news bulletin

The Sanatorium Board of Manitoba

VOL. 8, No. 3

PUBLISHED BY THE SANATORIUM BOARD OF MANITOBA, WINNIPEG

MARCH - APRIL, 1967

Medical Director Appointed

The Sanatorium Board of Manitoba announces the appointment of Dr. Reuben Mitchell Cherniack as Medical Director of our Tuberculosis and Respiratory Disease Service.

Dr. Cherniack, who assumed his new post at the beginning of March, is widely known both at home and abroad for his contributions towards the advancement of medicine, particularly for his orignal investigations in the respiratory yield.

In addition to his new appointment, he holds other prominent positions in Winnipeg, including Associate Dean in the Department of Medicine, University of Manitoba, and Director of the Cardio-Respiratory Division of the Winnipeg General Hospital Clinical Investigation Unit. As Associate



DR. R. M. CHERNIACK

the Beerl Cellers of Physicians

Doctor, Engineer to Research Electronic Controls for Limbs

Beginning next September 1, the activities of our Prosthetics and Orthotics Research and Development Unit will take on a new perspective with the arrival of Robert N. Scott, associate professor of electrical engineering at the University of New Brunswick and executive director of the university's Bio-engineering Institute.

On a preliminary visit to the Sanatorium Board in mid-March, Professor Scott to 1 d of his plans to spend one year with the PORDU medical and technical staff, experimenting with myo-electric control systems for artificial arms. This project, which has attracted the interest of the young personable engineer for the past six years, involves one of the most exciting and certainly least tapped aspects of prosthetics research, and if the next year's venture proves successful, a significant contribution will be made toward equipping the dis-

tional prosthetic devices and, above all, they most closely approach the doctor's and engineer's dream of developing artificial appliances which will provide joint movements in imitation of nature.

Such a system has great implications for quadriplegics as well as amputees, Professor Scott said. Unlike most conventional devices, the myo-electric control system does not require discernible movement of body members to put it into operation. In fact it can work for the patient when physical motion is very limited or impossible, as a

grams of the Faculty of Medicine. As director of the Clinical Investigation Unit, he was the prime planner and first director of the new Intensive Care Unit at the Winnipeg General Hospital.

A 1948 graduate of the University of Manitoba Medical School, Dr. Cherniack interned at the Winnipeg General Hospital and did post-graduate work as a Fellow in Medicine at the Presbyterian Hospital, Columbia University, and at John Hopkins Hospital in Baltimore.

He received his M.Sc. in medicine in 1954, became a Fellow in

American College of Physicians in 1961. He was first appointed to the University of Manitoba teaching staff in 1950.

Dr. Cherniack is the author or co-author of some 50 publications, including chapters in medical books. He is a member of a number of professional organizations—among others, the Canadian Society for Clinical Investigation (in which he served as president in 1963) and the American Society for Clinical Investigation.

The Sanatorium Board is very happy to welcome Dr. Cherniack to our medical staff.

TB Screening Well Under Way

With the funds raised from the 1966-67 Christmas Seal Campaign, the Sanatorium Board of Manitoba has moved swiftly into its 41st a n n u a l program of tuberculosis prevention.

During February and March, over 22,000 persons were tested for tuberculosis through our Christmas Seal financed tuberculin and x-ray surveys.

This figure includes 12,129 students tested during February in 10 Winnipeg high schools, 2,573 Winnipeg school teachers and well over 4,000 patients in 50 Winnipeg and Brandon nursing homes.

The Board's industrial tuberculosis screening program also got well under way at the beginning of March, and by the end of the month

close to 4,000 employees of 12 Winnipeg industries had received TB skin tests or chest x-rays, or both. Among the more ambitious projects was the screening of 1,250 employees at the Winnipeg Grain Exchange and 950 staff members at Bristol Aerospace Ltd.

Surveys of high risk groups will continue to be given special priority. A major effort each year, for example, are the chest x-ray surveys of Indian reserves, conducted in co-operation with the Medical Services branch of the Department of National Health and Welfare. The Sanatorium Board's mobile van begins the round of reserves in southern and northern Manitoba on April 17. By the end of June our technicians will have set up shop at 45 different sites.

Broadly speaking, Professor Scott's research is based on the principle of literally "thinking" artificial arms and hands into action by using the brain's control over muscles deep within the body to start and stop small motors in the limb's joints.

mene appraires.

It has long been known that a contracting muscle gives off electrical impulses, ranging from a few microvolts to a few hundred microvolts, depending on the force of the contraction, Professor Scott said. Small electrodes buried by the surgeon in a muscle could pick up even the minutest of these signals and transmit them to an amplifier which in turn would power the motorized parts of the artificial limb.

Though far from perfected, such systems will one day provide the most effective and direct method of powering prostheses, the professor feels. They are completely wireless, they do away with the heavy, cumbersome cables and harnasses used to activate conven-

has just enough electrical output to serve as a control site.

The development of microelectronic control systems for rehabilitation purposes is a nother example of medicine benefiting from space research. Scientists found that the small, highly efficient electrodes used to monitor men in space could just as well be used for E.C.G. monitoring of patients in Intensive Care Units. The same type of system was also used for the development of heart pace-makers, and in 1960 Russian scientists produced the first myoelectronic artificial limb. The limb - an artificial arm for below-elbow amputees - uses small surface electrodes placed in contact with upper arm and neck muscles and is capable of one or two basic movements in the hand. The manufacture rights were sold two years ago to research centres in England and Montreal where engineers are now working to widen the scope of its movements.

(Continued on page 2)



Address all communications to:
THE EDITOR, SBM NEWS BULLETIN,
800 Sherbrook Street, Winnipeg 2, Manitoba
Authorized as second class mail, Post Office Dept., Ottawa
and for payment of postage in cash.

Announce Christmas Seal Research Grants

Why do some positive tuberculin reactors develop active tuberculosis while others, also infected, do not?

Can researchers develop a new antibiotic that will actually kill tubercle bacilli?

What more effective measures might be taken to increase the function of disabled lungs?

In hopes that answers might one day be found to these questions and many of the other unsolved problems of respiratory diseases and disorders, the Canadian Tuberculosis Association has announced that \$108,000 will be spent this year on research projects throughout the country.

The research program, sponsored by the CTA since 1959 and financed largely through a percentage of Christmas Seal funds from the provinces, has two broad goals. One is to develop more effective means of controlling infectious diseases such as tuberculosis; the other is to gain a clearer understanding of the way the human body works with respect to respiratory function.

It is for this latter reason, therefore, that the CTA has included in this year's research budget a grant of \$11,060 to Dr. N. L. Stephens of the University of Manitoba, who is currently investigating the various factors that affect some of the mechanical processes of breathing.

The bronchial tree, we know, delivers air to the lungs by elongat-

often happens, for example, in pulmonary tuberculosis) . . . or how these passages constrict a n d shut off air during, for example, an asthma attack.

Dr. Stephens, a cardiologist who graduated from the University of Lucknow, India, and has done post-graduate research in England and the United States, is now studying the role of the smooth muscles in the bronchial walls in controlling the flow of air to and from the lungs, and the way these muscles react to varying amounts of oxygen, c a r b o n dioxide and acidity.

Through s u c h studies, the CTA feels, we may someday have a much better understanding of the natural phenomena of breathing . . . and then perhaps of the means of strengthening the body's defences against disease, or of offsetting damage already caused by disease or injury.

In all, the Canadian Tuberculosis Association is financing 18 research projects this year, as well as 11 fellowships. The investigations cover a wide field, some being related to biochemistry, to treatment methods, to immunization, and so forth

There is a great need for a new, powerful antibiotic for the treatment of tuberculosis, for in sanatoria today are many patients who are resistant to the three major drugs we now have. They have been there for years, sentenced to a life of imprisonment because their disease does not kill them and the drugs do not cure them.

It is in the hope that another antibiotic will be found that the CTA Research Fund supports the work of Dr. Chan.

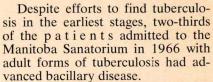
Other researchers who have received CTA grants for studies relating to lung function include Dr. Bryan Kirk of the University of Manitoba, Dr. L. Cudkowicz of Dalhousie University, and Dr. B. J. Sproule of the University of Alberta.

Dr. M. A. Hickey of Royal Edward Chest Hospital, is doing further work on "The Clinical Picture of Histoplasmosis" – a fungus disease which is often mistaken for tuberculosis and which is increasingly reported in various parts of the country.

Dr. C. H. Dorval, Laval Hospital, has a \$14,000 grant for a "Study of the Immunological and Biochemical Properties of the Serum of Tuberculous Patients."

The CTA Research Committee,

Two-thirds Have Advanced Disease Doctor Reports



In his annual report to the Sanatorium Board on March 28, Dr. A. L. Paine, medical superintendent of Manitoba Sanatorium, said that in urban white communities, where minimal tuberculosis is usually treated at home, one expects that most patients admitted to Sanatorium would have advanced bacillary disease.

At Ninette, however, 85 percent of all new cases admitted for treatment are either of Indian or Eskimo extraction. And since the policy is to hospitalize native patients regardless of the extent of their disease, one would certainly hope to find a higher incidence of minimal disease as e among them, Dr. Paine said.

Yet in natives, even more than in whites, new disease is usually found in the advanced stage.

The reason, Dr. Paine suggests, is probably not a lack of case finding facilities (in fact, case finding among the native population has been greatly intensified in recent



on expiration. But no one knows yet just how the bronchial muscles are capable of shutting off the airflow to extensively diseased or damaged areas of the lungs (as

ELECTRONIC CONTROLS

(Continued from page 1)

The Russian arm, however, relies on electric signals from superficial muscles just under the skin. Professor Scott feels that the system would be more effective if transmitters were moved from the body surface to larger, less used (preferably unused) muscles deep within the body. Various areas of these muscles could then be used for no other purpose than to serve as control sites for specific prosthetic functions.

Professor Scott, who will be accompanied by two or three electrical engineering graduates from his New Brunswick institute, hopes to prove this point at the Manitoba Rehabilitation Hospital during the next year. He will be working very closely with PORDU's medical director who will implant transmitters in the brachialis muscle of above-elbow amputees who require surgery and who, of course, volunteer to take part in the program.

Asked if the patients fitted with these myo-electric control systems might find it difficult and confusing to contract the right muscle in the right way, Professor Scott said no. Past experiments have shown that most people can get isolated control over several muscles within a few hours, he said.

Among the projects renewed this year was a grant of \$7,750 to Dr. E.C.S. Chan of McGill University, whose studies are in the field of microbiology.

and recommends grants, is chaired by Dr. C. G. Shaver of St. Catharines, Ontario. Dr. R. M. Cherniack of Winnipeg is one of the six members.

IN MEMORIAM

With deep regret the Sanatorium Board reports the deaths of two former, highly valued members of our staff at Manitoba Sanatorium, Ninette.

MITZI (NEWMARK) McKENZIE, crafts instructress at Ninette since March 28, 1955, and wife of the sanatorium switchboard operator, Donald McKenzie, died in Winnipeg on February 26 after a lengthy illness. Mitzi, who was born and educated in Winnipeg, was a patient at Manitoba Sanatorium for 10 years. She was a wonderfully clever woman, an expert seamstress, adept at leatherwork, weaving and a multitude of other crafts, and the sanatorium felt very fortunate when, on sufficient recovery, she agreed to teach her skills to others. Though dogged by illness during the last part of her life, Mitzi tackled her work enthusiastically. She took a warm, personal interest in all the patients, ever seeking new ways for them to occupy their time in bed and proudly helping to organize exhibits of their accomplishments. She is indeed missed by a great many people.

WILLIAM BARR STEWART, former chief purchasing agent at Manitoba Sanatorium and a member of the staff for 35 years, died at Deer Lodge Hospital on March 9. Mr. Stewart was born at Cobden, Ontario, and educated at the nearby town of Renfrew. During World War I he served with the Princess Patricia Canadian Light Infantry but soon after his arrival overseas was sent home with advanced tuberculosis. Mr. Stewart spent more than 10 years in various hospitals, was eventually admitted to Ninette in 1928 where the following year he started part-time work in the sanatorium's business office. He worked his way up through sanatorium steward to chief purchasing agent, retiring from this post in October 1963. Married to the former Elsie Leech, a member of the sanatorium nursing staff, Mr. Stewart continued to make his home at Ninette until his final illness — "a warm and happy oasis for everyone," he often told friends. And Mr. Stewart had a wide circle of friends who will miss him sadly.

course that tuberculosis still takes in natives.

Dr. Paine also commented on the high percentage of children admitted for sanatorium treatment.

This amounted to approximately one-third of the new cases in 1966, he said. None were tuberculin converters and many had extensive lung and glandular involvement. Three had miliary tuberculosis, which supposedly happens rarely nowadays.

Altogether in 1966 there were 227 tuberculosis admissions to Manitoba Sanatorium, and of these, 101, or 77 percent, had new disease.

Dr. D. L. Scott, Central Tuberculosis Clinic, reported 433 admissions to the wards, of which 241 had respiratory tuberculosis.

During the year patients paid 11,279 visits to the clinic . . . over 5,000 were for examination. These examinations turned up 156 new cases of disease.

ELECTRICITY IN MEDICINE—

Among the remedies for headaches prescribed by Scribonius Largus around 47 A.D., was the use of a living black torpedo or ray fish which should be placed, he said, "on the spot where pain is present until the pain ceases and this place is benumbed." This is perhaps the first application of electricity in medicine.

EMPHYSEMA

The Growing Menace

The patient is usually a male between 50 and 70 years of age. He has probably been a heavy smoker for many years.

Somewhere along the line he developed a troublesome cough, then dyspnea (shortness of breath). He found he was perpetually tired, he had trouble sleep-

ing. In the end his constant struggle to breathe may have forced him to give up his job, his social life, his hobbies . . . his entire existence now being spent shuffling between bed and chair, his every effort devoted to keeping his lungs functioning . . . to breathing, just breathing.

The patient is a victim of emphysema, a disease that is fast on the rise in Canada, now replacing tuberculosis as the second most common cause of death due to respiratory disease.

It is estimated that there are four times as many deaths from emphysema now as 10 years ago; in 1964 about 700 Canadians died of emphysema and another 500 died of emphysema and bronchitis combined.

It is not known how many people in our population suffer from the disease, for it can exist long before victims are aware of it. However, several studies of selected groups in the United States indicate that asymptomatic emphysema may be relatively common, occurring in perhaps five to eight personal contents.

disease progresses to the point where it actually interferes with his life that he turns up in the doctor's office.

There are a number of factors that account for the increasing incidence of emphysema: the growing number of elderly people and better diagnosis are two chief reasons. Cigarette smoking — and to a lesser extent, other forms of air pollution — is certainly another. According to authorities, the death rate from emphysema is about six times greater for cigarette smokers than for non-smokers.

So far doctors know neither how to prevent emphysema nor how to cure it, and it is only fairly recently that they are finding the means to help patients improve lung function and live more comfortably with their disease. Drugs, breathing exercises, oxygen therapy all help, but as with other diseases, the earlier the condition is diagnosed and treated, the better are the chances of slowing down the progress of the disease – perhaps even arresting it.



OUT OF BREATH? This man may just be out of condition. But can he be sure that his breathing problem is not a sign of a chronic respiratory disease? If shortness of breath persists, or seems unusual, it is wise to see a doctor.

(Photo by Dave Portigal)

Emphysema is a chronic, obstructive pulmonary disease which creeps up on the victim slowly and for some reason appears to be 10 times more common among males than females. Often a late effect of chronic bronchitis, it is a condition where, because of obstruction in the bronchial airways, air is trapped in the alveoli or air sacs of the lung. The walls of these tiny sacs lose their elasticity, become inflated and break down, and instead of many millions of tiny units providing vital, oxygen-carbon dioxide exchange, there are fewer, larger, poorer working air sacs.

If obstruction of the airways and destruction of the air sac walls continue, the lungs as a whole become over-stretched and less and less efficient. The changes interfere with the passage of blood through the capillaries in the lung and the heart must work harder and harder to pump blood. Many patients with far advanced emphysema die of heart failure.

But as we have shown the development of emphysema is insidious. Since our lungs have about six times the amount of tissue they need to function, the condition can exist and progress long before the patient is aware of it. Emphysema, for example, may begin in a man's late twenties or early thirties. In his forties he may notice shortness of breath on exertion or on arising in the morning, but very often he attributes it to smoking, lack of exercise or perhaps a gain in weight. Usually it is not until the

pulmonary function tests are now being recommended as an important part of routine physical checkups. Some medical groups have also suggested that breathing function be tested on a mass survey basis, on the same sort of basis as the mass screening tests now being carried out in different areas for the detection of tuberculosis and diabetes.

Chronic respiratory disease — which in addition to emphysema and chronic bronchitis, include such other conditions as tuberculosis, chronic pneumonia, bronchietasis, asthma and hay fever, account today for 28 percent of all disabling illness. It is a vast health problem, one which will deserve a great deal of medical attention and research for years to come.

Southern Reserves Get Diabetes Tests

In cooperation with the Medical Services branch of the Department of National Health and Welfare, the Sanatorium Board is combining a diabetes screening program with the chest x-ray survey of Indian reserves in Southern Manitoba.

Between April 17 and June 30, about 6,000 adult Treaty Indians in the Clandeboye, Fisher River, Dauphin and Portage la Prairie agencies will receive blood tests for diabetes. Children from families with a history of diabetes will also be examined.

Good Health Is Earned

How many people see their physicians regularly for a physical check-up?

Not many, according to one drug company which sent out questionnaires to general practitioners and certified specialists across Canada. From 1,400 forms completed and returned, the company found:

Only eight of every 100 visits to physicians are for general health examinations.

Almost eight out of 10 physicians surveyed indicated that less than 25 percent of their patients seek an annual health examination.

Procrastination and fear are two chief reasons why people do not seek annual health check-ups. Of these, we feel that procrastination – or better, lack of interest – is the biggest single factor. Most people seem to take *apparent* good health for granted – "Why take up the doctor's time and mine when I feel perfectly well?"

Why, indeed?

Statistics show that periodic health examinations do reveal a significant number of abnormalities in apparently well people – abnormalities that could, if left untreated, lead to serious illness and hospitalization.

One survey, for example, found that two-thirds of almost 370 disorders diagnosed in periodic health examinations of 269 apparently well people were previously unknown to these people. Of the diagnoses previously unkown to patients, 76 percent were made at

the first health examination and 24 percent at subsequent examinations.

Only 44 of the 269 apparently well persons examined were free from disorders considered hazardous to health or capable of interfering with effective function of the patient.

Today there are few diseases which, if detected early enough, cannot be cured, arrested or slowed down. To name a few:

Arthritis - Rheumatic diseases (arthritis comes under this general head) far outrank every other chronic disease in frequency and are second only to nervous and mental disorders in the amount of disability they cause. More than one million Canadians are affected. of whom 285,000 are disabled and 63,000 are totally disabled. But if treatment is started early, much can be done to relieve pain and slow down progress of the disease. In fact it is claimed that early diagnosis and treatment can prevent serious disability in four out of five patients.

Diabetes – It is estimated that there are 250,000 known diabetics in our population; many others (thought to be about one percent of the population) have diabetes and don't know it. There are extremely important reasons why this disease should be found early. Not only can it lead to death, but it opens the way to infections (e.g. tuberculosis) and hardening of the

(Continued on page 4)

STAFF NEWS

PORDU Team to Switzerland

Three members of the Sanatorium Board's Prosthetics and Orthotics Research and Development Unit have been invited to conduct a two-day teaching course in Lausanne, Switzerland, next September.

James Foort, Technical Director, Douglas Hobson, mechanical engineer in charge of design, and Dr. F. R. Tucker, medical director, will demonstrate the procedures used by our unit for the fitting and aligning of temporary prostheses for above-knee and below-knee amputees. Among those attending the course will be prosthetists, orthopedic physicians and therapists from Italy, Germany, France, Belgium and Great Britain.

Prior to the demonstrations in Lausanne, Mr. Hobson and Dr. Tucker will spend several weeks touring and lecturing in various prosthetic research centres in Europe.

Will Supply Drugs

Since April 1 the Sanatorium Board of Manitoba has been providing pharmaceutical services to residents and patients at the new Park Manor personal care home in Transcona.

This service, which was undertaken by the Board at the request of the Manitoba Department of Mrs. Whimster supervised the M.R.H. Out-patient Department since her appointment in August, 1962. Prior to her resignation in mid-February, both the hospital business and clerical staff and the M.R.H. nursing staff held parties in her honor.

Mrs. Sonya Carol Olien replaces Mrs. Zacharias as clerk-typist in the Central Tuberculosis Clinic, and Mrs. Margaret Wiegart, RN, has assumed the post of supervisor of the Out-patient Department.

Recent additions to the M.R.H. registered nursing staff include Mrs. Victor Dzikowski, Mrs. Claudette Christopher, and Mrs. Yvette Wulff. Mrs. Wulff, we note, was a member of the nursing staff at our former Clearwater Lake Hospital, The Pas, from 1962 until 1964.

New remedial gymnast in the M.R.H. Physiotherapy Department is *Miss Lesley Jane Bridger*, a graduate of Pinderfield School of Remedial Gymnastics, Yorkshire, England.

We also welcome *Dr. Thannee Krasaesindhu* (from Bangkok, Thailand) and *Dr. Tat-ming Wong* (China) to our M.R.H. medical staff, and *Mrs. Joanne Husiak* to the Central Tuberculosis Registry clerical staff.



ASSISTANTS GRADUATE — Group 12 of the Manitoba Rehabilitation Hospital Nurses' Assistants and Nursing Orderlies Training Program completed their 12-week course of classroom and ward instruction on March 31 and were presented with graduation certificates at a ceremony in the hospital auditorium. Our congratulations to the new graduates, pictured here with Nursing Instructor Mrs. Doris Setter, standing. Front row, left to right: Miss Carol Muzyka, Mrs. Evelyn Pinay and Miss Joanne Sinclair. Back row: Mrs. Cheryl Bird, Anthony Batson, Miss Pauline Prescott and Miss Tatjana Konoplenko. (Photo by Dave Portigal)

GOOD HEALTH IS EARNED

(Continued from page 3)

arteries. On the other hand, if diabetes is diagnosed and treated early, it may become not much more than a slight inconvenience to patients.

Tuberculosis – Public apathy toward tuberculosis is one of the greatest problems facing health workers. Though no longer a chief killer, close to 5,000 new active

Arteriosclerosis, which is hardening and narrowing of the body's arteries, is by far the leading type of heart disease . . . and the most deadly killer. It can, however, be detected early and the patient may learn to live with his condition for many years if he takes care of his health and follows the doctor's orders. tion and drug information on a daily basis.

The Park Manor home provides 60 beds for the elderly, 20 of which were ready for occupancy on April 1. It is operated by the Seventh Day Adventists.

This is the second service the Board has undertaken for people in the outside community. In 1964, at the request of the Home Welfare Association, the Sanatorium Board agreed to prepare the meals for the "Meals-on-Wheels" service to a selected group of elderly or disabled persons in Winnipeg.

At present the Manitoba Rehabilitation Hospital food services staff is preparing 52 noon-hour dinners and four suppers for these citizens, catering to individual preferences and special diets.

Personnel Changes

Farewell parties were held recently for Mrs. Lorna Zacharias, clerk-typist in the Central Tuberculosis Clinic, and Mrs. Doris L. Whimster, supervisor of the Outpatient Department, Manitoba Rehabilitation Hospital.

Lorna, who has left our staff to become a full-time mother and wife, was a real asset to the C.T.C. for 10 years — a devoted, conscientious and cheerful worker who will be missed very much. Prior to her departure at the end of March, she was honored by many fellow employees at a special tea in the Christmas Seals office.

Begin Nursing Course

Ten graduate nurses are registered in the Sanatorium Board's Eighth Rehabilitation Nursing Course, begun at the Manitoba Rehabilitation Hospital on April 3.

The intensive three-week course – established in October, 1963 – covers all aspects of rehabilitation nursing and the role of other professional disciplines in the treatment and restoration of the physically disabled.

Graduate nurses registered in the program from outside the Rehabilitation Hospital are Miss Johanna Mitzkowski of Coqualeetza Indian Hospital, Sardis, B.C., Mrs. Jeanette Young of CARE Services, Provincial Department of Health, Miss Brenda Heyes of Swan River, and Miss S. Ponce of the Central Tuberculosis Clinic.

Auxiliary Aids Patients

The patients at the Central Tuberculosis Clinic are very pleased with the generous gifts recently bestowed on them by the Ladies Auxiliary to Local 110 of the Canadian Union of Public Employees.

An auxiliary representative, Mrs. D. W. Gunn, appeared at the clinic one bright Saturday morning to present the patients with two electric hair dryers, two electric shavers and some jigsaw puzzles. All very welcome gifts indeed!

do not take advantage of free detection services offered across the country, for in many cases sickness could be prevented and in other cases, if the disease is discovered in the early stages, long months of hospitalization could be avoided. Yet the fact is that in Manitoba last year, nearly 50 percent of the new active cases were either moderately or far advanced when first reported.

detection tremendously increases the patient's chances for survival.

And so the list goes on . . . anemia, glaucoma, emphysema and other respiratory diseases could be cured, arrested or slowed down if patients would take the trouble to visit their doctors regularly.

Good health is earned. It should never be taken for granted.

1. Tanzi, F. and Adams, W.: Med. Clin. North America 44: Jan. 1960.

Thanks for Your Donations

The Sanatorium Board expresses sincere thanks to the thousands of people in the province who contributed to the 1966-67 Christmas Seal Campaign.

A total of \$179,255.93 was donated this year to our Christmas Seal fund — a handsome return indeed and one which will enable us to continue year-round tuberculosis preventive services.

These services include community and industrial tuberculin and x-ray surveys, stationary diagnostic and screening clinics and antituberculosis vaccination programs.

Three percent of the returns will be sent to the Canadian Tuber-culosis Association to help finance various research projects across the country. Other money will be used in the province on health education programs.

It has been through the small annual donations of thousands of people that the Sanatorium Board has been able to carry on an active c a m p a i g n against tuberculosis

throughout the province. This campaign, which began over 60 years ago, has done much to reduce the tuberculosis threat in all our communities. But because tuberculosis is a communicable, chronic disease which defies all attempts to wipe it out, control measures are still imperative and will continue to be extremely i m p o r t a n t for many years to come.

Therefore, the Board is very grateful to the many people who support our work each year, both through their donations and their participation in tuberculosis surveys.

We also extend warmest thanks to the radio and television stations, the newspapers and magazines which have generously helped us publicize the campaign and preventive work; to the hundreds of volunteers who assisted with campaign preparations . . . and finally to Miss Mary Gray, Christmas Seal Supervisor, who organized and ran the whole show.