NEWS BULLETIN

The Sanatorium Board of Manitoba

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PORDU – The First Five Years

Prosthetics in Canada lagged in 1963. Education and research were needed . . . and so the decision was made to support with public funds, a special effort in this field.

Such is the laconic opening to a five-year review of the activities of that singular group of men who staff the Sanatorium Board's Prosthetics and Orthotics Research and Development Unit. While our researchers don't waste words on color, the review they present is a fascinating story of achievement . . .and at times, frustration . . . which is well worth repeating.

The fact is that up until 1963 the art of limb and brace making in Canada was not keeping abreast of new materials and design principles developed by engineers in industrial and space research. After the thalidomide episode, the federal govern-

Despite the fact that PORDU has had to adhere to a very restricted budget and has not always been blessed with adequate working space, the accomplishments it has chalked up in five years are impressive. The unit, in fact, has brought worldwide attention to our hospital and each year has seen a steadily increasing number of visitors from all parts of the world.

Education

In his review, James Foort recalls that the first big task was to upgrade prosthetic services in the Winnipeg area so that "a better climate would exist for testing out the results of research". This meant the establishment of education programs which in the beginning took the form of informal instruction for prosthetists and for medical and paramedical people in our own area. Gradually these efforts were stepped up to

Our Christmas Seal Babies *(Photo by Barbara Moss)*

It's Christmas Seal Time!

Christmas Seals, carrying the familiar double-barred Cross of Lorraine and a gay winter motif, make their 42nd annual appearance in Manitoba this month as we launch our province-wide campaign against tuberculosis and other respiratory disease.

The annual Christmas Seal Campaign is basically a year-round work of health — the chief goal of which is the prevention of lengthy illness through early discovery of unsuspected disease and through research and education.

Between January 1 and October 31 of this year, funds raised by Christmas Seals have helped pay for some 80,000 free examinations for tuberculosis and other chest diseases in surveys conducted by the Sanatorium Board in 22 Manitoba municipalities and districts, and in schools and industries, primarily in the Winnipeg area. Before the year is out, an estimated 10,000 more Manitobans will be tested.

The examinations provided in community surveys this year have included:

— 60,000 chest x-rays. (The Sanatorium Board has returned to mass x-raying of adults in order to find, in addition to tuberculosis, other respiratory and cardiac conditions.)

— 16,150 tuberculin skin tests. (In our survey program, tuberculin testing has been stepped up among children as a means of detecting tuberculosis infection at the start and, through prophylactic treatment of positive reactors, of preventing the development of adult disease. Provincial health units have become partners in this program, and in the schools public health nurses have taken over the job of administering the skin tests.)

— over 2,200 pulmonary function studies, to detect early lung conditions and to learn more about the incidence and nature of chronic bronchial disease. This is a new health program, which was begun in the Transcona survey last month. It is part of the Joint Respiratory Program of the University of Manitoba, in which the Sanatorium Board participates.

As an extra service, in collaboration with the University of Manitoba Metabolic Laboratory, and using Christmas Seal facilities and staff (but not Seal funds), over 22,000 people received blood tests for diabetes and other conditions in many of our community and industrial surveys. The program is under the medical direction of Dr. J. A. Moorhouse.

Christmas Seal funds — which are largely made up of small contributions from thousands of Manitobans — provide preventive health services which directly benefit every citizen of the province. In the past, these donations have done much to lessen the threat of tuberculosis. And even yet, with 183 new active cases reported in the province during the first nine months of this year, the job of Christmas Seals in this area is far from over — and will not be over so long as a large reservoir of

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the situation and selected several centres to carry out intensive research. Hopes for improvement were pinned primarily on two brilliant engineers (both Canadians), who had already made an impressive mark on prosthetics research, particularly in the United States. One of them — Colin McLaurin, an aeronautics engineer attached to a prosthetics research unit at Northwestern University — returned to Toronto to take charge of a biomechanics unit at the Crippled Children's Centre. The other — James Foort, a chemical engineer — gave up his research post at the University of California to team up with Dr. F. R. Tucker in the organization of a Prosthetics and Orthotics Research and Development Unit in Winnipeg. At the Manitoba Rehabilitation Hospital, three laboratories and a design office were established in a section of the basement, and gradually the staff was enlarged to include, in addition to our technical and medical directors, three other engineers (mechanical and electrical), a part-time prosthetics specialist and an engineering technician.

tions, lecture series, workshops and symposia. Hundreds of people over a wide geographical range have been influenced to some degree by this program. Twenty technicians, with previous experience in the field, received further training and clinical practice through the short courses and workshops. And two engineering students, who came to the unit to do summer work, made biomechanics the subject of their theses, then following graduation returned to take up research.

Yet, while this education program is a marked improvement over the situation of five years ago, it is still not sufficient to fill the continuing need for a formalized training program to improve the quality of service and turn out the prosthetists and therapists this country urgently needs, Mr. Foort feels. Canada has the potential for developing one of the best prosthetics and orthotics programs in the world. But this will never come about if we continue to depend on only a handful of knowledgeable people.

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Agencies Must Work Together

Promotion of health, prevention of illness, and diagnosis and treatment to alleviate suffering are best accomplished through co-ordinated action of all individuals and agencies in the health field.

This statement — with its implications of dwindling authority for individual health organizations, voluntary and otherwise — was made by Dr. D. H. Williams, director of Continuing Education at the University of British Columbia, when he addressed the annual meeting of the Canadian Tuberculosis and Respiratory Disease Association in Vancouver last June. This month we heard even more about the subject at the First Manitoba Health Conference (organized by the Manitoba Hospital Association) at the Fort Garry Hotel in Winnipeg.

In the keynote address on November 6, provincial Minister of Health and Social Services, Dr. George Johnson dwelt on the need for integration of health services in the community, including those provided by hospitals. The idea, he said, is the elimination of non-essential or wasteful programs and duplication of service.

Later in the sessions, Dr. John E. Hastings, professor of health administration, University of Toronto, proposed regional health boards which could make more effective use of existing resources and thus raise the level of health care to all segments

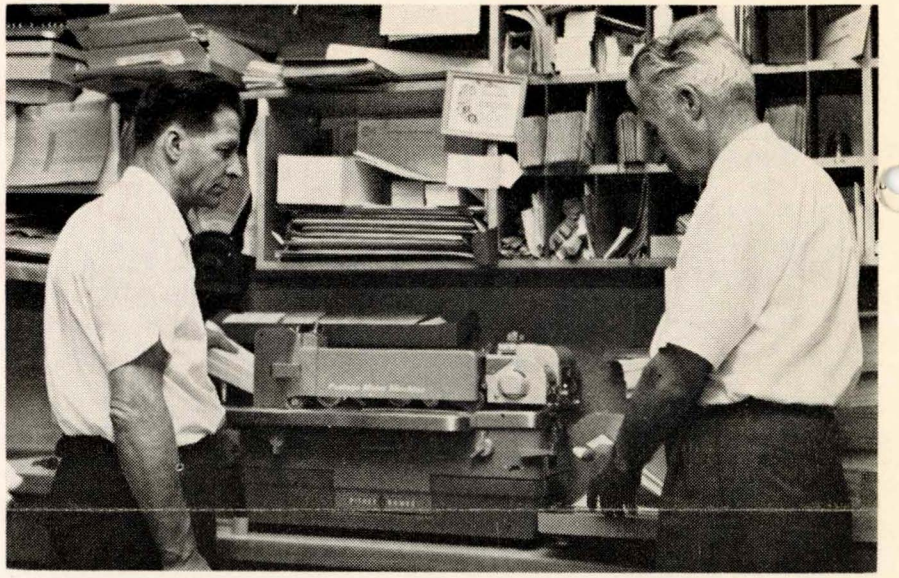
two billion dollars annually, and here in Manitoba, with a population of around one million, the bill is in the neighborhood of 100 million dollars per year.

It is a burden, said Dr. Johnson, that the Canadian people can barely manage to sustain.

Other problems are an increasing shortage of trained health personnel and facilities, plus a growing (and rightful) demand for comprehensive services to meet the needs of the various sectors of the population. While health agencies continue to proliferate — each making a demand on monetary and manpower resources — there are still groups of people who are not receiving adequate coverage.

Chief among these groups are those requiring care for chronic and long-term illness. According to Dr. J. S. Crawford, of the University of Toronto School of Medical Rehabilitation, "the scope of this problem, which might have been expected to diminish with improved medical care, has paradoxically pyramided to alarming proportions."

With better prevention and treatment of illness, survival and longevity have increased, adding constantly to the number of physically handicapped and chronically ill each year, he said. There are about 2½ million Canadians who are physically handicapped . . . Acute hospital beds are becoming filled with the chronically ill at



OVER 200,000 CHRISTMAS SEAL LETTERS slipped through the postage meter machine during October preparations for the annual campaign against tuberculosis and other respiratory disease. Rudy Trnka, Max Ulm and Tom Pickering spent over 200 hours on the job — but for Mr. Pickering (right), supervisor of Modern Building Cleaning Service, it was strictly voluntary work. Each year he has shown up every spare minute he has to help with the tedious (and for the fingers, rather painful) task of tying letters into bundles. Mr. Trnka, mailing room supervisor, was also of extra help this year: one Saturday morning he brought to the Board some 100 Boy Scouts and Girl Guides from the St. Vital area to help with envelope stuffing. (Photo by Dave Portigal)

jority of our senior citizens are not sick. There should be increased effort to preserve their health and usefulness as long as possible — and this is particularly needed in rural communities where a higher percentage of the population are in the older age group.

Mental health and family life, the prevention of accidents, environmental control (with all the problems of water shortage, industrial waste, insecticides, pollution, the

Hastings, is for all disciplines and agencies to work together with a common purpose — which is to keep the people well and elevate the dignity of men. A program is no good unless there is a decrease in death and sickness.

Administer 8,500 Tests In Transcona

board, according to a brief, would seek and review submissions and representations from both the providers and consumers of health services . . . Through its own staff, resources, outside consultant and provincial and regional organizations, where applicable, (it) could effectively contend with the ongoing problems of determining the type, size and location of facilities and programs to meet the basic health needs of the various communities."

There are several important reasons behind these proposals. Probably the greatest is mounting health costs. Canada's bill for hospital and medical care has already reached about

years ago, chronic diseases were the cause of one-fifteenth of all deaths, the same ailments today are responsible for three-quarters of all deaths.

Planning for broader hospital and other community care services must receive top priority, the conference was told. There should be a continuity of medical service right through from the acute phase of illness to extended treatment and rehabilitation care and to custodial care, home care, and other programs and facilities in the community.

Dr. Hastings pointed to other areas of concern. While the elderly comprise the greater proportion of the chronically ill, he said, the vast ma-

age and poverty) must also receive attention, he said. The inter-relation between poverty, malnutrition and ill health is very important. "There are some areas in Canada that are not dissimilar to the so-called underdeveloped countries."

Dr. Hastings concluded that no one professional group can chalk off the field and attack the problems alone. "No matter what their qualifications and background, there will be basic deficiencies in their ability to apply the broad concept of public health."

Doctors, therefore, will not necessarily take the lead. All health workers must be prepared to accept responsibility . . . including nurses, health administrators, dentists, pharmacists, engineers and health educators. All will require retraining for the job and all must be aware of what each of the other specialties has to offer.

The ultimate objective, said Dr.

An Organ For Sunday Services? Do You Suppose . . . ?

"It would be nice," sighed the patient, "if we had some music. Organ music, like in other churches, to set the proper mood . . . add that extra bit of joy to worship . . ."

"Yes," agreed another. "For when you think about it, the hospital auditorium does become a church Sunday mornings . . . you know, when the Protestants and the Reverend McKay meet for services at 9:30 . . . and again at 11 when the Catholics celebrate Mass."

"Did you hear," rejoined the first patient, "that so many patients and staff came for Mass last Sunday that Father Joanisse had to scramble around to find extra chairs?"

"And they say that some of the people who come are ex-patients . . . mostly paraplegics, I believe."

"Yes," sighed the first patient. "An organ . . . a little organ . . . would be so nice. And I bet the hospital wouldn't mind one for their Christmas Carol Festival, or for the occasional wedding held here, or for other special events."

"Do you suppose that someone . . . maybe some service group . . . would consider contributing one?"

Inquiries regarding a small organ for worship services at the Manitoba Rehabilitation Hospital will be gratefully received by the Executive Director, Sanatorium Board of Manitoba, 800 Sherbrook Street, Winnipeg 2.

Christmas Seals

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infection remains in the community.

In other fields, it is hoped that the Christmas Seal Campaign will have a significant part in reducing other threats to health. Chronic bronchitis and emphysema, for example, are now reaching epidemic proportion in the population, accounting for about 1,700 deaths in Canada last year and severe — terribly severe — disability among thousands. The exact cause of these diseases is unknown and so is the cure. Through research, early case finding and education, perhaps Christmas Seals can do something about the problem.

partment wound up a multiple screening program in Transcona on October 29, then moved into Polo Park for three days to offer chest x-rays and breathing tests (plus questionnaires) to shoppers and employees. During the rest of this month and in December the surveys team are providing chest x-rays and tuberculin skin tests to students and faculty at the Universities of Manitoba and Winnipeg and St. Boniface College.

The survey of Transcona — the largest we have ever tackled — was well attended. A total of 3,253 residents lined up for x-ray examinations, 3,039 received blood tests for diabetes and anemia, and 2,297 pulmonary function studies were carried out. In the follow-up of the diabetes tests, 120 people returned for further tests.

The Transcona survey could not have been carried out without the able help of the Transcona Health Unit or the hundreds of volunteers who conducted a house-to-house canvass in advance of the operation, and later manned the reception, registration and questionnaire desks at the testing sites.

In particular, we express our thanks to Dr. W. French, health unit medical director, and his staff; to Alderman William Dzyndra who acted as general chairman; to the Transcona Jaycees (especially Bob Jonuk) who looked after the publicity; and to the area captains who were responsible for the canvassing and recruiting help in their districts. The area captains included Mrs. Frances Buxton, Mrs. J. Zalondek, Don Perry, Mrs. H. Isherwood, Mrs. H. Gesell (assisted by Mrs. Betty Hansford), Mrs. Natalie Wallace and Mrs. R. Teres.

'68 Symposium — A Lively Session of If's, Maybe's, But's

Venturing into a medical symposium on rheumatic disease last month, we were so impressed with the discourse that we lingered an hour or two to watch and listen.

The symposium — properly titled the Symposium on Orthopedic Disabilities and Rehabilitation — is an annual event in Winnipeg, arranged by the University of Manitoba Department of Continuing Medical Education and sponsored by several provincial health organizations, including our own. The program, held this year in the auditorium of the Manitoba Rehabilitation Hospital, offered five distinguished speakers: Dr. J. L. Goldner, professor and chairman of the Orthopedic Surgery Division, Duke University, North Carolina; Professor Erik Moberg of Goteberg, Sweden, who is currently president of the Swedish Surgical Society and of the International Federation of the Socity for Surgery of the Hand; Dr. Leon Sokoloff, chief of the Section on Rheumatic Disease, National Institute of Health, Bethesda, Maryland, and medical director of the U.S. Public Health Service; Dr. J. D. Spillane of Cardiff, Wales, president of the Neurology Section of the Royal Society of Medicine; and Dr. Marian Ropes, physician to Massachusetts General Hospital, Boston, and clinical professor in medicine at Harvard Medical School.

Although much of the scientific offerings went clear over our head, the humor of the speakers did not. Arthritis, one of the greatest cripplers known to mankind, is also one of the biggest puzzlers. Since the

While they may suppress symptoms, they give rise to dangerous complications, and, in her opinion, they are helpful as supplementary treatment under only a few conditions.

Widely known for her ultra-conservative views on treatment, Dr. Ropes believes strongly in a regime that "gives the best results with the least bad effects". Mainly this includes plenty of rest, heat and exercise, joint support and control of inflammation, primarily with salicylates prescribed in full dose (up to near toxicity).

Even for some patients with mild disease, Dr. Ropes does not hesitate to order complete bed rest — or, if this is not possible, she advises rest over a few extra hours each day. Rest should be kept up until all signs and symptoms return to normal or at least remain constant — even if this requires six months in bed, she said, adding that in her opinion a six week program of treatment is at best very minimal for patients requiring hospitalization.

times obstructed). This abnormal enlargement triggers a chain reaction leading to inflammation and the formation of thickened pads in the synovial membrane (the soft tissue lining the joint capsule) and culminating in the proliferation of synovial tissue from the margins of the joint onto articular cartilage.

In the opinion of Dr. Moberg, it is a cycle which, if caught early enough, can be halted by surgery.

Dr. Goldner agreed up to a certain point. The thirty percent of arthritis patients who do not experience a remission of disease may benefit from the removal of the synovial membrane, he said. "The problem is that the physician cannot predict which patients would remit anyway, and which would not."

Dr. Ropes disagreed with Dr. Moberg almost completely. "There is no evidence yet that proves beyond doubt that early synovectomy helps the patient," she said. "Nevertheless a lot of surgery is being done — and will continue to be done. Since about 70 percent of the patients do remit, it is very easy to interpret the results of treatment and be encouraged."

Dr. Ropes admitted, however, that the fact that doctors do not know whether or not surgery is really helpful is no reason why it should not be investigated further.

Sokoloff suggested that aging and osteoarthritis are poorly understood. Genetic and biochemical factors may have a more important bearing on the development of degenerative joint disease than weight-bearing, he said. Excessive weight-bearing perhaps causes excessive disease . . . but the physician should look for other causes and use the new knowledge to alter the course of the disease.

The subject of emotional stress as a factor in the development of arthritis provoked a lively discussion. The soft-spoken Dr. Spillane — who gave us the impression that he's seen and done everything, at least twice — felt that "it is the seed not the soil that counts." He went on to tell the story of Robert Koch who, after revealing the tuberculosis germ for the first time to the Berlin Phthisiological Society in March, 1882, proceeded to a big meeting in Paris to reveal his discovery to the great medical men of Europe. He was laughed at, said Dr. Spillane. Then the director of the meeting rose to give his version of the cause of tuberculosis — and that version could be found today as a chapter on stress in a modern medical textbook.

But later the good doctor gently turned the tables on himself. He described how he too had suffered from arthritis, had found salicylates disagreeable to him and eventually

is completely unknown, so also is the cure . . . and time and again, as we listened to the pro's and con's of this treatment and that, we reflected on the lively arguments that must have taken place in the days before anti-tuberculosis drugs, or indeed before the tubercle bacillus was discovered. The speakers also seemed to be aware of this, for on more than one occasion they jokingly referred to a crucial deficiency of knowledge, and to their opposing views.

Rheumatoid arthritis is a remitting disease that varies tremendously from patient to patient. It can be severe or mild, long or short in duration, "and no one in this world can predict what will happen," Dr. Ropes told the audience. "Despite any form of treatment . . . from the beginning of time . . . 10 percent of the patients will go on to permanent crippling and 60 to 70 per cent will improve. This is universal . . . and it means absolutely nothing."

The spirited Dr. Ropes, who feels that rheumatoid arthiritis is generally a milder disease than most people think, and that in its early stages it is much more prevalent than commonly believed, accused physicians of being afraid of it.

"Physicians ought to treat patients strenuously enough to help them heal and reach a remitting stage without deformity," she said. "Unfortunately, treatment is not accepted well by a great many physicians. The average doctor says . . . and this is wrong . . . 'You have arthritis. I can't do anything about it. Learn to live with it.'"

Dr. Ropes also criticized doctors for prescribing steroids unnecessarily.

of handling the disease," she continued. "There is no question that arthritis patients have difficult, personal problems, or that stress and emotional patterns have an important bearing on disease.

"The physician should get to know the patient, discover the factors that have bothered him in life, and try to help him understand the relationship of these factors to the precipitation of disease or to the lack of healing.

"Achieving emotional rest is the hardest and most time-consuming part of treatment," she said. "And it is generally the part of treatment that is *least* done."

What Dr. Ropes seemed to advocate was a sanatorium type of treatment, stretched out vigorously over many months, if necessary. Other speakers took a more radical view, particularly with respect to preventive surgery.

Inflammation of connective tissue is the common characteristic of arthritis. Doctors do not know very much about the early pathology of the disease and, as Dr. Erik Moberg explained, a definition cannot be given in terms of time, but only in terms of the early signs of disease as seen in the x-ray plate and the examination of tissue under the microscope.

In the earliest known stage, according to Dr. Moberg (and this apparently is also controversial), localized lesions appear in the walls of small blood vessels just where they enter or leave the articular bone. In attempting to get the nutrient supply into the bone, the blood vessels become inflamed and enlarged (some-

one considers the cost of a hospital bed per day," she said.

The symposium featured several other learned papers, dealing with such topics as surgical management of the arthritic hand, hip problems and their treatment, compression neuropathies and biopsy in the diagnosis of rheumatoid arthritis. In a lecture on aging and the biology of degenerative joint disease, Dr. Leon

daily doses of prednisone, which gave him relief for several years.

"Then some years ago I went on a lecture tour behind the Iron Curtain," he mused. "I became so depressed by the conditions I encountered there that I forgot my disease . . . forgot the medicine . . . and haven't suffered a day since."

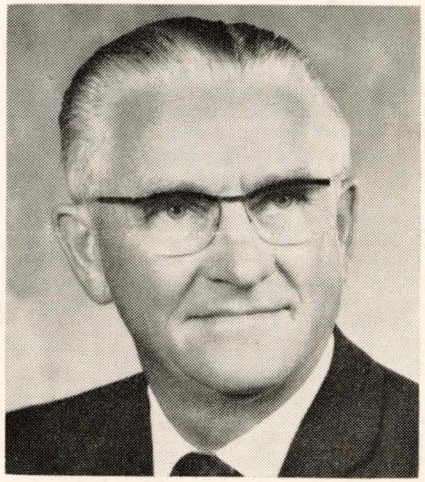
It was, as we said, a very interesting session.

Named to Executive Committee

The Sanatorium Board is pleased to announce that Harold L. McKay accepted membership this month on our Executive Committee and will henceforth serve as the Board's representative on the Manitoba Health Sciences Council.

The Council is a newly organized authority, which is composed of representatives from nine health institutions and agencies and is responsible for the over-all planning of co- ordinated programs of medical care, hospitalization, teaching and research at the Manitoba Medical Centre site and at St. Boniface Hospital. T. A. J. Cunnings, executive director of the Sanatorium Board, is a member of the Council Planning Committee; Frank Boothroyd, chairman of the Board, will serve as our alternative representative on the Council.

Mr. McKay, who has been a member of the Sanatorium Board since April, 1964, is Senior Vice-president of the Bank of Montreal. Born in Neepawa, Manitoba, he joined the Bank of Montreal in 1922, and, apart from 10 years in Ontario, he has



HAROLD L. McKAY

spent most of his career attached to various branches of the bank in the prairie division.

His considerable business experience, plus his deep interest in health work and community welfare, will undoubtedly be a great asset both to the Board and to the Health Sciences Council.

Edward Dubinski M.H.A. President

The Sanatorium Board extends warm wishes and congratulations to our assistant executive director, Edward Dubinski, who stepped into the demanding post of president of the Manitoba Hispital Association Inc., at the 47th annual meeting of the association at the Fort Garry Hotel, November 7.

Mr. Dubinski, who was born and educated at The Pas, has been a member of the Sanatorium Board administrative staff for just over 21 years, and during that time he has contributed actively to various regional hospital organizations.

He is a past president of the Upper Midwest Hospital Conference, past president of the Winnipeg Regional Hospital Council, and a member of the Board of Directors of the Manitoba Hospital Association since 1960. He was elected to the executive of the M.H.A. Board of Directors in 1964 and since then has held various offices leading to the presidency.

This past summer, Mr. Dubinski was also conferred membership in the American College of Hospital Administrators.

Sons Voice Thanks

It is dangerous, we feel, to become too puffed up with pride . . . because, well, you never know, the next day you may fall flat on your face.

PORDU — The First Five Years

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Instant Prostheses

With respect to design activities, the Winnipeg unit has concentrated mainly on the improvement of artificial legs (while Toronto, on the other hand, has gone to work on arms and braces). The initial items centred on the development of "instant prostheses", a term coined in 1963 to describe artificial limbs that could be assembled in minutes. The first prosthesis classified as such was developed for thigh amputees (later for below-knee amputees), and it consisted of a prefabricated, adjustable socket mounted on a conventional limb. The system was strictly temporary; its purpose was to evaluate doubtful candidates, as well as to condition new amputees and keep them active in their rehabilitation programs while a permanent leg was being made.

The results were good. It became possible to assemble a temporary limb in under 30 minutes and to get amputees started on rehabilitation soon after surgery. It also meant that a good many patients who had hitherto been considered unlikely candidates for artificial legs, were now being fitted with them.

Elderly people, according to Mr. Foort, make up about 60 percent of all leg amputees — but until recently, only about 60 percent of this age group were equipped with prostheses. Today, as a result of research and a new attitude, 98 percent of our geriatric patients are able to get up and

Foot (which was designed years ago by Foort, McLaurin and Hampton and improved recently by PORDU), the Wedge-Disc Alignment Unit, Socket-Receptacle System, instant sockets, polyurethane cosmetic covers, clamp-on valve housing for suction sockets, pneumatic, hydraulic and friction Swing-phase Controls for the artificial knee, knee-shank unit, hip joint fork, Northwestern hip joint for hip level amputees, and various auxiliary items.

All levels of lower extremity amputees (except knee disarticulation) have been taken into account in the development of the modular system. Most of the components are ready for use and are being produced by Winnipeg manufacturers. The biggest problem now, says Mr. Foort, is to get the appliances into widespread clinical use. For this, funds for organized testing programs are needed.

Other Projects

Besides the modular system, PORDU has developed or is currently working on other items, largely in answer to special requests from clinicians. These include a series of 13 (right and left) prefabricated thigh sockets for children, an electronic alignment device, a cable recovery unit (which takes up the slack in the cable used by high level arm amputees to activate components of the artificial arm), the Simpson Arm (a light-weight, gas-driven system for small children), the Murphy Cart (an electric cart for a thalidomide child

BULLETIN BOARD

Nine registered nurses completed the three-week Rehabilitation Nursing Course at the Manitoba Rehabilitation Hospital on November 8. The group, according to Nursing Instructor Mrs. Doris Setter, was the 11th to participate in this intensive program. They included Mrs. Irene O. Baron, director of nurses at the Baron and Arcadia Nursing Homes; T. W. O'Brien, head nurse at Manitoba Sanatorium, Ninette; Miss Catherine L. McMillan of the D. A. Stewart Centre; Miss Ladie C. Garduque, Miss Grace T. Sencio, Mrs. Doris L. Timberg, Mrs. Sylvia J. Tumak, Mrs. Susan Wong and Miss Nieves U. Yahya of the Manitoba Rehabilitation Hospital.

* * *

With regret, the Sanatorium Board records the death on October 17 of Richard Carter, former night watchman at our Manitoba Sanatorium, Ninette, and for the past few summers relief storesman. Mr. Carter joined our staff on December 1, 1944, and served ably for some 17 years. He died at Killarney Hospital.

* * *

J. Brayton Person, director of the Department of Communica-

ters of words of encouragement that have much the same warming effect as a hot rum toddy on a cold winter's night.

So, tempting fate, we decided to publish this letter, which the other day brought a soft glow to the faces of our executive director and Board members.

Dear Mr. Cunnings:

Further to our conversation last Friday afternoon.

Please find enclosed cheque in the amount of $150.00 U.S. funds which will allow you to purchase the new Electronic Speech Aid, to assist in your rehabilitation work.

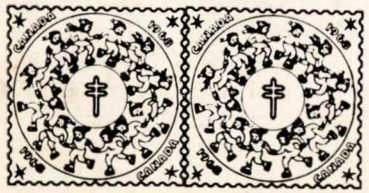
It is difficult to adequately express our appreciation to your staff for the care and patience they showed Dad while he was in their charge. There is no doubt the rehabilitation program he underwent led him to enjoy himself and his fellow men throughout the latter years of his life.

My brothers join me in conveying to you and your staff our heartfelt thanks, and we are also comforted in the knowledge that you dedicated people will help many other persons like our Dad to come back into the stream of society to lead useful and worthwhile lives.

Yours most sincerely,
George Taylor for Frank,
Bob and Fred Taylor.

See what we mean? And we are even more impressed by the fact that the late Mr. Taylor was a rich man indeed to have such sons.

CHRISTMAS SEALS FIGHT TB



& OTHER RESPIRATORY DISEASES

"Old age," says Mr. Foort, "is not an excuse for withholding or delaying prosthetic care; it is a cogent reason for speed."

Modular System

The invention of instant sockets paved the way for PORDU's greatest contribution: the Winnipeg Modular System of Prosthetics.

Adjustable legs, which has been used with the instant sockets, were too heavy and bulky for prolonged use. So our unit launched a project to develop artificial limbs which could be assembled from simple, prefabricated parts.

Tinker toys and mechano sets are examples of modular systems. So are Buckminster Fuller's domes and Expo's Habitat. In the same way, a unified modular system provides prostheses (and braces) which can be assembled, adjusted and changed faster and more easily than is possible with conventional components.

"Because of this," Mr. Foort points out, "it is possible to pass amputees through the rehabilitation process without interruption. Alignment can be changed at any time in the life of the limb. Length can be changed . . . Function can be changed by substituting different controls. If a part becomes worn, it is easy to replace. If an adjustment is needed common tools are sufficient to set things straight. An amputee with ordinary skills could, if he wished, do much of the maintenance work himself."

The prefabricated parts for the modular system were either designed by PORDU, or were borrowed from elsewhere and in some cases, improved upon. They include the Sach rough ground), plastic back braces, two types of Perthes braces and a series of simple plastic-metal splints for immobilizing the wrists of arthritis patients.

PORDU has worked with the University of New Brunswick in the development of myoelectric control systems for artificial arms, and has also collaborated with other units in Ontario and further west on various projects "of mutual interest". On the international level, the staff participates in American programs and communicates regularly with researchers in Europe.

"Within PORDU we're a horizontal organization," comments Mr. Foort. "We have a team of equals, with members carrying out the functions for which they have a flair. Leadership essentially belongs to the man with the best ideas and, therefore, tends to shift from person to person."

Considering what we had five years ago and what is offered today, most of us marvel at the progress in the prosthetics and orthotics field. But Jim Foort is not so much impressed as he is concerned.

Bracing, on the whole, is still poorly done, he says.

And many of the complicated problems in prosthetics and orthotics are neglected so that the more prevalent ones can be dealt with.

There are far too few rehabilitation engineers and other skilled personnel to cope with a problem which, as medical science advances, is becoming increasingly larger.

"There must be a basis for young men to enter the field and take over where we leave off," he says.

Rehabilitation Hospital, flew to Denver November 14th to attend the annual convention of the American Speech and Hearing Association. Earlier, Mr. Person had attended the annual sessions of the Canadian Speech and Hearing Association in Toronto, and also spent several days in Regina to help with the organization of a speech and hearing service at the South Saskatchewan Hospital Centre.

Speech clinicians Mrs. M. Vogel and Miss Lise Smith, of the Department of Communication Disorders, attended a seminar on voice disorders at Fargo, North Dakota, on November 1 and 2. The seminar was sponsored by N.D. State University.

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Among the latest additions to the registered nursing staff at the D. A. Stewart Centre are Miss Sandra Jackson from Bristol, England, and Mrs. Judith-Anne Heppelle.

A warm welcome is also extended to these new members of the Manitoba Rehabilitation Hospital staff: Miss Barbara Hah, occupational therapist; Miss Barbara Gray, laboratory technologist; Miss Brenda Bean, physiotherapist; Miss Marney Joliffe, Miss Vivian Smith, Mrs. Joanne Shackleton and Miss Sandra Porter, general staff nurses; and Miss Renate Lohr, Mrs. Theresa Weselowski (formerly Kostiuk) and Mrs. Gertrude Peters (newly arrived from London, England), clerk typists in Medical Records.