occurred toward the end of the war, when the Air Force rehabilitation program was already in progress in more than 200 hospitals, and Dr. Rusk was busy getting 10 new rehabilitation centers completed and staffed.

At the end of the war, Dr. Covalt would have preferred either to return to Indiana, or to join Dr. Rusk at Bellevue Hospital in New York where the future of rehabilitation medicine was being explored. But Dr. Rusk convinced him that he had another chore to do before settling down. That chore was, in Dr. Rusk's own words, "to help General Paul R. Hawley, General Omar Bradley, and Dr. Paul Magnussen organize a rehabilitation program in the Veterans Administration." He took the assignment. His work in convalescence and rehabilitation earned him the Legion of Merit, awarded in 1945. Two-and-a-half years later, Dr. Covalt left the VA, where a rehabilitation program was growing strongly in VA hospitals across the country. He returned, not to Indiana, but to join Howard Rusk in those "two old dilapidated wards" on New York's lower East Side. There he found a few other men and women who felt very deeply about something that hardly anyone else seemed to know or care about. These people knew that, historically, large scale rehabilitation had been mostly a hastily improvised wartime specialty ... always backward because its gains tended to be lost in the periods between wars. They decided that, this time, wartime gains would be the foundation for peacetime progress, with growth equally dramatic but also sustained and enriched by scientific studies across the entire range of crippling and disabling conditions.

From Bellevue Hospital in New York to an old loft building on 38th Street and First Avenue, and thence to today's renowned and still-growing Institute of Rehabilitation Medicine of the New York University Medical Center, Dr. Covalt worked with his old Air Corps chief. Until 1957 he was Clinical Director of this institution which set the pace for rehabilitation in the United States and much of the rest of the world. Thereafter he was Associate Director, until his death in October 1977.

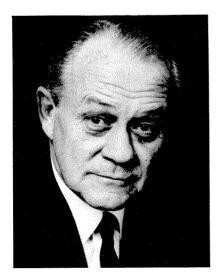


FIGURE 2.-Donald A. Covalt, M.D., 1906-1977

Dr. Covalt's career was probably most unusual in the way he was able to take part in large-scale events, which had results that have been truly global, while still remaining a clinician and a practitioner in direct, personal, everyday contact with his patients. Thus, his own influence on large institutional developments helped anchor the institution's policies firmly to the clinical and human realities of life.

His many publications down through the years reflected his viewpoint: in the late '40's, amid papers on the problems of returning veterans, there was a series on the rehabilitation of children. Rehabilitation of the amputee and the hemiplegic patient formed the bulk of his published work, with occasional pieces on the value of dynamic treatment in chronic disease and spinal cord injury. He was interested in the role of the therapist, and the employment of total medical resources, i.e., laying the foundation of the "team approach." And his list of titles repeatedly used such words as "hope," "new hope," and "new vision," testifying to the identification with the patient as a fellow human being.

Dr. Covalt was a Diplomate, American Board of Physical Medicine and Rehabilitation, and a past president of the American Congress of Physical Medicine and Rehabilitation Medicine: at that time he received the Gold Key Award.

He served as a consultant in the planning of rehabilitation facilities to various hospitals and medical centers throughout the United States and Canada, as well as serving as Vice-chairman, Medical Committee, the President's Committee on Employment of the Physically Handicapped.

Dr. Covalt is survived by his mother, wife and daughter, brother, and two sisters.

Tamara T. Sowell

#### CHARLES LE ROY LOWMAN, 1879-1977

Dr. Lowman, a distinguished orthopedic surgeon with numerous contributions to rehabilitation of patients with a variety of difficulties, died after a brief illness in the Orthopaedic Hospital, Los Angeles, California, which he had founded in 1922. He had been very active until shortly before the end of his long, illustrious, and vigorous life.

Dr. Lowman had been born in Park Ridge, Illinois on December 25, 1879 but had moved to Los Angeles in 1900. He graduated from the University of Southern California Medical School in 1907, served as an intern at the California Lutheran Hospital, and studied orthopedic surgery at Massachusetts General Hospital, Carney Hospital, and Children's Hospital, in Boston, Massachusetts, where much of the pioneering work in orthopedic surgery was developing at the time.

Even after he ostensibly retired from his responsibilities as Chief of Staff of the Orthopaedic Hospital in 1945, at the age of 65, he remained extremely active both for that institution and in a variety of other activities. For many years he frequently flew to Calexico, at the border between California and Mexico, to help staff the Valley Orthopedic Clinic, which supplied free medical care for polio victims and other handicapped children from both the United States and Mexico. Unfortunately the polio vaccines were not widely used in Mexico, and epidemics continued long after they disappeared in the United States. Some of the other staff members from the Orthopaedic Hospital, whom he inspired to go to Calexico for weekends to serve as volunteers, have continued to serve there after their formal retirement from the Orthopaedic Hospital.

In addition to meeting him on many occasions, especially at many meetings of the American Academy of Orthopaedic Surgeons, I recall with great pleasure a prolonged visit with him on a train to Los Angeles many years ago, close to the end of World War II. Both Miss Helena T. Mahony and Mrs. Vera Rickman Ford, who had been physical therapists at Warm Springs when I was a patient there, had later served on the Orthopaedic Hospital staff. We reminisced about them as well as discussing orthotics problems as we rode across the dry but everchanging West. I occasionally visited the Hospital.

Dr. Lowman was an extraordinarily active and vigorous person with strong ideas about the desirability of exercises. He continued to exercise even when strapped into an airplane seat during his frequent travels. Among his numerous publications was a note on the desirability of isometric exercises to maintain circulation while flying.

He received numerous honors, including the nation's highest civilian honor, the Presidential Medal of Freedom. Undoubtedly thousands of patients are grateful for his personal care. Much larger numbers of handicapped whom he never treated personally have benefitted from his long concern for total patient care, including education for the children during their stay in the hospital. It was both a privilege and a pleasure for me to know this fascinating and devoted friend and servant of humanity for so many years of what was really his nonretirement.

Eugene F. Murphy