

MANITOBA SANATORIUM  
SEVENTH ANNUAL REPORT  
FOR THE YEAR ENDING  
DECEMBER 31st, 1917  
INCLUDING THE AUDITORS'  
REPORT FOR THE YEAR  
ENDING MARCH 31st, 1918

WF 200  
Sa 2  
Ann Rep  
1917  
Q2

SANATORIUM BOARD OF MANITOBA  
LIBRARY COPY \_\_\_\_\_

# MANITOBA SANATORIUM

NINETTE, MAN.



## Board of Directors :



D. H. COOPER, Esq., Chairman.  
GORDON BELL, Esq., M.D., Vice-Chairman.  
E. W. MONTGOMERY, Esq., M.D.  
HON. J. W. ARMSTRONG.  
E. L. DREWRY, Esq.  
W. A. WINDATT, Esq.  
S. W. PROWSE, Esq., M.D.  
C. H. ENDERTON, Esq.  
GRANT HALL, Esq.  
E. F. KOHL, Esq.  
W. H. McLEOD, Esq.  
J. McEACHERN, Esq.  
JOHN YELLOWLEES, Esq.  
CHARLES CANNON, Esq.  
Secretary-Treasurer:  
E. M. WOOD, Esq.



## CONSULTING STAFF:

Surgeons: NEIL J. MACLEAN, M.D., M.R.C.S. (Eng.), F.A.C.S.  
JAMES GORRELL, B.A., M.D., C.M.  
Eye, Ear, Nose and Throat Surgeon:  
GEORGE W. FLETCHER, M.D., M.B.

## STAFF:

Medical Superintendent: DAVID ALEXANDER STEWART, B.A., M.D.  
Medical Assistants: CHARLES WILLIAM TORRANCE, M.D., (Jan.-May).  
JOHN M. ORR, M.D., (May-Dec.).  
Lady Superintendent: MISS MARY MARTIN, R. N. (July-Dec.).  
Accountant: J. S. YATES.  
Engineer: J. R. SCOTT.  
Solicitor: J. A. MACHRAY, Esq.  
Auditors: W. A. HENDERSON & CO., Chartered Accountants.

## REPORT OF THE MEDICAL SUPERINTENDENT.

---

It is becoming increasingly difficult to focus into a brief, clear report a year's work of the Manitoba Sanatorium. It has come to be a combination of civil and military, a civilian Sanatorium receiving military patients. Of the 394 patients discharged during 1917, 268 were civilian and 126 military. It has been thought best to report separately on the two classes.

A second difficulty relates to diagnosis. There was a time when scarcely a negative or doubtful finding appeared in an annual report; now it seems as though an important function of a Sanatorium is to determine whether tuberculosis is actually present in its cases or not. Patients are sent in with slighter and less definite evidence than was usual a few years ago, and meet at the Sanatorium more conservative valuations of slight signs and symptoms. The result is that an increasing number are classed as negative, while some have still to remain in the unsatisfactory class of "not proven" or doubtful. This is especially true of military patients. The prevalence in barracks, camp and trenches of all sorts of respiratory infections makes for difficulty in diagnosis. Of soldiers received at Ninette up to May 10, 1918, twenty-eight per cent. were classed as non-tuberculous and five per cent. as doubtful, and indeed the number of those classed as doubtful could very fairly be doubled. Soldiers are sent to Ninette practically direct from overseas without the sifting which is frequently done at military district headquarters. A sanatorium where men can be kept as long as is necessary, under supervision, seems the proper place for sifting over those sent home tagged "T.B. suspect." In the French army eighty per cent. of those sent back in this way have been declared by Major Rist to be non-tuberculous, and in the German army from thirty to eighty per cent. have had the temporary diagnosis made at the front negated on fuller investigation.

Many who are pronounced non-tuberculous really require treatment and are greatly improved by the Sanatorium routine, while many who are definitely tuberculous come back, after prolonged hospital and Sanatorium treatment overseas, ready for discharge. This treatment of the non-tuberculous, and the diagnosis and discharge without treatment of some of the tuberculous, makes a tabulation of the work of the Sanatorium still more complicated.

And since diagnosis has come to be an important feature of Sanatorium work it seems improper to leave out of the tables those who really came for diagnosis and who were discharged untreated, or treated for only a short time.

The list of complications given among the tables enumerates only the more serious of the secondary conditions found among the definitely tuberculous patients. Among the disease conditions found in civilians classed as non-tuberculous were, anaemia, asthma, bronchitis, carcinoma, debility, enteritis (non-tuberculous), influenza, lues, neurasthenia, pneumonia, pulmonary abscess, rheumatism, uterine haemorrhage and valvular heart disease. Among soldiers classed as non-tuberculous were found bronchiectasis, bronchitis (usually chronic), debility, empyema, emphysema, gas poisoning, malingering, pulmonary abscess, sinus infection and "shell shock."

Since war is the only topic of the day certain of our conclusions about tuberculosis in soldiers, though only tentative, may be of interest. Contrary to a deeply rooted popular idea gas is not in any great measure, if at all, responsible for the tuberculosis of soldiers. Tuberculosis in the soldier is not due to army infection, but to previous infection with breakdown in service. While some have broken down who likely would not have done so in civilian life, on the whole the breakdowns due to army service seem to be no more numerous than might have been expected in times of peace. The apparent increase in the incidence of tuberculosis is due to an average earlier diagnosis in the army than in civilian life, to the fact that practically all enlisted men are treated in institutions, and to the fairly large proportion of mistaken diagnoses. While very far advanced neglected cases are by no means uncommon the military cases come for treatment on the average earlier than civilians. The pleuritic form is a common form of onset.

There is no clinic connected with the Manitoba Sanatorium but many free consultations are given. During 1917 the Medical Superintendent, apart from the work of the Sanatorium, made 138 free examinations. Many thus examined and advised were ex-patients who wished to be "checked up." Several free examinations were made by other members of the staff.

It will be noted in the tables that the patients discharged during 1917 had 16,055 days of part, full or extra bed care, and 23,154 days of ambulant routine with no bed care. At the time of writing this report the patients at the Sanatorium are about equally divided between the bed and ambulant classes. There is no doubt that the liberal provision and free use of hospital accommodation gives good results. The "rest cure" is the cure for tuberculosis, and a Sanatorium with the ordinary run of cases is most successful when it is most a hospital.

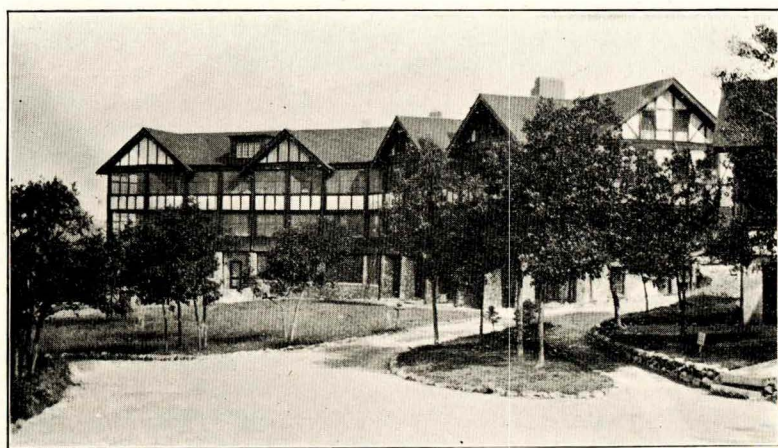
Twenty-five graduates and final year students in medicine were in residence at the Sanatorium for from a week to six months during the year 1917. The graduates were chiefly internes of the Winnipeg General Hospital and came through an affiliation between the Sanatorium and the hospital. The under-graduates came on their own initiative.

Early in 1917 an addition to the Infirmary building, raising its capacity from 30 to 70, came into use, and, later in the year, two pavilions, each for 32 military patients, were built. The capacity of the Sanatorium was thus nearly doubled. From the opening in 1910 up to the end of 1917, six treatment units, accommodating 158 patients, had been added, increasing the capacity of the Sanatorium nearly 400 per cent., but scarcely any change had been made in the central plant, in kitchen, dining room, store room, office and staff accommodation. Among treatment units, while ambulant patients were fairly well provided for, there had never been room enough for bed cases. So more hospital accommodation was urgently needed.

By the co-operation of the Invalided Soldiers' Commission of the Dominion Government with the Government of Manitoba, a fairly extensive building program to correct these conditions is under way. This aims to **increase central accommodation**, providing adequate kitchen, store room, office and staff accommodation largely by additions and alterations to the Administration Building; to **increase treatment units**, by providing an additional Infirmary or Hospital unit for 60 patients, and an additional Pavilion for 40 patients; to add a **vocational training building** and make additions and alterations in the heating and power plant.

For several years the water supply has been unsatisfactory. A new well sunk during the past year gives an adequate supply of excellent water.

DAVID A. STEWART,  
Medical Superintendent.



INFIRMARY  
For which a new wing is in course of erection, 1918.

## MEDICAL REPORTS AND TABLES

January 1st, 1917, to January 1st, 1918.

	Male	Female	Total
Patients in Sanatorium, January 1, 1917....	59	47	105
Patients admitted during 1917.....	299	176	475
Patients treated during 1917.....	358	222	580
Patients discharged during 1917.....	220	174	394
Patients remaining in Sanatorium January 1, 1918 .....	138	48	186

### ADMISSIONS YEAR BY YEAR.

1910, May to December .....	97
1911, January to December .....	168
1912 .....	189
1913 .....	232
1914 .....	267
1915 .....	306
1916 .....	329
1917 .....	475

2,063

Total number admitted, from the opening of the Sanatorium at the end of May, 1910, to December 31, 1917.....2,063

### MILITARY ADMISSIONS.

1914 .....	1	1916 .....	72
1915 .....	13	1917 .....	181
Total, to end of 1917, 267. ....			

### CLASSIFICATION OF PATIENTS.

#### Discharged During 1917.

The 394 patients discharged during 1917 were classed on admission and discharge as follows:—

#### On Admission.

	Civilian.	Military.	Total
	%	%	%
Non-Tuberculous .....	26 9.8	42 32.8	68 17.3
Incipient, A, .....	41 15.4	30 23.5	71 18.0
Incipient, B, .....	8 3.0	—	8 2.0
Moderately advanced, A, .....	27 10.1	15 11.7	42 10.7
Moderately advanced, B, .....	20 7.5	2 1.6	22 5.6
Far advanced, A, .....	25 9.5	13 10.2	38 9.6
Far advanced, B, .....	33 12.4	13 10.2	46 11.7
Far advanced, C, .....	42 15.8	4 3.0	46 11.7
Apparently Hopeless .....	44 16.5	9 7.0	53 13.4
	266 100.0	128 100.0	394 100.0

### On Discharge.

	Civilian.		Military.		Total	
		%		%		%
Untreated	2	.8	19	14.8	21	5.3
Apparently arrested	4	1.6	2	1.6	6	1.5
Quiescent	64	24.0	30	23.4	94	23.9
Improved	133	50.0	66	51.6	199	50.5
Unimproved	29	10.9	1	.8	30	7.6
Died	34	12.7	10	7.8	44	11.2
	266	100.0	128	100.0	394	100.0

### Length of Stay.

Admitted as—	Civilian	Military
	Weeks	Weeks
Non-Tuberculous	5.7	6.2
Incipient, A,	13.3	8.3
Incipient, B,	13.5	
Moderately advanced, A,	14.6	9.9
Moderately advanced, B,	14.6	8.2
Far advanced, A,	17.6	17.8
Far advanced, B,	15.4	18.5
Far advanced, C,	20.5	16.7
Apparently Hopeless	19.4	32.0
Discharged as—		
Untreated	.85	1.9
Apparently arrested	55.2	15.0
Quiescent	21.1	21.1
Improved	10.3	7.4
Unimproved	16.0	22.8
Died	21.4	23.4
Whole average	15.5	11.4
	weeks	weeks

### STANDARDS OF CLASSIFICATION ON ADMISSION.

#### Lesion.

**Incipient.**—Slight infiltration limited to the apex of one or both lungs, or a small part of one lobe.

No tuberculous complications.

**Moderately advanced.**—Marked infiltration more extensive than under incipient, with little or no evidence of cavity formation.

No serious tuberculous complications.

**Far Advanced.**—Extensive localized infiltration or consolidation in one or more lobes.

Or disseminated areas of cavity formation.

Or serious tuberculous complications.

**Apparently hopeless.**

### Symptoms.

**A (Slight or none,)** Slight or no constitutional symptoms, including particularly gastric or intestinal disturbance, or rapid loss of weight; slight or no elevation of temperature or acceleration of pulse at any time during the twenty-four hours.

Expectoration usually small in amount, or absent.

Tubercle bacilli may be present or absent.

**B (Moderate.)** No marked impairment of function, either local or constitutional.

**C (Severe.)** Marked impairment of function, local and constitutional.

### CLASSIFICATION ON DISCHARGE.

The classification on discharge is as follows:

**APPARENTLY CURED**—All constitutional symptoms and expectoration with bacilli absent for a period of two years under ordinary conditions of life.

**ARRESTED**—All constitutional symptoms and expectoration with bacilli absent for a period of six months; the physical signs to be those of a healed lesion.

**APPARENTLY ARRESTED**—All constitutional symptoms and expectoration with bacilli absent for a period of three months; the physical signs to be those of a healed lesion.

**QUIESCENT**—Absence of all constitutional symptoms; expectoration and bacilli may or may not be present; physical signs stationary or retrogressive; the foregoing conditions to have existed for at least two months.

**IMPROVED**—Constitutional symptoms lessened or entirely absent; physical signs improved or unchanged; cough and expectoration with bacilli usually present.

**UNIMPROVED OR PROGRESSIVE**—All essential symptoms and signs unabated or increased.

### NON-TUBERCULOUS.

Of the patients discharged during 1917, 26 civilians and 42 military patients were classed as **Non-Tuberculous**. All were kept for diagnosis, some for further observation, and some for treatment. They were discharged as follows:

#### Non-Tuberculous—Civilians.

On discharge classed as	REMAINED UNDER TREATMENT				Total	Per Cent.
	Average in weeks	Less than 1 month	1-3 months	Over 3 months		
Improved	5.7	8	13	1	22	84.6
Unimproved	1.6	2			2	7.7
Died	9.7	1		1	2	7.7
Whole average	5.7	11	13	2	26	100.0

**Gain of Weight**—15 (or 57%) gained a total of 65 lbs., an average of 4¼ lbs.; 4 (or 16%) lost a total of 13 lbs., an average of 3¼ lbs.; 7 (or 27%) were not weighed on discharge.

Some bed care was required by 8; 18 had no bed care.

**Non-Tuberculous—Military.**

On discharge classed as	REMAINED UNDR TREATMENT				Total	Per Cent.
	Average in weeks	Less than 1 month	1-3 months	Over 3 months		
Untreated - -	1.5	17			16	38.1
Quiescent - -	29.9			3	3	7.1
Improved - -	6.4	7	13	3	23	54.8
	Whole average 6.2	23	13	6	42	100.0

**Gain of Weight**—30 (or 71%) gained a total of 176¾ lbs., an average of 5¾ lbs.; 7 (or 17%) lost a total of 18¾ lbs., an average of 2½ lbs.; 5 (or 12%) were not weighed on discharge.

Some bed care was required by 1; 41 had no bed care.

**INCIPIENT.**

Of the patients discharged during 1917, 41 civilians had been classed on admission as **Incipient, Class A.**; and 8 as **Incipient, Class B.** 30 Military patients had been classed as **Incipient, Class A.** These were discharged as follows:—

**Incipient, Class A—Civilian.**

On discharge classed as	REMAINED UNDER TREATMENT				Total	Per Cent.
	Average in weeks	Less than 1 month	1-3 months	Over 3 months		
Untreated - -	.9	2			2	4.9
Apparently arrested	63.4			3	3	7.3
Quiescent - -	14.9		3	6	9	21.9
Improved - -	8.1	3	20	4	27	65.9
	Whole average 13.3	5	23	13	41	100.0

**Gain of Weight**—36 (or 88%) gained a total of 326¾ lbs., an average of 9 lbs.; 2 (or 5%) lost a total of 12½ lbs., an average of 6¼ lbs.; 3 (or 7%) remained stationary.

Some bed care was required by 8; 33 had no bed care.

**Incipient, Class A—Military.**

On discharge classed as	REMAINED UNDER TREATMENT				Total	Per Cent.
	Average in weeks	Less than 1 month	1-3 months	Over 3 months		
Untreated - -	1.0	3			3	10.0
Apparently arrested	15.0	1		7	2	6.7
Quiescent - -	17.1		1	1	8	26.7
Improved - -	4.6	9	8		17	56.7
	Whole average 8.3	13	9	8	30	100.0

**Gain of Weight**—23 (or 77%) gained a total of 127 lbs., an average of 5½ lbs.; 6 (or 20%) lost a total of 9½ lbs., an average of 1½ lbs.; 1 (or 3%) remained stationary.

No bed care was required.

**Incipient, Class B—Civilian.**

On discharge classed as	REMAINED UNDER TREATMENT				Total	Per Cent.
	Average in weeks	Less than 1 month	1-3 months	Over 3 months		
Quiescent - -	22.4			3	3	37.5
Improved - -	7.4	1	4		5	62.5
	Whole average 13.5	1	4	3	8	100.0

**Gain of Weight**—7 (or 88%) gained a total of 55 lbs., an average of 7¾ lbs.; 1 (or 12%) lost a total of 2 lbs., an average of 2 lbs.

Some bed care was required by 3; 5 had no bed care.

**MODERATELY ADVANCED.**

Of the patients discharged during 1917, 27 civilians had been classed on admission as **Moderately Advanced, Class A.**; and 20 as **Moderately Advanced, Class B.** 15 Military patients had been classed on admission as **Moderately Advanced, Class A.**, and 2 as **Class B.** These were discharged as follows:—

**Moderately Advanced, Class A.—Civilian.**

On discharge classed as	REMAINED UNDER TREATMENT				Total	Per Cent.
	Average in weeks	Less than 1 month	1-3 months	Over 3 months		
Apparently arrested	30.7			1	1	3.7
Quiescent - -	19.5		1	13	14	51.9
Improved - -	7.6	3	8	1	12	44.4
	Whole average 14.6	3	9	15	27	100.0

**Gain of Weight**—27 (or 100%) gained a total of 265½ lbs., an average of 9¾ lbs.

Some bed care was required by 1; 26 had no bed care.

**Moderately Advanced, Class A.—Military.**

On discharge classed as	REMAINED UNDER TREATMENT				Total	Per Cent.
	Average in weeks	Less than 1 month	1-3 months	Over 3 months		
Quiescent - -	16.3		2	4	6	40.0
Improved - -	5.8	2	7		9	60.0
	Whole average 9.9	2	9	4	15	100.0

**Gain of Weight**—12 (or 80%) gained a total of 104¾ lbs., an average of 8¾ lbs.; 2 (or 13%) lost a total of ¾ lbs., an average of 1½ lbs.; 1 (or 7%) remained stationary.

Some bed care was required by 1; 14 had no bed care.

**Moderately Advanced, Class B.—Civilian.**

On discharge classed as	REMAINED UNDER TREATMENT				Total	Per Cent.
	Average in weeks	Less than 1 month	1-3 months	Over 3 months		
Quiescent - -	17.0			10	10	50.0
Improved - -	12.3	1	6	3	10	50.0
	Whole average 14.6	1	6	13	20	100.0

**Gain of Weight**—15 (or 75%) gained a total of 230 lbs., an average of 15 lbs.; 5 (or 25%) lost a total of 5½ lbs., an average of 1 lb.

Some bed care was required by 14; 6 had no bed care.

**Moderately Advanced, Class B.—Military.**

On discharge classed as	REMAINED UNDER TREATMENT				Total	Per Cent.
	Average in weeks	Less than 1 month	1-3 months	Over 3 months		
Quiescent - -	14.7			1	1	50.0
Improved - -	1.7	1			1	50.0
	Whole average 8.2	1		1	2	100.0

**Gain of Weight**—1 (or 50%) gained a total of 61 lbs., an average of 6 lbs.; 1 (or 50%) lost 2¾ lbs.

Some bed care was required by 1; 1 had no bed care.

**FAR ADVANCED.**

Of the patients discharged during 1917, 25 civilians had been classed on admission as **Far Advanced, Class A.**; 33 as **Far Advanced, Class B.**; and 42 as **Far Advanced, Class C.** 13 Military patients had been classed as **Far Advanced, Class A.**; 13 as **Class B.**, and 4 as **Class C.** These were discharged as follows:—

**Far Advanced, Class A.—Civilian.**

On discharge classed as	REMAINED UNDER TREATMENT				Total	Per Cent.
	Average in weeks	Less than 1 month	1-3 months	Over 3 months		
Quiescent - -	22.0			15	15	60.0
Improved - -	9.3	2	7	1	10	40.0
	Whole average 17.6	2	7	16	25	100.0

**Gain of Weight**—25 (or 100%) gained a total of 320¾ lbs., an average of 14¾ lbs.

Some bed care was required by 4; 21 had no bed care.

**Far Advanced, Class A.—Military.**

On discharge classed as	REMAINED UNDER TREATMENT				Total	Per Cent.
	Average in weeks	Less than 1 month	1-3 months	Over 3 months		
Quiescent - -	23.7		2	6	8	61.6
Improved - -	8.3		5		5	38.4
	Whole average 17.8		7	6	13	100.0

**Gain of Weight**—12 (or 92%) gained a total of 103½ lbs., an average of 8¾ lbs.; 1 (or 8%) lost a total of 2 lbs., an average of 2 lbs.

Some bed care was required by 2; 11 had no bed care.

**Far Advanced, Class B.—Civilian.**

On discharge classed as	REMAINED UNDER TREATMENT				Total	Per Cent.
	Average in weeks	Less than 1 month	1-3 months	Over 3 months		
Quiescent - -	24.1			10	10	30.3
Improved - -	11.0	7	8	6	21	63.7
Unimproved - -	.4	1			1	3.0
Died - -	36.5			1	1	3.0
	Whole average 15.4	8	8	17	33	100.0

**Gain of Weight**—26 (or 79%) gained a total of 335½ lbs., an average of 12¾ lbs.; 5 (or 15%) lost a total of 35½ lbs., an average of 7 lbs.; 1 (or 3%) remained stationary, and 1 (or 3%) was not weighed on discharge.

Some bed care was required by 22; 11 had no bed care.

**Far Advanced, Class B.—Military.**

On discharge classed as	REMAINED UNDER TREATMENT				Total	Per Cent.
	Average in weeks	Less than 1 month	1-3 months	Over 3 months		
Quiescent - -	26.4			4	4	30.8
Improved - -	15.1	1	4	3	8	61.6
Died - -	14.4			1	1	7.6
	Whole average 18.5	1	4	8	13	100.0

**Gain of Weight**—10 (or 77%) gained a total of 81¾ lbs., an average of 8 lbs.; 3 (or 23%) lost a total of 40 lbs., an average of 13¼ lbs.

Some bed care was required by 8; 5 had no bed care.

**Far Advanced, Class C.—Civilian.**

On discharge classed as	REMAINED UNDER TREATMENT				Total	Per Cent.
	Average in weeks	Less than 1 month	1-3 months	Over 3 months		
Quiescent - -	42.8			3	3	7.2
Improved - -	17.4	3	9	14	26	61.9
Unimproved - -	18.9	2	2	5	9	21.6
Died - -	26.7		1	3	4	9.3
	Whole average 20.5	5	12	25	42	100.0

**Gain of Weight**—22 (or 55%) gained a total of 196 lbs., an average of 8¾ lbs.; 18 (or 40%) lost a total of 129 lbs., an average of 7 lbs.; 2 (or 5%) were not weighed on discharge.

Some bed care required by all.

**Far Advanced, Class C.—Military.**

On discharge classed as	REMAINED UNDER TREATMENT				Total	Per Cent.
	Average in weeks	Less than 1 month	1-3 months	Over 3 months		
Improved - -	14.6	2		1	3	75.0
Unimproved - -	22.8			1	1	25.0
	Whole average 22.8	2		2	4	100.0

**Gain of Weight**—2 (or 50%) gained a total of 43 lbs., an average of 21½ lbs.; 1 (or 25%) lost a total 20¾ lbs.; and 1 (or 25%) was not weighed on discharge.

**APPARENTLY HOPELESS.**

Of the patients discharged during 1917, 44 civilian and 9 military patients had been classed on admission as **Apparently Hopeless**. They were discharged as follows—

**Apparently Hopeless.—Civilian.**

On discharge classed as	REMAINED UNDER TREATMENT				Total	Per Cent.
	Average in weeks	Less than 1 month	1-3 months	Over 3 months		
Unimproved - -	17.0	4	6	7	17	38.6
Died - -	20.9	4	11	12	27	61.4
	Whole average 19.4	8	17	19	44	100.0

**Gain of Weight**—5 (or 12%) gained a total of 20¼ lbs., an average of 4 lbs.; 31 (or 70%) lost a total of 335 lbs., an average of 10¾ lbs.; 8 (or 18%) were not weighed.

Some bed care was required by all.

**Apparently Hopeless.—Military.**

On discharge classed as	REMAINED UNDER TREATMENT				Total	Per Cent.
	Average in weeks	Less than 1 month	1-3 months	Over 3 months		
Died - -	32.0	2	2	5	9	100.0
	Whole average 32.0	2	2	5	9	100.0

**Gain of Weight**—1 (or 10%) gained a total of 13¾ lbs.; 4 (or 45%) lost a total of 71½ lbs., an average of 17¾ lbs.; 4 (or 45%) were not weighed.

Some bed care was required by all.



## WEIGHT.

Of 394 patients of all classes, 269 gained a total of 2,471¼ lbs., an average of 9.0 lbs.; 91 lost a total of 701 lbs., an average of 7½ lbs.; 34 neither gained nor lost, or were not weighed.

## DURATION OF DISEASE.

The **Presumed Duration** of disease before admission was:

Less than one year	37	.11%
One to two years	18	.41%
Over two years	44	.48%

The **Average Duration** before admission by classes was:

	Civilian	Military
Non-Tuberculous	—	—
Incipient, Class A.	20.3 months	19.7 months
Incipient, Class B.	14.2	“
Mod. Advanced, Class A.	28.4	53.0
Mod. Advanced, Class B.	64.4	16.5
Far Advanced, Class A.	49.1	27.5
Far Advanced, Class B.	64.1	29.9
Far Advanced, Class C.	45.3	17.0
Apparently Hopeless	39.6	17.1
Total average	41.6	27.7

## SANATORIUM AND HOSPITAL TREATMENT.

Patients discharged during 1917 were given in all 39,209 days' treatment as follows:

Sanatorium, ambulant treatment, no bed care	23,154	days
Part infirmary or hospital treatment, some bed care	5,141	“
Full infirmary treatment, full bed routine	7,815	“
Extra infirmary treatment, close bed care	3,009	“
Total	39,209	“

## AGES OF PATIENTS DISCHARGED.

Under 10 years	3	31-35	52
11-15	10	36-40	37
15-20	74	41-50	28
21-25	97	Over 50	6
26-30	87		

## OCCUPATIONS.

The occupation of patients admitted to the Sanatorium during the year 1917 were as follows:

Artists	1	Merchants	1
Brakemen	1	Messengers	2
Bookkeepers	3	Motormen	1
Carpenters	2	Nurses	6
Conductors	1	Opticians	1
Caretakers	1	Painters	1
Constables	1	Printers	1
Clerks, Bank	2	Physicians	1
Clerks, Hardware	1	Stenographers	7
Clerks, Store	1	School boys	4
Clerks, Office	26	School girls	12
Domestics	12	School Teachers	11
Dentists	1	Students	13
Druggists	1	Salesmen	1
Dyers	1	Soldiers	182
Engineers	1	Shippers	3
Factory girls	3	Telegraphers	4
Farmers	27	Travellers	1
Firemen	2	Tailors	2
Housewives	82	Teamsters	1
Interpreters	1	Waiters	1
Laborers	18	Woodworkers	1
Laundry Workers	1	No occupation	20
Machinists	3		
Milliners	4		
Music Teachers	1		
			475

## COMPLICATIONS.

Tuberculous.	Non-Tuberculous.		
Abdominal adhesions	1	Albuminuria	4
Adenitis, with and without suppuration	4	Alcoholism	3
Discharging Sinus	1	Asthma	3
Ear, Tuberculosis of	1	Constipation—obstinate	2
Empyema	2	Dysmenorrhoea	3
Haemoptysis	18	Emphysema	1
Intestinal Tuberculosis	13	Erysipelas	1
Ischio-rectal abscess	1	Erythema Nodosum	1
Joints, Tuberculosis of	3	Exophthalmic Goitre	1
Kidney, Tuberculosis of	3	Gastric Ulcer	1
Laryngitis, with and without ulceration	39	Hernia, Inguinal	1
Meningitis	1	Injury to Hip	1
Peritonitis	2	Lues	3
Pleurisy (severe)	6	Mitral lesion (severe)	2
Pott's Disease	3	Neurasthenia	4
Pneumothorax, spontaneous	2	Pneumonia	1
Testicle, Tuberculosis of	2	Pregnancy	9
		Pyorrhoea alveolaris	1
		Rheumatism	2
		Shrapnel wounds	1
		Sinus infection	2
		Teeth in very bad condition	12

## MUNICIPALITIES.

Patients admitted to the Sanatorium in 1917 were from the following municipalities:

Alberta, province	2	Minitonas	1
Albert	1	Neepawa, town	2
Assiniboia	14	Norfolk, N.	3
Boulton	1	Ontario, province	23
Boissevain, town	1	Ochre River	1
Beausejour, village	5	Pipestone	2
Bifrost	2	Pembina	3
Brandon, city	13	Portage la Prairie, rural	2
Brokenhead	5	Portage la Prairie, city	7
Brenda	1	Rhineland	5
Blanshard	1	Rosser	2
Carman, town	2	Roland	2
Cornwallis	1	Rockwood	4
Coldwell	3	Russell	3
Clanwilliam	2	Riverside	2
Dauphin, town	2	Rosburn, village	2
Daly	2	Saskatchewan, province	25
Dufferin	2	Selkirk, town	3
Ethelbert	2	Shell River	2
Edward	2	Strathcona	2
Elton	2	Springfield	3
Emerson, town	1	Shellmouth	2
Franklin	2	Stanley	1
Gimli, village	1	Selkirk, town	2
Gilbert Plains	1	Swan River	1
Glenwood	1	St. Andrews	3
Grey	4	St. Boniface, city	11
Grandview	3	St. Clements	1
Gretna, village	1	St. Vital	2
Hamiota	2	Transcona, town	1
Hanover	2	Tuxedo	1
Kildonan East	4	Turtle Mountain	2
Kildonan West	8	Thompson	1
Killarney, town	1	Unorganized territory	11
Langford	1	Victoria	1
Le Pas	3	Westbourne	5
Lorne	4	Whitewater	1
Louise	4	Woodworth	1
Lawrence	1	Winnipegosis	1
Manitou, village	2	Winnipeg, city	202
Minnedosa, town	3		
Minto	2		475
Macdonald	3		
Miniota	1	Saskatchewan and Ontario pa-	
Morden, town	2	tients are almost all returned	
McCreary	3	soldiers.	

## NATIVITY

The nativity of patients admitted to the Sanatorium during the year 1917 was as follows:

Canada	204	France	3
England	101	Germany	1
Scotland	39	Holland	1
Ireland	22	Iceland	5
Wales	1	Italy	1
United States	22	Norway	4
Austria	10	Poland	7
Austria, Ruthenians	3	Russia	23
Armenia	1	Russia, Jews	12
Belgium	3	Sweden	10
Brazil	1		
Bulgaria	1		475

## DONATIONS (APART FROM CASH DONATIONS) OR OF CASH FOR SPECIAL PURPOSES.

### Library Books, Papers, Magazines, Pictures, etc. :—

Mr. Hickling, Brandon; J. Yellowlees, Ninette; Mr. F. D. Blakeley, Winnipeg; A. Eason, Wawanesa; J. A. Faulkner, Shoal Lake; Hiawatha Red Cross Society, Ninga, per Miss M. Love; E. F. Kohl, Winnipeg; Winnipeg News Agency; M. G. G. Club, Winnipeg; Boys' Own Rifles, Winnipeg; Lt.-Col. C. W. Rowley, Winnipeg; Cotter Bros., Winnipeg, and others.

### Cut Flowers, Floral Decorations, etc. :—

Patmore Nursery Co., Brandon; Grandview Ladies' Aid; Mrs. Cookman, Brandon; ex-patients of Sanatorium, per Mrs. Scott and Miss Wilkie and others.

### Clothing and Funds for Equipment and Comforts for Soldiers and Civilian Patients :—

W. M. S., Manitou; J. Yellowlees, Ninette; United Grain Growers Patriotic Committee; Mrs. Robt. Jackson, Hilton Red River Valley, W. A.; United Empire Chapter, I.O.D.E.; Returned Soldiers' Association, Winnipeg; Ladies' Auxiliary of Rowland Red Cross Society; Clearwater "Needles"; W. H. Reynolds; Mrs. Henson, Winnipeg; I. O.D.E., Winnipeg; Manitoba Club, Winnipeg; Kitchener Club, Scarth; Red Cross Society, Douglas, and others.

### Fruit, Confectionery, Christmas Parcels, etc. :—

Mrs. Clendenning, Brandon; Mr. E. F. Kohl, Winnipeg; Queen Mary's Guild, Griswold; Mr. W. F. C. Braithwaite, Winnipeg; Khaki Boys' Club, Ninette; Women's Auxiliary,

Cypress River; I.O.D.E., Brandon; Fairweathers' Knitting Club, Winnipeg; Ladies of Royal Bank, Winnipeg; Mrs. Scott and Miss Wilkie, Winnipeg; A. Laughton, Brandon; Public Schools, Brandon; St. Margarets College Alumni; Nintika Club, Winnipeg; Mrs. Jas. Tees, Winnipeg; Soldiers' Hospital Visiting Committee; I. O. D. E., Winnipeg, and others.

In addition a number of parcels and gifts were received from various donors for individual soldiers or members of specific units.

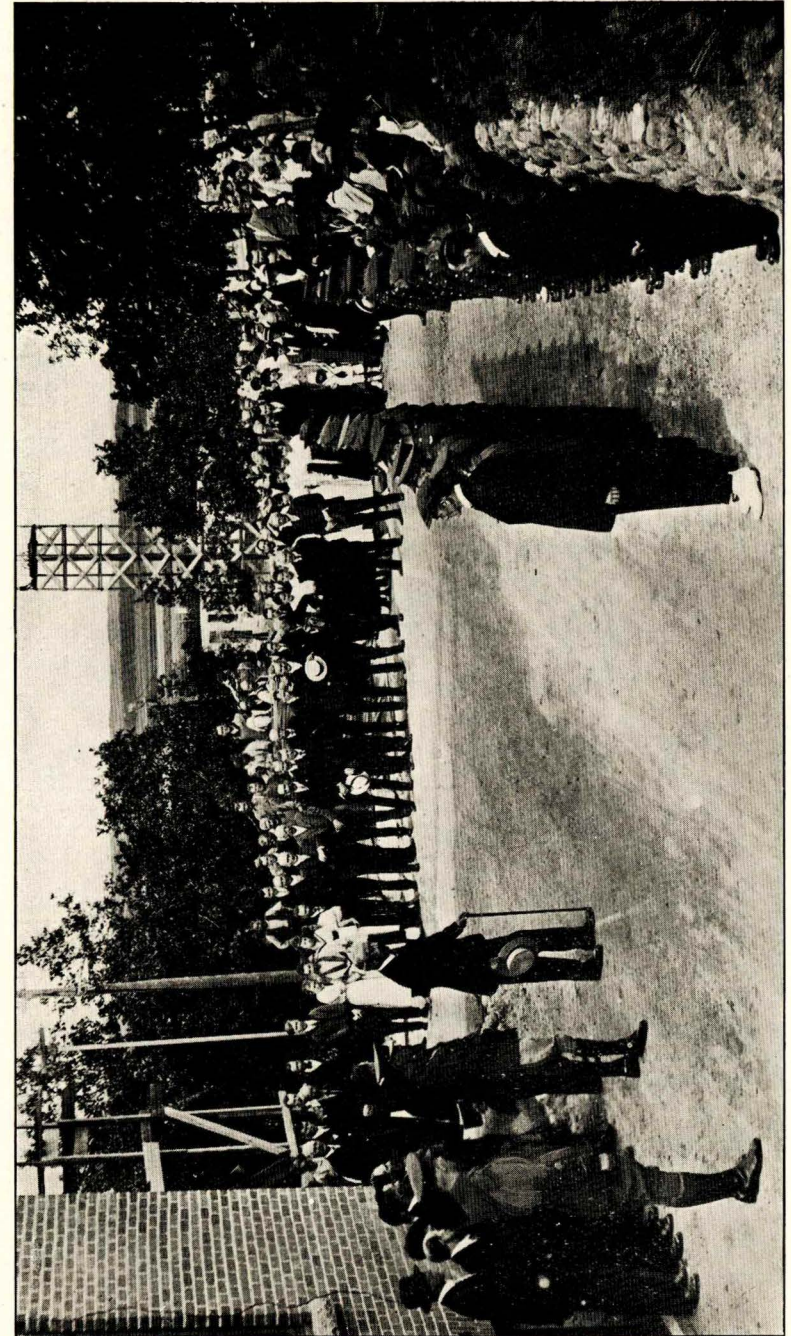
**Musical Instruments, Gramophones, Records, Games, etc. :—**

Mr. C. Murray, Mr. H. L. Patmore, Brandon; Miss Johnston; Mrs. E. J. Speirs.

**Donations to provide Christmas cheer for Soldiers and Civilian patients :—**

Mrs. Munroe; Miss Fraser; Mr. W. G. McMahon; Mr. R. C. Scott; Mr. C. H. Enderton; Miss Gemmill; Miss LePage; Dr. C. A. Baragar; Mr. Alex. Thomson; Brandon Hills "Busy Bees"; Mr. A. Smith, Holland; Women's Auxiliary C.D.C., Winnipeg; Miss Bradshaw; The "Mons" Chapter, I.O.D.E., Shoal Lake, and others.

A number of gifts of various kinds were sent anonymously or without indication of names of donors, and to those who thus sent the thanks of the Board is extended.



HIS EXCELLENCY THE DUKE OF DEVONSHIRE, GOVERNOR-GENERAL OF CANADA, ADDRESSING SOLDIER PATIENTS AT MANITOBA SANATORIUM, AUGUST 30th, 1918.

Photo. by Foote & James.



ious year. This is entirely an increase in the Capital Surplus, however, and has been derived from the following sources:

Grants from Provincial Government on account of Capital Expenditure on Infirmary and Military Pavilions .....	\$48,250.00
Grant from Dominion Hospital Commission for Military Pavilions .....	21,934.00
Bank Interest .....	489.06

<b>Actual Increase in Capital Surplus</b> .....	<b>\$70,673.06</b>
Less Deficit on Revenue Account .....	9,304.45

**Net Increase in Total Surplus** .....

The increase or decrease in the various Assets and Liabilities during the year is shown by the following statement:

	31st March, 1917	ASSETS.	31st March, 1918
	\$213,736.76	Land, Buildings, Plant and Equipment (less Depreciation) .....	\$273,804.91
	\$28,534.85	Receivables ..	\$29,852.10
	8,221.94	Inventories ..	9,231.71
	36,756.79		39,083.81
	<u>\$250,493.55</u>	<b>Total Assets</b> .....	<u>\$312,888.72</u>
		<b>LIABILITIES.</b>	
	\$ 10,335.46	Payables .....	\$ 12,016.65
	4,667.85	Overdraft .....	4,013.22
	<u>\$ 15,003.31</u>	<b>Total Liabilities</b> ...	<u>\$ 16,029.87</u>
	235,490.34	Surplus of Assets over Liabilities .....	296,858.85
	<u>\$250,493.55</u>		<u>\$312,888.72</u>

A comparison of the per Capita Costs and per Capita Earnings for the fiscal year 1917-1918 with the two preceding fiscal periods is set forth hereunder:

	1917-18	1916-17	1915-16
Hospital Days .....	61,051	41,755	39,240
<b>Expenditure:</b>			
Maintenance .....	1.637	1.613	1.543
Administration .....	.104	.124	.125
	<u>1.742</u>	<u>1.737</u>	<u>1.668</u>
Depreciation .....	.278	.339	.313
	<u>2.020</u>	<u>2.076</u>	<u>1.981</u>
<b>Income:</b>			
Hospital .....	1.808	1.843	1.798
Other .....	.060	.224	.341
	<u>1.868</u>	<u>2.067</u>	<u>2.139</u>

We beg to report that to the best of our knowledge and belief all reported funds of the Sanatorium have been accounted for, and all expenditures have been properly authorized and vouched.

Reported by  
(Sgd.) HENDERSON, REID & CO.  
24

**BALANCE SHEET AS AT 31st MARCH, 1918.**

Exhibit "A"

ASSETS.	
<b>Land, Buildings, Plant and Equipment:</b>	
Land and Improvements .....	8,077.58
Buildings (less Depreciation) ..	196,323.34
Plant and Machinery (less Depreciation) (Heating, Lighting, Water, Sewage, etc.) .....	47,001.71
Furniture and Equipment (less Depreciation) .....	9,244.80
Furnishings and Miscellaneous Equipment (less Depreciation) .....	11,708.63
Horses, Harness, etc. ....	748.00
Spur Track .....	700.85
	<u>\$273,804.91</u>
<b>Receivables:</b>	
Patients' Balances Outstanding ..	\$ 12,368.80
Provincial Government Per Capita Grant .....	17,244.80
Sundries .....	238.50
	<u>29,852.10</u>
<b>Inventories and Deferred Charges:</b>	
Supplies, etc., on hand .....	7,305.39
Prepaid Insurance .....	1,926.32
	<u>9,231.71</u>
	<u>\$312,888.72</u>

LIABILITIES.	
<b>Payables:</b>	
March, 1918, Vouchers, paid in April .....	\$ 12,016.65
Bank Overdraft .....	4,415.90
Less Balance in Bank Trust Account ..	402.68
	<u>4,013.22</u>
Balance, being nominal surplus of Assets over Liabilities .....	\$ 16,029.87
	<u>296,858.85</u>

We have examined the foregoing Balance Sheet and supporting Income and Expenditure Statements, together with the relative Books and Vouchers. In our opinion these Statements respectively outline the position at close of period and the transactions during the period, according to the best of our information and as disclosed by the books.

(Sgd.) HENDERSON, REID & CO.  
Chartered Accountants.

Winnipeg, 28th May, 1917.

**MAINTENANCE ACCOUNT FOR 12 MONTHS, ENDING 31st MARCH, 1918**

DEBIT.	
<b>ADMINISTRATION AND MAINTENANCE:</b>	
<b>Salaries and Wages:</b>	
Management and Medical . . . . .	\$ 7,841.25
Nurses . . . . .	8,404.35
House . . . . .	9,115.30
General . . . . .	4,482.50
	\$ 29,843.40
<b>Medical and Domestic:</b>	
Subsistence . . . . .	50,549.12
Dispensary . . . . .	2,010.40
Fuel . . . . .	11,203.67
Light, Water and Ice . . . . .	1,873.49
Laundry Operating . . . . .	2,567.60
Sundry Supplies, etc. . . . .	1,942.31
	70,146.59
<b>Management Expenses:</b>	
Stationery . . . . .	\$ 1,171.29
Insurance . . . . .	1,395.01
General . . . . .	1,627.78
	4,194.08
<b>Repairs and Replacements:</b>	
Buildings, plant, etc. . . . .	2,151.73
	Total Expended for Admin- tration and Maintenance
	\$106,335.80
<b>Other Charges: Depreciation—</b>	
Buildings . . . . . 5%	\$8,373.43
Plant . . . . . 10%	5,256.71
Furniture . . . . . 5%	480.67
Furnishings . . . . . 20%	2,876.86
	16,987.67
	Total Charges for Adminis- tration and Maintenance
	\$123,323.47

CREDIT.	
<b>INCOME FROM EARNINGS:</b>	
Patients — Private, Municipal, City, etc.	\$92,893.80
Less: Sundry Uncol- lectibles under the "Charity Aid Act" . . . . .	484.00
	\$92,409.80
Outdoor Treatment . . . . .	10.00
	\$92,419.80
Povincial Govern- ment Per Capita Grant . . . . .	17,244.80
Surplus on Farm Operating (per Schedule No. 3) . . . . .	720.42
	\$110,385.02
<b>OTHER INCOME:</b>	
Municipal Levy . . . . .	\$25,000.00
Less: For Patients treated therout . . . . .	23,540.50
	1,459.50
Subscriptions and Donations (per Schedule No. 1) . . . . .	2,174.50
	3,634.00
	Total Income available for Current Administration and Maintenance . . . . .
	\$114,019.02
Balance, being excess of Expendi- ture over Income Maintenance Account . . . . .	9,304.45
	\$123,323.47

26

**CAPITAL ACCOUNT.**  
**STATEMENT OF INCOME AND EXPENDITURE**  
**for 12 Months ending 31st March, 1918.**

<p><b>INCOME.</b></p> <p>Provincial Government on Account Grant for Buildings . . . . . \$48,250.00 Dominion Hospital Commission . . . . . 21,934.00 Interest on Bank Balances . . . . . 489.06</p> <p style="text-align: right; border-top: 1px solid black;">\$70,673.06</p>	<p><b>EXPENDITURE.</b></p> <p><b>Land:</b> LAND, BUILDINGS, PLANT AND EQUIPMENT: Improvements . . . . . \$ 1,361.63</p> <p><b>Buildings:</b> Alterations and Im- provements to Main Buildings . . . \$ 2,554.70 New Boiler Room and Laundry . . . . 805.55 Infirmary Buildings 51,030.36</p> <p style="text-align: right; border-top: 1px solid black;">54,390.61</p> <p><b>Plant and Machinery:</b> Laundry and Equipment, New Boilers, etc. . . . . 7,477.42 Water and Sewage, Wells, etc. Spur Track . . . . . 700.85</p> <p><b>Furniture and Equipment:</b> General . . . . . \$ 858.77 Superintendent's Resi- dence . . . . . 16.50 New Infirmary . . . . . 496.26 Equipment, Infirmary 898.66 Equipment, Sundry . . . 5,278.84</p> <p style="text-align: right; border-top: 1px solid black;">7,549.03</p> <p>Total Expenditure to date . . . . . \$77,055.82 Excess of Expenditure over Income on Capital Account . . . . . 6,382.76</p> <p style="text-align: right; border-top: 1px solid black; border-bottom: 3px double black;">\$70,673.06</p>
--	---

27

**CASH ACCOUNT.**  
**SUMMARISED STATEMENT OF RECEIPTS**  
**AND DISBURSEMENT**  
**for 12 Months ending 31st March, 1918**

**RECEIPTS.**

**Maintenance Account:**

Patients (Private, Cities, and Outside Municipalities) .....	\$64,664.35
Municipal Levy (part of this for treatment of patients) .....	37,500.00
Farm Produce .....	916.37
Per Capita Grant (1916-1917) .....	7,368.00
Miscellaneous .....	2,131.78
Subscriptions and Donations per Schedule No. 1 ..	2,174.50
Outdoor Treatment ..	10.00
	\$114,765.00

**Capital Account:**

Provincial Government on Account Grant for Buildings .....	\$48,250.00
Dominion Hospital Commission .....	21,934.00
Interest on Bank Balances .....	489.06
	70,673.06

Total Receipts .....	\$185,438.06
Overdraft 21st March, 1918 ..\$	4,415.90
Less Balance in Trust Account ..	402.68
	4,013.22
	\$189,451.28

**DISBURSEMENTS.**

Vouchers paid during year .....	\$184,783.43
Overdraft 1st April, 1917 .....	4,667.85
	\$189,451.28

**SCHEDULES.**

**SCHEDULE No. 1.**

**Cash Donations, 1917-1918.**

Estate of William Marnock .....	\$2,099.50
Estate of G. Erickson .....	50.00
Municipality of Hanover .....	15.00
Alex. Fowler .....	10.00
	\$2,174.50

**SCHEDULE No. 2.**

**Summary of Inventories**

Stores on Hand .....	\$1,651.96
Fuel .....	2,033.06
Ice, etc. ....	486.00
Repair Materials .....	360.70
Hay, oats, and Live Stock .....	570.65
Stationery, etc. ....	209.80
Laundry Supplies .....	120.15
Dispensary .....	1,019.32
Sundry Supplies .....	853.75
	\$7,305.39

**SCHEDULE No. 3.**

**Farm Account.**

**Credit—**

Produce sold during year .....	\$ 410.20
Produce used by Sanatorium .....	1,779.86
	\$2,190.06

**Debit—**

Inventory of Produce, 1st April, 1917 .....	\$ 530.07
Wages, Expenses and Supplies, chargeable for year .....	1,510.22
	\$2,040.29

Less—Inventory of Produce 31st March, 1918 .....	570.65
	1,469.64
Surplus for year .....	\$ 720.42