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KING EDWARD VII SANATORIUM MIDHURST

(FOUNDED BY H.M. KING EDWARD VII IN 1902 WITH FUNDS PROVIDED BY THE LATE SIR ERNEST CASSEL)

PRESIDENT:

HIS MAJESTY THE KING

THIRTY-THIRD ANNUAL MEDICAL REPORT

JULY 1938 to JUNE 1939

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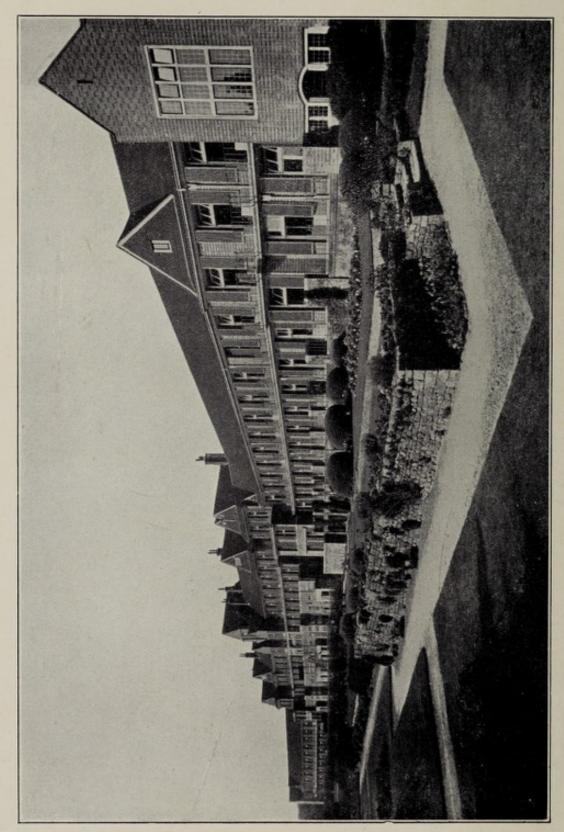
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KING EDWARD VII SANATORIUM, MIDHURST South Elevation of Patients' Block



KING EDWARD VII SANATORIUM MIDHURST

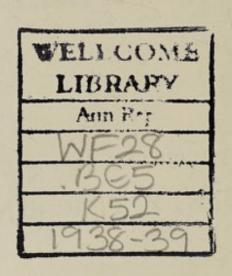
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KING EDWARD VII SANATORIUM

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KING EDWARD VII SANATORIUM MIDHURST

Thirty=third Annual Medical Report JULY 1938 to JUNE 1939

DURING the period July 1st, 1938, to June 30th, 1939, 244 patients were admitted to the Sanatorium, 55 of these being readmissions.

During the same period, 233 patients were discharged, and 6 died in the Sanatorium. Of those discharged, 8 were in the Sanatorium less than nine weeks, and are not followed up in the after-history records, and 51 were readmissions who are considered in a later section of the Report. The remaining 174 patients were grouped according to condition on admission, as follows:—

Group I	 	 	 37
Group II	 	 	 114
Group III	 	 	 19
Group IV	 	 	 4

(Details of the classification will be found on page 9.)

Applications for particulars of admission totalled 395, and the average waiting list was 19-20 for men and 21-22 for women.

Twenty-four applicants were examined by the Medical Superintendent; of these 20 were accepted for treatment and 4 were rejected as unsuitable, according to the rules of the Sanatorium.

During the year the television set, which was kindly presented to us by Sir Edward Mayerstein, has been in constant use, and has always attracted a considerable number of people. Considering the distance from Alexandra Palace, the reception is extremely good. As previously, such things as the tennis championships at Wimbledon and items of historical interest have been viewed by those who would otherwise have been unable to see them.

An extra number of moving pictures were added to the already popular weekly programmes, and they were carried on fortnightly during the summer months. This was made possible by the dark curtains which have been installed in the dining room and, even on the brightest summer evening, they were shown in the usual way.

Two staff concerts were given, but the usual fortnightly concerts were discontinued in favour of the weekly picture shows.

The usual whist drives, bridge drives and competitions at holiday times were carried on by the patients and were organised by the Patients' Committee.

We would like to put on record again the invaluable assistance of the *Times* Book Club, which has given helpful advice on keeping the library up to date with the most modern works of fiction and books of historical interest.

Church Services were held on Sundays, with special Services on such days as Armistice Day, etc. Holy Communion is held weekly in the Chapel, and is also administered to bed patients. The increase in the number of attendances has been maintained.

The Roman Catholic Priest has again visited the Sanatorium at regular intervals to say Mass for the Catholic patients.

The shop continues to prove very popular, and a number of new lines have been added during the year.

We wish to place on record our grateful thanks to the Council and Consulting Staff for their valuable services and unfailing interest in the welfare of the Sanatorium.

To all members of the Staff also we add our sincere thanks for their loyal co-operation.

GENERAL STATISTICS

The following tables show an analysis of the 174 new patients discharged during the year, under the following headings:—

- (1) Place of Residence.
- (2) Occupation.
- (3) Age and Sex.
- (4) Married or Single.
- (5) Mode of Onset of Disease.
- (6) Duration of Disease.

TABLE 1—PLACE OF RESIDENCE

Place of Residence			Number of Patients	Place of Residence			Number of Patients	
London			48	Northants			2	
Surrey			15	Suffolk			2	
Kent	***		12	Wiltshire			2	
Irish Free State			10	Australia			1	
Middlesex			8	Channel Islands			1	
Hampshire			7	Cheshire			1	
Essex			7	Chile			1	
Sussex			7	China			1	
Devonshire			6	Cornwall			-1	
Yorkshire			5	Derbyshire			1	
Brazil			4	Dorsetshire			1	
Hertfordshire			4	Durham			1	
Varwickshire		1	3	East Africa			1	
No fixed residence			3	France			1	
Bedfordshire			2	Herefordshire			1	
Berkshire			2	Nigeria			1	
Buckinghamshire				Lincolnshire			1	
ndia			2 2	Staffordshire			1	
ancashire			2	Worcestershire			1	
Leicestershire			2	Oxfordshire			1	
		-				3	174	

TABLE II—OCCUPATION

, Occupation	on		Number of Patients	Occupation	Number of Patients	
Housewives			23	Solicitors	2	
Clerks			20	Actresses	1	
Managers			12	Analytical Chemists	1	
Medical Practitione			10	Artists	1	
Engineers			8	Bakers and Confectioners	1	
Agents			6	Barristers	î	
Secretaries			6	Builders	1	
Students			6	Cattle Buvers	1	
Merchants			5	Chartered Accountants	î	
Nil			5	Civil Servants	1	
Teachers			5	Draughtsmen	î	
Army		1000	4	Estate Agents	i	
Nurses		***	4	Grocers	î	
Accountants & Boo		ners	3	Hairdressers	î	
Brokers	N-KCC)		3	Handicraft Workers	i	
lergymen			3	Metallurgists	î	
Commercial Travel	love		3	Public Assistance Officers	1	
Company Officials		***	3	Dublishow	î	
	***	***	3	Calcomon	î	
t. P	***	***	2	C D+	1	
Apprentices			2	Set Decorators, Motion		
Bank Officials	***		2	Distance	1	
		***	2	Correct Theresists	1	
Dispensers	***	***	. 2		1	
	***	***	2	CD 1	1	
ournalists Social Workers		***	2	Tobacco Manufacturers	1	
ocial Workers		***	-	V-1-1	1	
				Window Dressers	1	
					174	

TABLE III—AGE AND SEX

	1	Years	Males	Females	Total		
Under 20	 		 		6	5	11
20-25	 		 		17	11	28
26-30	 		 		27	18	45
31-35	 		 		19	11	30
36-40	 		 		19	5	24
41-45	 		 		12	4	16
46-50	 		 		12	2	14
Over 50	 		 		5	1	6
					117	57	174

TABLE IV

Married	 	90
Single	 	84
		174

TABLE V-MODE OF ONSET OF DISEASE

	Mode	of Ons	Number of cases	Percentage		
Cough				 	74	42.5
Lassitude				 	26	14.9
Hæmoptysis				 	24	13.8
Pleurisy				 	19	10.9
Loss of Weight			***	 	1	.6
Other Modes				 	17	9.8
Influenza				 	13	7.5
					174	100.0

TABLE VI-DURATION OF DISEASE

Average Duration		 2 years 2 months.
Extremes	1222	3 weeks-35 years.

TABLE VII—GENERAL RESULTS OF TREATMENT AS SHOWN BY THE CONDITION OF THE PATIENTS ON ADMISSION AND ON DISCHARGE FROM THE SANATORIUM DURING THE YEAR 1938-39.

Admission	Number of Cases	Arrested	Much Improved	Improved	Stationary or Worse	Died in Sanatorium
[A	27	26	1	_		
В	10	6	_	2	2	-
IIA	46	35	9	-	2	
[]В	68	28	26	13	1	_
IIIA	5	_	3	2	_	-
Шв	16	_	3	5	- 6	2
All Cases	172	95	42	22	11	2
definit V Pulmo	ts in whom ree evidence on Tube s was found	of				

In the above table A denotes Negative Sputum, B Positive.

The percentage of patients discharged with "Disease arrested" remains about the same, namely 55 per cent, as compared with 56 per cent last year.

Once again we note with gratification that the number of patients discharged with "Disease arrested" has increased on the last year. This can be ascribed to the continued increase in the amount of active treatment carried out on the cases admitted during the year.

As in the previous report, Group IV cases have been very few in number, as the long waiting list for admission has made it necessary for a diagnosis of tuberculosis to be made before the patient is accepted for treatment.

GROUPS

As in previous Annual Reports, the Turban-Gerhardt classification has been used to indicate the clinical condition of patients on admission. This classification, based on physical signs, is as follows:—

Group I.—Disease of slight severity, limited to small areas of one lobe on either side, which, in the case of affection of both apices, does not extend beyond the spine of the scapula or the clavicle, or, in the case of affection of the apex of one lung, does not extend below the second rib in front.

Group II.—Disease of slight severity, more extensive than Group I, but affecting at most the whole of one lobe; or severe disease extending at most to the half of one lobe.

Group III.—All cases of greater severity than Group II, and all those with considerable cavities.

By "disease of slight severity" is to be understood: disseminated foci characterised by slight dullness, indefinite rough or weak vesicular or broncho-vesicular breathing, and fine medium crepitations.

By "severe disease" is meant massive infiltration, recognised by dullness, broncho-vesicular or bronchial breathing, with or without crepitations. Cases with signs of considerable excavation, giving rise to tympanitic percussion with amphoric or cavernous breathing and numerous coarse consonating râles come under Group III.

Pleuritic dullness, if only of slight extent, is to be left out of account; if it is considerable, pleuritis should be specially mentioned under tuberculous complications.

The following terms are used to describe the condition of patients on discharge from the Sanatorium:—

- "Disease Arrested."—General health completely restored in every respect, without any sign of disease of the lungs except such as is compatible with a completely healed lesion; sputum, if still present, free from tubercle bacilli.
- "Improved."—General health improved, but not restored; physical signs of disease in the lungs still present, though less marked than on admission.
- "Stationary."—No appreciable improvement in the condition of the lungs or in the general health.
 - "Worse."-General or local condition worse.

TABLE VIIIA-DEMONSTRATION OF T.B. IN SPUTUM

On Admi	ssion			On Disch	arge		
Positive			88	Positive			44
Negative			52	Negative			81
No Sputum			29	No Sputum			45
Not tested			1	Group IV			4
Group IV			4				
		-	174				174
		-	CHEST .			=	NAME OF TAXABLE PARTY.

In 35 cases, sputum which was T.B. positive on admission was negative on discharge; in 14 such cases, sputum cleared up completely. In 5 cases, sputum which was T.B. negative on admission cleared up completely. Thus, sputum condition improved in 54 cases.

On looking through the above table, it may seem that a great number of patients are discharged with positive sputum. This is due to the fact that a large number of these patients went to live in the vicinity of the sanatorium and continued as out-patients, in order to make room for urgent admissions. Another reason is that we do not consider a sputum negative until it is negative on culture, as quite often ordinary negative sputum becomes positive on culture.

All positive cases are followed up and are not allowed to return to their work until negative. For those who go back to their own homes with a trace of sputum which is positive, instructions in the way to prevent spread of the disease are given in minute detail.

A number of those discharged with positive soutum are on our list of those to be readmitted for further treatment at a later date.

Table VIIIB—Analysis According to Treatment, of Successful Sputum Results, 1938-39.

Treatment	T.B. Positive to Negative	T.B. Positive to Nil	T.B. Negative to Nil	Total
Artificial Pneumothorax	16	6	3	25
Sanocrysin	7	3	1	11
Routine Extra-Intrapleural Pneumo-	6	3	1	10
thorax	3		_	3
Extrapleural Pneumothorax Artificial Pneumothorax and	1	1	-	2
Phrenic Evulsion	1	_	-	1
Upper Thoracoplasty Artificial Pneumothorax and	1	-	-	1
Sanocrysin	_	1	_	1
	35	14	5	54

TABLE IX-WEIGHT

Weight			Group I	Group II	Group III	Group IV	Total
Gained			27	86	9	4	126
Lost			9	22	7	-	38
No change			1	4	1	-	6
Not weighed			_	2	2	-	4
			37	114	19	4	174

RE-ADMISSION CASES

Of the 233 patients discharged, 51 were readmission cases, as compared with 56 last year and 36 the year before. The following table compares the clinical condition of these cases on their previous discharge with that on their readmission.

TABLE I

		C			Number of Cases			
		9	roup	No.	On previous discharge	On Readmission		
I				 	5	2 28		
II				 	28	28		
Ш				 	12	15		
IV				 	1	1		
					46	46		
Not	Class	ified		 ***	5	5		
					51	51		

As in previous years, many of them returned for further treatment of an active kind, as specified below:—

Artificial Pneumothorax-

Continued fro	m prev	ious tr	eatmen	t		9
Induced before						1
Induced in the						5
Extrapleural Pneu	motho	rax—				
Induced before						1
Induced in the						6
Extra-intraple	eural P	neumo	thorax			4
Extrapleural Pneu						1
Extrapleural Pneu					sh	1
Thoracoplasty and						1
Lower Thoracopla				lsion		1
Phrenic Evulsion						2
Skin graft						1
0					- 1000	_
						33

The remaining 18 returned for further routine treatment.

TABLE II-GENERAL RESULTS OF TREATMENT OF READMISSION CASES

Grou	ıp	Arrested	Much Improved	Improved	Stationary or Worse	Died in the Sanatorium	Total
I		1	1		_	_	2
II		17	5	5	1	-	28
III		1	3	11	-	3	18
IV		-	-	-	1	-	1
		19	9	16	2	3	49
Not Cla	ssifie	i .					5
							54

REPORT OF THE THROAT DEPARTMENT

Of the 233 patients discharged during the year, the larynx of 230 was examined by Sir St Clair Thomson. Definite tuberculous disease was present in 16 cases, as compared with 14 last year, while the larynx in the remaining 214 cases was found to be normal.

One case was treated with galvanocautery and was discharged with disease arrested. Three cases were put on silence and 5 on whispers.

Of the 16 patients suffering from disease of the larynx, 2 were thoracoplasty cases, 7 artificial pneumothorax and 2 were receiving Sanocrysin treatment.

TABLE I—Showing the Result on Discharge of Treatment in Patients Suffering from Tuberculosis of the Larynx in Whose Sputum Tubercle Bacilli were Demonstrated in the Sanatorium.

Classifica- tion	Number of Cases	Arrested	Much Improved	Improved	Stationary or Worse	Remarks
Group I Group II	1 2		=	_	1	=
Group III	5	3	-	1	1	And I patient who died in the Sana- torium.
	-	-	_			
Total	8	5	_	1	2	

TABLE II—Showing the Result on Discharge of Treatment in Patients Suffering from Tuberculosis of the Larynx in Whose Sputum Tubercle Bacilli were not Demonstrated in the Sanatorium.

Classifica- tion	Number of Cases	Arrested	Much Improved	Improved	Stationary or Worse	Remarks
Group I Group II	- 3	-3	_		_	=
Group III	3 3	ì	-	1	1	And I patien who died i the Sana torium.
Total	-6	4	-	-	-	

ARTIFICIAL PNEUMOTHORAX

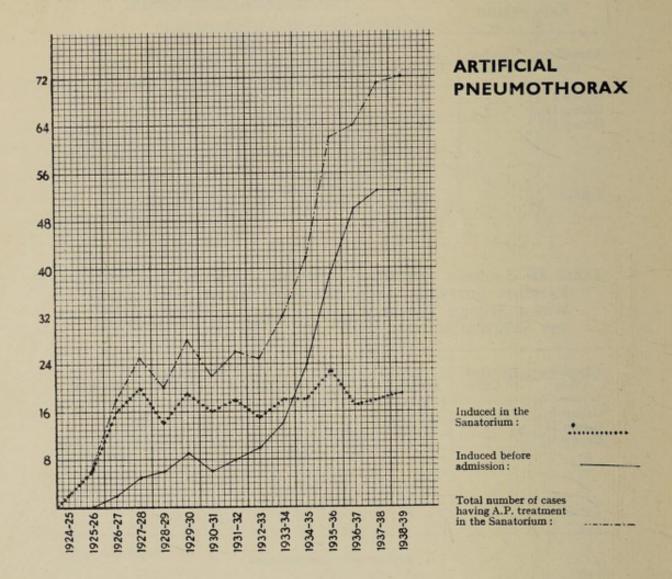
During the period 1925–1938, Artificial Pneumothorax was attempted in 280 cases, of which 220 were successful.

Of these 220 patients, 165 (75 per cent) are known to be alive. Particulars of sputum are known in 121 cases and are analysed as follows:—

TABLE I

		No Sputum	T.B. Negative	T.B. Positive	Sputum Not Tested	Total
Ceased Refills		55	3	5	18	81
Continuing Refills		21	8	5	6	40
	400	76	11	10	24	121

The total number of patients receiving artificial pneumothorax treatment during the year under review was 72. We again show the annual figures graphically.



Once again we would like to draw attention to the apparently small number of artificial pneumothoraces induced in the sanatorium (19), but this is entirely due to the fact that, owing to our long waiting list, many cases have their treatment commenced before admission. The actual number of patients receiving artificial pneumothorax treatment at any one time is extremely high, as can be seen by the graph.

All cases have been grouped as follows :-

- Choice I.—Cases with involvement of not more than half of one lung, with signs of activity.
- Choice II.—Cases in which the whole of one lung is affected, or the upper half of one, with slight infiltration in the other.
- Choice III.—Cases with bilateral disease, but with a possibility of benefit by a limited pneumothorax on the more active side. Cases in extremis, e.g., with hæmoptysis.

TABLE II—AN ANALYSIS OF CASES IN WHICH ARTIFICIAL PNEUMOTHORAX WAS SUCCESSFULLY INDUCED IN THE SANATORIUM.

Classification		Sputum on Adn		Admission	Sputum on Discharge	
		Normal	No Sputum or T.B. Negative	T.B. Positive	No Sputum or T.B. Negative	T.B. Positive
Choice I		1	2	7	8	1
Choice II	***	1	1	9	8	2
Choice III		-	-	-	-	-
		-	-			-
All Cases		2	3	16	16	3

TABLE III—ANALYSIS OF CASES IN WHICH ARTIFICIAL PNEUMOTHORAX WAS SUCCESSFULLY INDUCED BEFORE ADMISSION.

Sputum before Artificial Pne	e induction of eumothorax	Sputum on Discharge		
No Sputum or T.B. Negative	T.B. Positive	No Sputum or T.B. Negative	T.B. Positive	
6	45	41	10	

Died in the Sanatorium

SANOCRYSIN

The after-history of the 327 cases who had gold treatment in previous years shows that 80 are now dead, while of the remaining 247, 229 are known to be alive. Particulars of sputum are known in 182 cases, as follows:—

No Sputum		 	 78
T.B. Negative		 	 24
T.B. Positive		 	 22
Sputum not tested	***	 	 58
			182

Twenty-nine cases have been treated with Sanocrysin during the year under review, as compared with 28 last year. Of these, 14 ceased the treatment because of various complications. We include a table showing the amount each case received and the reason for it being discontinued. As it is impossible to give names, the cases are numbered.

It has been our practice again to start with .05 grame, then to increase after one dose, to .1 gm., and after three doses to .2 gm. We never exceed this amount. The urine is tested the day before and the day after, and two ounces of 50% glucose are given by mouth on the day of the injection.

We consider the drug dangerous enough to cease its administration on the first appearance of complications due to it. We have so often seen patients admitted to this sanatorium who have had a few extra doses given after the appearance of a rash or albumen in the urine, and who have consequently had a stormy time before the effects of the drug wore off.

Having had to stop the treatment for any reason, we never administer it again to the same patient.

SANOCRYSIN

Case Number	Amount Given	Reason for discontinuing treatment		
1	.1	T.B. Bacilluria		
	2	Diarrhœa		
3	.2	Left the Sanatorium		
4	.55	Left the Sanatorium		
2 3 4 5	.8	Artificial Pneumothorax induced		
	.85	Died		
6 7 8	.85	Sore tongue		
8	.9	Vesicular eruption on lips		
9	.95	Ulceration of mouth		
10	1 grm.	Ulceration of mouth		
11	1.05	Generalised itching		
12	1.05	Generalised itching		
13	1.2	Ulceration of mouth		
14	1.2	Left the Sanatorium		
15 .	1.40	Sore throat		
16	1.4	Left the Sanatorium		
17	2 grms.	Rash		
18	2.15	Rash		
19	2.3	Left the Sanatorium		
20	2.6	Left the Sanatorium		
21	2.65	Rash		

Eight patients completed a course of this treatment, and the following table compares the results of sputum examination on admission and discharge.

	-	(On Admission	n	On Discharge			
Grou	P	No Sputum	T.B. Negative	T.B. Positive	No Sputum	T.B. Negative	T.B. Positive	
				1			1	
II			1			1		
II				1		1		
II			TOTAL DESIGNATION OF THE PERSON OF THE PERSO	1		1		
II			02 13000	1				
II			1			1		
II			Par Dev	1		1000		
II				1	1	3 07 000		
Totals			2	6	2	1	2	

SURGICAL DEPARTMENT

The following table shows the nature of the 120 major operations -

Thoracoplasty (on 16 cases)	 35
	 11
Extra-Intrapleural Pneumothorax	 7
Phrenic Evulsion	 9
Phrenic Crush	 1
Thoracoscopy and Division of Adhesions	 44
Thoracoscopy	 4
Thoracotomy and Division of Adhesions	 1
Other Operations	 8
	120

The theatre continues to do valuable work, and all kinds of thoracic operations are carried out as required. From the table showing the types of operations done, one sees that it is much the same as last year.

We have continued to get good results from thoracoplasty operations, extrapleural pneumothoraces and extra-intrapleural pneumothoraces. Our methods of carrying out these operations and their after-care were explained in detail in the last report.

The whole number of surgical cases treated since the opening of the theatre are being tabulated, and it is hoped to publish a full report on the condition of patients who have had these operations, before the actual operation, during treatment at the sanatorium and their present condition as regards sputum, health and capacity for work. Owing to the war, publication of these statistics has of necessity been delayed, but we hope to publish them as soon as circumstances permit. It is not possible to go further into this subject here, as it would take up too much space in a report of this kind.

A further number of modern instruments and equipment have been added to the theatre, as it is our practice to keep it fully up to date to deal with any emergency which may arise in the course of treatment of a chest case.

We do not propose in this report to discuss any special cases, as has been our practice in previous years, as it is imperative at this time to make it as concise as possible.

THORACOPLASTY

Of the 27 Group II cases who have undergone this treatment since its commencement here, 13 are known to be working or fit for work, 11 are well though not working, 1 has since died, and of the remaining 2, 1 has received further sanatorium treatment and 1 is on the waiting list for readmission.

Of the 18 Group III cases who have had the operation, 6 are known to be working or fit for work, 5 are well though not working, 5 have died and 2 are keeping in fair health.

EXTRA AND EXTRA-INTRAPLEURAL PNEUMOTHORACES

Of the 17 Group II cases who have had Extrapleural treatment since its commencement here, 4 are well and working or fit to work, 9 are well but not working, 1 is in fair health, 2 are still receiving sanatorium treatment, and 1 has died.

Of the 14 Group II cases who have received combined Extra-intrapleural treatment, 1 is working, 9 are well but not at work, 2 are in

fair health, and 2 are still receiving sanatorium treatment.

Of the 3 Group III cases having Extrapleural treatment, 2 are keeping well and 1 has died. Two cases in this Group received Extraintrapleural treatment; 1 is keeping well and 1 has been readmitted to the Sanatorium.

OPERATION RESULTS—CASES DISCHARGED DURING THE YEAR.

PHRENIC OPERATIONS

			Blood Sedime	entation Rate	Sputum		
	Gro	пр	Before Operation	After Operation	Before Operation	After Operation	
1			 23	2	Negative	Nil	
II			 10	2	Positive	Negative	
II			 30	12	Positive	Negative	
II			 6	4	Positive	Negative	
II			 4	2	Positve	Negative	
III			 18	30	Positive	Negative	
III			 36	45	Negative	Positive	

2 cases were in the Sanatorium for 1 week only.

THORACOPLASTY OPERATIONS

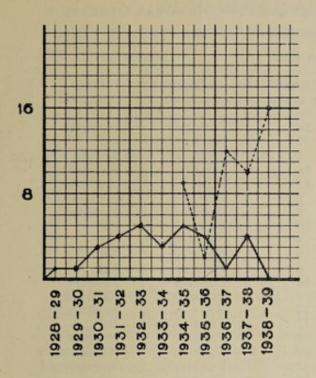
	Blood Sedi Ra	imentation ite	Spu	tum	Work	ing Capacity
Gr'p	Before Operation	After Operation	Before Operation	After Operation	Before Operation	After Operation
II	10	2	Positive	Negative	In bed	Full work
II	12	9	Positive	Negative	In bed	Normal life
II	9	2	Negative	Negative	Up all day	Full work
II	18	9	Positive	Positive	Up all day	Normal quiet lif
III	5	2	Positive	Positive	In bed	Part-time work
III	27	8	Positive	Positive	In bed	Full work

2 patients died in the Sanatorium.

Analysis of Cases in which Extrapleural Pneumothorax was Induced before Admission

putum before Exti	rapleural Operation	Sputum or	Discharge
No Sputum or T.B. Negative	T.B. Positive	No Sputum or T.B. Negative	T.B. Positive
3	4	6	1

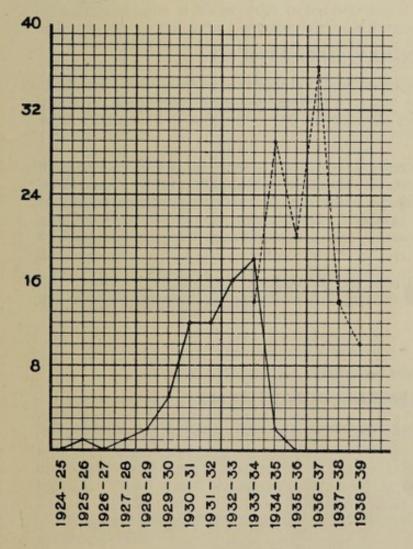
I patient died in the Sanatorium.



THORACOPLASTY OPERATIONS

Cases operated on in the Sanatorium :

Cases discharged for operation :



PHRENIC OPERATIONS

Cases operated on in the Sanatorium:

Cases discharged for operation:

	 		Before Operation 30 11	After Operation	Before Operation Positive	After Operation Positive
II			11	16	Positive	Positive
II			11	7		
I		200			Nil	Nil
			14	1	Positive	Negative
	***		29	11	Positive	Negative
II			17	11	Positive	Negative
			4	2	Positive	Negative
I	***		6	3	Positive	Positive
II	***			30	Positive	Nil
II		***	55		Negative	Nil
II		***	6	4		Nil
II			10	8	Negative	Nil
II			13	4	Positive	The second secon
II			39	20	Positive	Positive
II			27	4	Positive	Negative
II			8	17	Nil	Positive
II			21	12	Positive	Nil
II			30	35	Positive	Positive
II			29	16	Positive	Negative
III			16	2	Positive	Negative
III			38	. 15	Positive	Nil

X-RAY DEPARTMENT

The average number of routine pictures taken weekly remains about the same as in previous years. The tomograph has been used on many occasions and has helped considerably in the diagnosis of possible lesions in some cases.

Once again the screening of artificial pneumothorax cases has been carried out weekly, as we consider this to be of the utmost importance. It is our practice to refill the patient on their screen appearance and not according to pressures or times. Some cases whose degree of collapse appears to vary considerably are screened more than once a week if necessary.

We would like to thank our Consulting Radiologist, Doctor J. V. Sparks for his many helpful suggestions during his frequent visits in the year under review.

DENTAL DEPARTMENT

The following dental treatment has been carried out during the year:-

Fillings				 	163
Extractions				 	84
Scaling and	Gum	Treatmen	t	 	23
Dentures				 	7
Repairs				 	7

PATHOLOGICAL DEPARTMENT

The following routine examinations were carried out during the year:-

Sedimentation Rates				 2,276
Sputum Examinations				 A THE R
Urine Examinations			/	 1,452
Pleural Effusions				 303
Throat Swabs				 34
Milk Examinations				 14
Water Examinations				 14
Blood Counts				 179
Miscellaneous				 30
Cultures for Tubercle	Bacillu	1S		 469
				6,557

During the latter half of the year it has been possible to attempt to define more fully the optimum conditions for the culture of the tubercle bacillus. This has been done using a simplification of the technique suggested by Novy and Soule (J. Infect. Dis. 36. 168). Pleural effusions which showed tubercle bacilli on microscopical examination were cultured in concentrations of 40%, 50%, 60%, 70% of oxygen. As controls, the effusions were cultured in the usual way, and also in the presence of a large volume of air in order to see whether it is the amount of available oxygen or the actual tension which influences the growth.

It would appear that the rate of growth is increased if the oxygen concentration is raised up to 50%. At concentrations of 70% the bacilli from some patients seem to have their growth inhibited. Further investigations are proceeding on this question, but the preliminary results have been so promising that every specimen which is cultured is also put up under a concentration of 50% oxygen, and in some cases obvious

colonies are apparent some 3-4 days earlier.

At the same time we are making some cultures in atmospheres of 50% oxygen and various concentrations of carbon dioxide (up to 1%) to determine whether a raised proportion of this latter gas has an acceler-

ating effect sufficient to justify its use in routine events.

Using a Hempel gas burette and pipettes, we have been doing analyses of samples of gas withdrawn from the pleural cavity in those cases with a pneumothorax. By this means it has been possible to demonstrate the presence of pleural fistulæ whose existence would not have been diagnosed otherwise.

STATISTICAL DEPARTMENT

The work of the Statistical Department has been carried out on the

same lines as in previous years.

The number of patients discharged from the Sanatorium up to date is 7,154. This number does not include Group IV cases, readmissions or patients who were in residence too short a time to be included in the records. Those about whom no information could be obtained number 346, or 4.8 per cent.

The statistics of the ultimate results of the enquiry are shown in the

following tables :-

TABLE Al.—STATISTICS OF ULTIMATE RESULTS

Cases in the Sputum of which T.B. were demonstrated in the Sanatorium All cases considered together

	tdgis teo ecet a		125 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	Des Desd		1644 1657 1700 1710 1710 1710 1710 1710 1710 17	0
		1939	28 8 8 9 9 9 9 5 5 5 6 6 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5	00
		1938	10000010010000000000000000000000000000	
		1937	888 88 88 88 88 88 88 88 88 88 88 88 88	
			29 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	
	o.	1935 1936	29 8 8 2 2 2 2 2 8 8 8 2 2 2 2 2 2 2 2 2	
	charg	1934	8	
	r Dis	1933	8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	r afte	1932 1933	8148868874886198814888888888888888888888888888888	
	e yea	MARKON CONTRACTOR	844882585488485555288668881111111	
	essiv	1930 1931	8544EEEEEEE48654EEEEEEEEEEEEE	
	succ	1929	0448835884865844884858511111111111111111111111	
	Alive " in each successive year after Discharge	1926 1927 1928 1929	0.44448333344444444444444444444444444444	
	e " in	1927	0.0000000000000000000000000000000000000	
	Aliv	1926	E 5 5 7 5 8 7 5 2 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5	
	,, 10		233 + 45 + 45 + 45 + 45 + 45 + 45 + 45 +	
	Well "	1924 1925	### ### ### ### ### ### ### ### ### ##	
-	=	1923	2.4.4. 2.5. 2.5. 2.5. 2.5. 2.5. 2.5. 2.5. 2.	
•	Number reported	1922	8452244443242833242833444334443344433444	
	er re	1921	### ### ### ### ### ### ### ### ### ##	
	Numb	1920	888888888888888888888888888888888888888	
		1919	888827458877	
		1914 1915 1916 1917 1918 1919 1920 1921 1922	455888888488	
		1917	### ## ## ## ## ## ## ## ## ## ## ## ##	
		1916	262EE582E	
	19.33	1916	45%8424	
			85448888	
		1908	21.25.25.25.21.	1
	mber		255 255 255 255 255 255 255 255 255 255	16
	Year	Dis- charge	1906/07 1908/09 1908/0	1991/99
E	-			

TABLE A2.—STATISTICS OF ULTIMATE RESULTS

Cases in the Sputum of which T.B. were demonstrated in the Sanatorium Group I considered separately

essive year after Discharge 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 Z		11 10 17 20 20 23		-				1900	00	=	-	-	12	17	17	8	4	3	2		4	2	4	23 ,		-	-	1	11
year after Dis	1937 1938 1939		12	13	00 10	2 00		12480	110		_	_																	
year after Dis	1937 1938	111				1000		9	5	12	7	00	15	56	7 12	15	6	-	17	12	6	25	12	00 (12	6	6	0 1	- 4
year after Dis	1937		12	12	00 0	0 9	-	9	2	12	-	00	16	25	7 1	13	6	-	16	1	5	53	12	00	11	6	6	0 1	- 1
year after Dis		100	13	14	00 0	200	-	9	20	12	-	00	16	56	7 1	14	6	-	19	12	00	27	13	00	13	11	6	00	11
year after Dis	1936	12	13	14	00 0	200	-1	-	2	12	-	œ	16	56	20	14	6	-	19	12	6	27	13	00	13	11	6	1	11
year after Dis	1935	12	14	14	00 0	200	-1	-	-	13	7	6	17	27	13	15	6	00	19	12	6	28	14	00	13	11	1	1	11
year after Dis	1934	120	14	15	000	9	-	1	00	14	-	6	17	28	# :	16	10	00	119	12	6	53	17	00	11	1	1	1	11
year after Dis	1933	12	14	15	13	9	-1	-	00	14	00	6	18	282	01	170	10	6	119	13	=	31	17	10	1	1	1	1	11
ve year afte	1932	120	14	16	120	9	00	00	00	15	œ	6	20	200	20	17	10	00	20	15	12	32	18	1	1	1	1	1	11
ve yea	1931	120	14	16	22	9	00	00	00	16	œ	6	20	53	9	17	10	00	21	15	12	333	1	1	1	1	1	1	11
5 0	1930	12	14	16	13	9	000	6	6	17	10	6	20	53	CI	17	10	10	21	15	13	1	1	1	1	1	1	1	11
essi 192	1929	12	14	17	13	9	000	6	10	17	11	6	20	53	200	22	==	10	52	15	1	1	1	1	1	1	1	1	11
each successive	1928	22 5	14	19	15	9	0	6	=	16	12	6	20	30	RT B	* 8	120	=	55	1	1	1	1	1	1	1	1	1	11
each 1927	1927	12	14	13	17	9	10	10	=	18	12	6	20	33.5	176	100	13	=	1	1	1	1	1	1	1	1	1	1	11
ni " in 1926 1	1926	13	13	21	17	9	10	10	==	19	12	6	22	34	17	20	15	1	1	1	1	1	1	1	1	1	1	1	11
or " Alive " in each	1925	14	13	22	17	200	10	12	=	20	12	6	24	34	200	23	1	1	1	1	1	1	1	1	1	1	1	1	11
or "	1924	14	13	55	50	2 00	1	12	==	20	11	6	56	200	200	9	1	1	1	1	1	1	1	1	1	1	1	1	11
Vell "	192	14	13	23	27.5	2 00	=	12	=	67	=	6	52	30	07		1	1	1	1	1	1	1	1	1	1	1	1	11
d " V	1922	15	14	25	22	200	10	12	=	55	=	10	27	45	1	11	1	1	1	1	1	1	1	1	1	1	1	1	11
porte	1921	14	14	25	27 :	200	13	=	12	22	12	10	53	1	1		1	1	1	1	1	1	1	1	1	1	1	1	11
Number reported " We	1920	18	14	27	25	07	15	13	13	23	14	10	1	1	1	11	1	1	1	1	1	1	1	1	1	1	1	1	11
Mumb 1919	1919	16	15	25	58	9 0	14	12	=	22	12	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	11
8161	1918	18	15	30	30	10	17	16	14	24	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1.1
1917	1917	19	15	30	50	22	16	17	15	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	11
9161	1916	17	15	53	30	150	14	16	1	1	1	1	1	1	1	11	1	1	1	1	1	1	1	1	1	1	1	1	11
7161	1611	17	12	25	58	14	17	1	1	1	1	1	1	1	1		1	1	1	I	1	1	1	1	1	1	1	1	11
	-	14	16	27	31	14	: 1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	11
1908	-	126	85	110	88	7	1	1	1	1	1	1	1	1	1	11	1	1	1	1	1	1	1	1	1	1	1	1	11
Number	I	30	28	43	45	155	19	20	16	24	15	10	29	45	07	22	15	11	22	15	13	33	18	10	13	12	10	0 0	- 4
Year of Dis-		-		-	-								_	_	-			1925/26	11			1929/30			-	-			1935/37

TABLE A3.—STATISTICS OF ULTIMATE RESULTS

Cases in the Sputum of which T.B. were demonstrated in the Sanatorium Group II considered separately

adgi 66	s isol .oN	0,040,00-00-00-000000 0040-00-00	11
	Number I 193 in 193	4460088887755575448888888888888888888888888	2003
	1939	12207114022082282381000228444224108488	80
	1938	055271140860 2888 2821101888 444 44 44 44 44 44 44 44 44 44 44 44	2
- 226	1937	1122222222223 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11
	1936	255 255 255 255 255 255 255 255 255 255	11
	1935	88 12 12 12 12 12 12 1	11
arge	1934	868 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	11
Disch	1933	1	11
fter	1932	E 9 2 2 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	11
year after Discharge	1931	1111119912555333447557455555555555555555555555555	11
sive ,	1930	474222222222222222222222222222222222222	11
ncces	1929	448838888888888888888888888888888888888	11
in each successive	1928	588888888888888888888888888888888888888	11
	1927	25883598885888588828884	11
Alive "	1926	529888888888888888888888888888888888888	11
or " A	1924 1925 1926	5854688884446845548	11
2	1924	746898888744684887	11
" Well	1923	- 52 - 53 53 53 54 54 54 54 54 54 54 54 54 54 54 54 54	11
rted	1922	F4E48888444866888	11
repo	1921	7.28.88.88.87.78.85.45.88	11
Number reported "	1914 1915 1916 1917 1918 1919 1920 1921 1922	714488888888888888888888888888888888888	11
Nu	1919	82 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	11
	1918	61 82 82 82 82 84 42 66 48	11
	1917	82.68.62.62.42.42.11.11.11.11.11.11.11.11.11.11.11.11.11	11
	9161	888888444	11
1	1915	42.8.8.9.4.8.8.4.	11
7 75			11
111	1908	252555	11
	Numb	75 25 25 25 25 25 25 25 25 25 2	71
Year	of Dis- charge	1906/07 1908/09 1908/09 1908/09 1910/11 1911/12 1912/13 1918/19 1918/19 1922/23 1922/23 1922/23 1922/23 1922/23 1922/23 1922/23 1922/23 1922/23 1923/34 1932/33 1932/33 1932/33 1932/33	1936/37

TABLE A4.—STATISTICS OF ULTIMATE RESULTS

Cases in the Sputum of which T.B. were demonstrated in the Sanatorium Group III considered separately

	s teo		1	-	-	'		0	4 -	-	1	-	-	03	00	4	00	-	03	-	-	1		- 0		-	-	-	6	10	1	-	.	1	
	Der I		38	72	81	50	22	200	99	77	200	89	90	79	73	73	82	92	90	91	97	46	44	07	30	11	14	66	26	26	00	14	100		
		1939	1	00	-	'	-	-	1.	1	0	9	9	00	7	13	13	13	=	16	17	œ;	=	000	0 7	+ 0	9 00	10	0	18	06	10	13	10	01
		1938	1	3	1	'	0	4	1.	1	0	9	7	6	00	13	14	14	12	16	17	00 ;	II o	×0 ×1	0 7	+ 6	1 00	10	200	18	00	66	18	2	
100		1937	-	60	-	1	0	4 -		1	*	9	1	8	00	14	16	15	14	17	18	01	13	07	0 4	# 0	10	100	15	76	000	000	07		
		1935 1936 1937	-	65	-	.	0	4.		-	4	9	00	00	6	14	18	15	15	19	21	10	14	10	0	# 60	00	10	17	06	000	20	11		
1 3			1	. 3.	6	1	0	4	-	-	4	9	00	00	6	15	18	15	17	21	23	=	14	= "		* *	+ +	10	120	24	2.0	1			
arge	0	1933 1934	2	00	6	1	0	4 -		-	2	9	6	6	6	17	18	15	18	21	24	=	1	= "	0	# 00	10	16	66	111		1	1		
Disch		1933	2	00	G	1	0	0.		-	2	9	6	6	10	18	18	16	19	21	58	12	22	77:	= "	19 00	100	96	0			1	1		
fter		1932	65	00	000	1	0	0	-	-	2	9	6	6	10	20	119	18	28	25	35	14	53	123	13	# 0	100	er			1	1	1		
anch successive year after Discharge		1929 1930 1931	00	00	0	,	10	9	-	22	2	9	10	6	10	22	20	17	21	27	34	11	56	16	4	1.0	or				1	1	1		1
y evis	2116	1930	60	00	0	,	1 0	0	-	23	2	9	10	6	10	22	22	20	21	53	41	21	58	19	19	77	1	1	1	1	1	1	1		-
10000	Topographic	1929	6	000	000		٠, ٥		-	2	4	9	10	10	11	22	23	20	25	34	46	22	35	24	77	1	1	1	1	1	1	1	1		1
ich ei	10 1171	1928	00	000	000	0 -	- 0	0	-	61	20	7	10	==	12	22	26	20	27	35	52	24	38	27	1	1	1	1	1	1	1	1	I	1	1
.5		1926 1927 1928	0	000	00	0 -	10	0	01	4	2	-	12	12	14	22	26	23	32	43	58	27	44	1	1	1	1	1	1	1	1	1	1	1	
Aliva"	DATE	1926	00	4	+ 0	0 -	- 0	00	63	4	0	6	12	12	14	27	27	27	44	20	67	39	1	1	1	1	1	1	1	1	1	1	1	1	1
:		1925	100	10	00	00	90	00	4	es	20	10	13	13	17	31	33	31	58	62	77	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11.00		1924	0	0 10	,	+ 0	110	00	00	0	4	11	13	15	18	33	38	40	69	80	1	1	1	1	1	1	1	1	1	1	1	1	1		1
" Well		1923	0	0 10	7	+ 0	0	00	3	2	4	13	15	17	20	39	53	54	85	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
100	nen	1922	1	+ 10	10		# 0	00	4	20	7	13	16	21	21	42	58	58	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	repor	1921	0	00	00	0	4	00	20	9	00	13	17	21	53	54	73	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
- Pro-	Number reported w	1920	-	**	- 0	0 1	0	23	20	7	10	13	19	28	36	69	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
N. N.	IN T	1919	-	* 1	-:	11	0	4	2	9	10	14	22	33	43	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		1918	14	00	0:	= "	-	4	=	12	=	19	30	53	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		3 1917	14	00	00	77	00	9	=	13	15	26	36	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		1914 1915 1916 1917 1918 1919 1920 1921 1922	-					-		-	16	-	1	1	1	1	1	1	1	1	1	1	-	1	1	1	1	-	1	1	1	1	1	-	1
		161	0	00		II	00	9	12	12	27	1	-	1	1	1	-	1	-	1	1	1	1	1	1	-	1	1	1	1	1	1	1	-	-
		191	+	200				100		22	1	1	1	1	1	1	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	1
	0	1908		102						1	1	-	1	1	1		1	1	-		1	1	1	-	1	-	1	1	-	1	1	-	1	1	-
	nabe	Nur	00	200	0/	83	20	52	55	44	63	74	67	80	800	00	080	00	103	108	115	54	57	36	37	19	19	17	333	36	43	49	34	25	255
;	Year	Dis. charge	-0,000.	1906/07	1907/08	1908/09	1909/10	1910/11	1911/12	1912/13	1913/14	1914/15	1915/16	1916/17	1017/18	1018/10	1919/90	1090/91	1001/00	1929/23	1923/24	1924/25	1925/26	1926/27	1927/28	1928/29	1929/30	1930/31	1931/32	1932/33	1933/34	1934/35	1935/36	1936/37	1937/38

TABLE A5.—STATISTICS OF ULTIMATE RESULTS

Cases in the Sputum of which T.B. were not demonstrated in the Sanatorium All cases considered together

No. lost sight 9891 mi to	4-0500000000000000044-0040000
Number Dead eeel ni	01 28 28 28 28 28 28 28 28 28 28 28 28 28
1939	10 10 10 10 10 10 10 10 10 10 10 10 10 1
1938	9119 119 119 119 119 119 119 119 119 11
1937	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
1936	1
935	83
charge 1934	25
r Disc	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
after 1932	988888888888888888888888888888888888888
ssive year	1
in each successive year after Discharge	11
succe 1929	16 4 5 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
each 1928	828 22 22 22 24 24 26 26 26 26 27 28
ni ".	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Alive "	7.8.8.8.8.2.8.4.8.6.8.8.8.8.8.8.8.8.8.8.8.8.8.8.8.8
or " A	0.000 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
ell "	82 2 4 4 4 8 5 2 4 8 5 4 4 5 6 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1199	8 # # # # # # # # # # # # # # # # # # #
oorted 1922	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Number reported 9 1920 1921 1922	8784448888445858844485118
Numbe	0.2244223324423331
161	12 % # # # # # # # # # # # # # # # # # #
8161	28444888888266
1917	0.000000000000000000000000000000000000
2 1916	25 5 5 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
1914 1915 1916 1917	9344 4 4 4 5 3 4 4 4 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
	445448888888888888888888888888888888888
1908	4112 1176 1176 1176 1176 1176 1176 1176
Number	425 624 625 635 635 635 635 635 635 635 63
Year of Dis- charge.	1906/07 1908/09 1908/09 1908/10 1910/11 1911/12 1912/12 1922/23 1922/23 1922/23 1922/23 1922/23 1922/23 1923/34 1932/33 1932/33 1932/33 1932/33 1932/33 1932/33 1932/33 1932/33 1932/33

TABLE A6.—STATISTICS OF ULTIMATE RESULTS

Cases in the Sputum of which T.B. were not demonstrated in the Sanatorium Group I considered separately

tdais tac		6	H	0	2	10	NT.	4		1	20	8		*	20	0	91	0	Y		9	4	4	0	3 0	00	9	9	-	10	0	0	1	23	00	0	1 ,	_	1	1	1	-	
1939 1939		10	10	77	14	11	11	12	-	- 1	-	10	1	0	-	0	0	5	00	100	IO	5	œ	10	OT	00	2	2	10	101	01	3	-	1	1	1	1	4	22	-	1	1	
7 A A	1939	6	14	*	50	0.1	17	22	10	n n	6	17		0	20	70	**	41	86	200	34	39	30	000	07	35	38	36	10	00	77	56	18	17	32	20	40	71	20	28	27	99	-
	1937 1938 1939	ox	17	#1	18	00	70	50	10	70	6	18		,	20	0.4	4.7	41	90	200	35	40	30	100	# 7	31	39	35	17	000	23	21	18	16	31	99	07	24	21	28	27	1	
	1937	0	10	01	50	00	77	21	10	10	=	16	1	×	23	00	20	41	30	2	37	42	38	0.4	1.7	33	40	38	16	10	17	25	19	19	33	96	000	52	222	200	1	1	
-	1936	0	100	0	20	00	77		10	2.0	=	16		5.	23	000	23	41	0.0	10	37	43	20	200	0.7	35	40	39	0.0	2 0	17	56	19	19	34	96	07	25	22	1	-1	1	
	1935	19	10	10	21	00	77	22	01	13	12	0.1	1 1	6	54	000	23	41	9.1	100	38	43	20	200	07	35	40	30	000	200	28	27	19	19	34	0.7	17	25	1	1	1	1	
rge	1934	10	100	18	53	70	7.7	22	101	13	12	00	2 .	9	9.5	000	6.7	41	16	10	33	47	17	20	07	37	41	40	00	000	200	53	19	19	35	00	20	1	1	1	1	1	
ischa	933	1.0	9 9	13	23	00	07	22	101	13	12	00	0.00	6.	96	000	53	41	9.1	10	38	47	67	200	07	37	40	40	70	5.7	38	30	50	20	355	200	1	1	1	1	1	-	
year after Discharge	932 1	10	2.0	17	25	200	17	23	101	T.A.	13	20	07	27	96	000	30	41	10	10	41	47	111	00	07	38	40	41	0.0	0.0	31	31	20	20	1		1	1	1	1	1		
ar af	1931	10	7.0	7.7	25	200	17	24	01	13	23	9.0	00	22	96	200	30	44	100	10	+	47	4.50	00	07	38	40	67	10	+7	33	35	20	1	1		1	1	1	i	1		-
	1930 1	1.1	11	777	26	000	28	24	000	61	65	96	000	12	96	200	30	44	00	00	41	47	AR	010	17	39	42	43	0.4	+ 7	35	32	i	1	1		1	1	1	1	1		
successive	929	10	77	7.7	27	00	52	24		21	13	10		22	86	000	53	44	00	20	41	45	46	000	27	39	42	43	70	+7	35	1	1	1	1		1	1	1	1	1		1
pns q	928 1	12	+1	53	96	00	53	24		13	11	10	1.0	12	06	000	32	45	00	00	41	43	16	0.0	23	39	4.5	43	0.4		1	1	1	1	1		1	1	1	1	1		
in each	927 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	46			-	1	i		1	1		1	1	1	1	1		
2	926 1	17	+1	23	98	00	30	94		13	14	96	0.00	=	0.6	200	32	46	00	00	43	46	111	00	25	42	48			1	1	1	1	1	1		1	1	1	1	1		1
" Alive	1925 1	101	00	23	86	-	31	24		2	14	90	000	75	86	200	38	45	0.4	10	44	47	10	00	25	43	1	-		1	1	1	1	1	1		1	1	1	1	1		
" or	1924	1	+1	23	86		31	95	0.	2	20	20	07	122	97		31	4.5	00	70	45	47	40	000	99	1	1	-		1	1	1	1	1	1	100	1	1	1	i	1		
Well	1923	1	+ 1	23	86	0	32	54		18	10	200	07	12	60	-	53	44	00	00	47	48	200	3	1	1	1	-		1	1	1	1	1	1		1	1	1	1	1		
" pa	1922	101	01	500	27	000	325	9.4		2	121	0.0	+	=	86	0.0	31	4.9	000	00	48	48			1	1	1	-		1	1	1	-	1	-		1	1	1	1	1		
Number reported "	1921	101	01	222	66	000	325	96		18	14	200	0.7	=	0.7	1	53	46	0.0	94	47	1			1	1	1	-		1	1	1	-	1	-		1	1	1	1	1		
ber 1	1920	1	+ :	24	86	000	33	26		20	25	90	07	133	06	200	33	48		24	1	1			1	1	i	-		1	1	1	1	1	-		1	1	1	1	1		-
Num	1919	14	10	24	97		35	26		202	14	20	07	6	00		31	47		1	1	1			1	1	1	-		1	i	1	!	1	1		1	1	1	1	1		
	1918	1	9	25	86	10	35	00		17	17	9.0	17	14	20	200	33	1		1	1	1			1	1	1	1		1	1	1	1	1			1	1	1	!	1		1
	1917	100	10	56	96	10	35	00		17	18	00	07	15	21	100	1	1		1	1	1			1	1	1			1	1	1	i	1	-		1	1	1	1	1		-
	9161	10.	10	24	93	200	34	31		07	16	0.0	17	13			1	-		1	1	1			1	1	1			-	1	1	1	i	-		1	1	1	1	1		
	1915	1:	=======================================	22	9.0	000	30	06	000	23		00	20	1			1	1		-	1	1			1	1	-			-	1	1	1	i	1		1	1	1	1	i		
	1914	15.	OT .	233	31	100	36	30	200	22	18	-	1	1			1	1		-	1	-		-	1	1	1			1	-	1	1	1	-		1	1	1	1	1		
	1908	100	10	137	110	200	107	58	000	22	-		1	1			1	-		1	1	-		-	1	1	1			-	-	1	1	1	-		1	1	1	-	1		
naber		100	01	31	30		42	27	-	56	10	00	53	17	99	-0.	34	51	200	99	200	48	-	10	20	43	49	4.4	200	67	35	32	20	90	25.	000	17	26	22	29	27	66	77
ar	s-	-	101	80/	00/	000	/10	111	111	712	/13	11.1	+1/	1/15	2/10	01/	/17	118	01/	61/	1/20	/21	100	777	/23	1/24	1994/95	MA	100	12/	1/28	928/29	1/30	/31	1031/39	200	932/33	1/34	1/35	1/36	1936/37	188	00/
Year	Dis- charge	0000	1900/07	1907	1008	1000	1909	1010/11	20101	1911	1019	1010/11	1913	1914	1016	CIRT	1916	1917	1010	1918	1919	1990	1001	192/122	1922	1923	1994	1005	1000	1820	1927	1928	1929	1930	1021	1000	1932	1933	1934	1935	1936	1027	1001
· V		-																									Ī		Ī	Ī		Ī		-									

TABLE A7.—STATISTICS OF ULTIMATE RESULTS

Cases in the Sputum of which T.B. were not demonstrated in the Sanatorium Group II considered separately

1937 1938 1939 Dead Beed Beel ni	10	39
1938	20100000000000000000000000000000000000	Market Land
1937 1938	844 855 555 555 844 855 555 855 855 855	1 1
1937		11
	991940L0827084088868718140L14180	
1936 1937		11
1935	1017407088788788788788899999	11
- + I	8057407680588500078588451888511	11
Discha 1933	8258482688525555554649555581111	11
in each successive year after Discharge	825888888888888888888888888888888888888	11
ear af	88588861481481481481481181111111	11
1929 1930 1931	885888881188511885118	11
ccess 1929	4628667783348384570711111111	11
ach su 1928	400180827700175505504750011111111	11
in ea	40181811811111111111	11
Well " or " Alive " in es	2052812148555148	11
" Ali	2042222448222241	11
" or	4540000004774888888	11
	404008110081101111111111111111111111111	11
ted "	2240188188888888888888888888888888888888	11
repor	24222825551	11
Number reported "	0 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	11
1919	1 1 1 1 2 2 2 2 2 2	11
1918	。	11
1917	0 2 4 3 0 4 0 0 2 5	11
Number repor 1908 1-13 1914 1915 1916 1917 1918 1919 1920 1921	1. 2. 4 21 9 22 L 9 22	11
1910	~ 577 ± 2 ∞ 50 ∞ 0	11
1914	4255 x 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11
	262424	11
Number	L 823000 0 1 4 8 4 6 L 8 4 8 9 2 8 6 1 8 6 4 8 1 2 8 4 8 6 5 8	4 0 0
Year of Dis- charge	1906/07 1908/09 1908/0	1937/38

TABLE A8.—STATISTICS OF ULTIMATE RESULTS

Cases in the Sputum of which T.B. were not demonstrated in the Sanatorium Group III considered separately

1dgle 1sol .oV eeel ni 1o	1-	-11	11	11	1-	. 1	1	10	1	1	-	11	1	-	1	1	1	1	1	1	1	1	1	1		-
Vumber Dead in 1939			9-0	21 01 .	- 00	000	1	4 ×	010	1	00 -	+ o	001	63 6	00	1-	1	-	-	61	12	4	1	1		
1939	11	-	11	1-	-	-	1	00 00	9 00	+	000	00	1 00	40	24 0	7 -	-	, ,	1	-	= '	- 0	00	N =	+	-
1938	1	-	11	1-	- 1	1	1	m 4	* 60	4	200	00	9 00	4	24 -			-	-	-	= "	- 0	00	1	1	-
1937	11	-	11	1-	11	-	1	co 4	* 00	4	9	40	100	4	010	77 -		-	-	1	13	000	70	1	1	
1936	1	-	11	1-	11	-	1	es 4	* 60	4	9	40	9 00	4	010	- 12	-		-	-	14	6	1	1	1	
1935	1	-	11	1-	-	-	1	eo =	+ 02	4		40	1 00	4	000	- 1		-	-	-	18	1	1	1	1	
1934	1	1-	11	1-	-	-	1	en =	+ 60	+		40	400	4	000			-	-	-	1	1	1	1	1	-
)ischa 1933	0.		000	0-	- 0	-	0	4 -	+ 60	7		40	400	10	000			-	-	1	1	1	1	1	1	
Well " or " Alive " in each successive year after Discharge	00	0-0	00	0 -			0	4 -	+ 00	4		40	4	5	40	7-		-	. 1	1	1	1	1	1	1	
ear a	0	0-0	00	0 61	- 0	-	0	4 -	* 00	+	-	40	0 4	5	100	74 -		1	1	1	1	1	1	1	1	
ive y	0	0-0	00	0 61	- 0	-	0	4 -	+ 00	4	-	+ -	* 4	2	0	- 12	-		1	1	1	1	1	1	1_	-
ccess	0	0-0	00	0 01		-	0	4 -	+ +	4	-	+ H	0 4	5	20	24	1		1	1	1	1	1	1	1	100
ch su	0	0-0	00	0 81	-	-	0	4 4	0 10	4	-	000	0 4	20	2	1	1		1	İ	1	1	1	1	1	
in ea	0	0-0	00	0 81	- 0		0	4,	0 10	4	-	000	0 4	20	1	1	1		1	1	1	1	1	1	1	
Alive "	0	0	-0	- 63	- <	0 61	0	5,	0 9	4	-	101	- 10	i	1	1	1	11	1	1	1	1	1	1	1	
" Al	0	0	-0	- 61	- 0	0 01	0	10 1	9	*	-	10 0	0	1	1	1	1	1	1	1	1	1	1	1	1	
l " or	0		0	- 61		- 61	0	10 0	9	4	6.	10	1)	1	1	1	1		1	i	1	1	İ	1	1	
Number reported " Well	0		-0	- 00		- 61	0	0	9	*	14	1	11	1	1	1	1	11	1	1	i	1	1	1	1	
ted "	0		-0	- 60		- 67	0	200	χ φ	+	1	1	11	1	1	1	1			1	1	1	1	1	1	
repor	0		-0	000	-	21 01	0	9	= 8	1	1	1	11	1	1	1	1	1	1	1	1	1	1	1	1	
mber	0		-0	- 65	-	21 01	0	9	13	1	1	1	11	1	1	1	1	1	11	1	1	1	1	1	1	
Number reported "	0	0 -	-0	- 61	-	04 00	0	9	11	1	1	1	11	1	1	1	1	1		1	1	1	1	1	1	
101	0		010	- 60	-	01 00	0	1	11	1	-	1		1	1	1	1			1	1	1	1	1	1	
1013	0		200	-	11.5		1	-	11		-1	-	11	1	-	-	-	1		1	1	1	1	1	1	-
101	0	0-				21	1	1	11		1	-		-	1	-	1	-		1	1	1	1	-	1	
101,	0					1.1	1	1	11	-	1	1	1		-	-	1	1		1	1	1	1	1	1	
80	0				1	11	1	-	1	-	-	1	-	1	-	1	1	1		1	1	1	1	1	1	
Discharged		00 10		- 1	101	4 4	-	-	62 00	-	-	1	0 1	1	10	67	2.	- 0	1	1 00	000	-	00	2	4	
Number		-1-01							. ×		0.50	3 75		-10		-	-		_				-	-		-
Year of Dis-	1906/07	1907/08	1909/10	1911/12	1913/14	1914/15	1916/17	1917/18	1918/19	1920/21	1921/22	1922/23	1923/24	1925/26	1926/27	1927/28	1928/29	1929/30	1930/51	1932/33	1933/34	1934/35	1935/36	1936/37	1937/38	

TABLE BI.—STATISTICS OF ULTIMATE RESULTS

Cases in the Sputum of which T.B. were demonstrated in the Sanatorium

	Condition in 1939	Alive Dead Lost sight of	Alive Dead Lost sight of	Alive Dead Lost sight of	Alive Dead Lost sight of	Alive Dead Lost sight of	Alive Dead Lost sight of
	Cor	Alive Dead Lost	Alive Dead Lost	Alive Dead Lost	Alive Dead Lost	Alive Dead Lost	Alive Dead Lost
	88/1861	00	-11	1111	111	32	22 1
	18/9861	00	411	111	111	1 23	42
	98/9861	9	61	111	111	15	33
	35/+861	01	9	1	111		8 - 1
	₹E/EE61	9 -	1 3	11-	111	10-1	13.21
	1932/33	9 1	00	111	111	10 to to	15 6
	28/1861	9 1	91	1-1	111	44 1	10 10 10
	18/0261	0000	111			=-1	- se
	08/6761	3 4 6	2 -	-	111	12 6	188
	67/8761	1 23 -1	-11		1-1	4.00	191
ear	87/1761	9	1	-11		10	10 6 2
Discharged during the Year	13/9361	1- 60	1 1 6	4-1	111	04 62	13
	1925/26	126	1-1	-11	111	4-1	641
np pe	1924/25	90101	21	1	-	10 10	13 13
harge	1923/24	- 8 -	4.4		-11	10 10	125
Disc	1922/23	8 G	1 0 1	111	111	70 4	437-
	1921/22	00 10	41-	1-1	111	64-	1- 65 01
	12/0261	33 33	121	-	-	1 2	30
	02/6161	6	00-	-01	111		35 12
	61/8161	00	4	-11	111	9 21	36 8
	81/4161	07	64	-11		01 00	4 32 4
33	41/9161	101-	901-		-	40-	24 to
	91/9161	64-	-4-	111	- -	61 70	3.5
	91/+161	9190-	0.10	171	-11	461	4 4 1
	\$1\£161	014-	44-	1-1		26-	4 4 5
	81/9061	40 53 6	33 6	01901	13.2	57	59 223 12
Condition on	Discharge	Disease Arrested	Much	Improved	Stationary or Worse	Disease	Much
Con	-simbA nois		I quo	Gr			II

			-			-	_
Alive Dead Lost sight of	Alive Dead Lost sight of	Alive Dead Lost sight of	Alive Dead Lost sight of	Alive Dead Lost sight of	Alive Dead Lost sight of	Alive Dead Lost sight of	
4-1	63	-11	1 - 5	641	4-1	80 00	16
13		-11	61-1	89	604	15	103
514	6-1	111	00 01	92-	100	90 24 1	115
691	1 1 2	00	10	121	41-	30 30 31	118
00 1-	-00	111	91-	41-	9 17 7	55 40	100
	41	1.11	401	24-	19	82 50 9	141
191	∞ o	1-1	1	r- ∞	8 62	36	125
15	8 9 E	111	111	63.70	1 8	66 58 10	134
14 25 1	15.3	111	01	- 10	10	74 76 5	155
171	13 2	111	63	613	1 9 -	559	118
8 1	4 %	1-1	00 10	103	141	63 63	121
44	00 00	-11	-01	13 0	10	65 56 6	127
6 6	1 6	111	10 10 -	4 5 8 1	1 2 2	4 3 3	1114
16	- 63	-11	016	27	101	39	128
1-1	111	10 00	12 54 1	121	16	39 123 4	166
-11	111	01 00	1 42 1	1 25	0.6	41 121 3	165
1-1	1-1	0,00	10 17 01	4 5 5	101	34 137 5	176
10	61	- 10 00	29	37	∞	56 135 6	197
00 t-	61	1 2 1	29 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	32 -	119	50 139 7	196
24-		111	35	20 1	18	56 131 11	198
96	1001	111	9 8 61	12	1 2 1 1	41 133 10	184
10	-=-	-	6 27 1	26	25.3	47 157 8	212
13	13	-	18	13	188	19 130 5	154
6	20	111	0 10 1	172	60 62	31 158 4	193
80	18	1-1	6 9	10	4 4 1	25 145 7	
118	115	5	12.	118	193	190 25 1048 145 45 7	1283 177
Improved	Stationary or Worse	Disease	Much	Improved	Stationary or Worse	Summary	TOTAL
Group			Delivery 3	III quo	19		

Table B2.—Statistics of Ultimate Results

Cases in the Sputum of which T.B. were not demonstrated in the Sanatorium

	Condition in 1939	Alive Dead Lost sight of	Alive Dead Lost sight of	Alive Dead Lost sight of	Alive Dead Lost sight of	Alive Dead Lost sight of	Alive Dead Lost sight of
	88/1861	55	111	111	111	1 33	1 1 6
	18/9861	26	111	-11	111	36	101
	1932/36	26	01	111	111	25	=1-
	1934/32	13	-11	111	111	118	2 8 2
	1933/34	17	61	63	111	13	23 23
	1932/33	23 - 23	411	-11	111	15	10 01
	28/1861	31	- -	111	111	13	411
	18/0861	15	111	- -	-11	10 4	4 -
	08/6761	18	-	-	111	401	
	62/8261	13	4 1	01	-11	44	8
	1927/28	19 6	-61-	- 63	-11	1-22-1	1 - 3
ear	1926/27	18	111	-11	-	41	1 - 12
he Y	92/2761	29	4	6 -	11-	9 10	1 - 23
ring t	1924/25	E 6 4	@ 01 01	-11	111	9 1 2	10
d dur	\$5/836I	3 8 55	10	-11	-11		es
Discharged during the Year	1922/23	19	2001-		111	64	111
Discl	1921/22	15 00 03	1 01	61	111	41 9 62	
	13/0261	36	-11	61	111	1-0101	11-
	03/6161	82 1- 4	- 60 61	411	-11	1-10	00
	61/8161	2 2 2 2	911	111	-11	18	4 7 4
	81/1161	52 70 4	0 01	- -	111	1-00-4	20 7
	41/9161	51 4 -	641	111	111	10 00	@ # 61
	91/9161	19	- -	111	111	e ∞ −	-8-
	21/1161	10	01401	- -	111	-11	P 87
	1913/14	9	51 4 83		111		0101
	81/9061	99 27	98-	00 01	4 21	18 20 8	26
Condition on	Discharge	Disease	Much	Improved	Stationary or Worse	Disease	Much
Con	-simbA nois		I qu	019			II

Alive Dead Lost sight of	Alive Dead Lost sight of	Alive Dead Lost sight of	Alive Dead Lost sight of	Alive Dead Lost sight of	Alive Dead Lost sight of	Alive Dead Lost sight of				
Aliv Dea Los	Alive Dead Lost s	Aliv Dea Los	Aliv Dea Los	Alive Dead Lost s	Aliv Dea Los	Alive Dead Lost s				
111	111	61	111	111	2	65	99			
60	711	111	-11		111,	74	78			
4-1	111	111	21	-	111	2002	75			
9	111	-11	60	12	0101	22	83			
61-1	111	00	10 4	9	01 00	222 8	88			
-11	111	111	-11	111	63	94 2	56			
01 01	- 61	411	111		111	86 - 4	64			
-11	61	111	111	-	-	eg ∞ es	44			
2 -	01	111	111	-11	111	28 6	35			
8	21	111	111	-11	-	39 10 4	53			
	61	111	61	111	111	35 16 4	55			
61 -	111	-	1-1	21-	111	3 3 3	41			
07	11-	2 -	-	1 2 1	111	9 11 6	70			
01-	-	-11	2 -	111	-	54 10 8	75			
-+1		014	-	100	111	18 4	89			
63	111	0101		1-1	111	18 18	51			
1-63	111	60 10	-11	- 8	111	59 24 10	93			
-11	-11	61	-11	-11	111	52	99			
4 -	111	-11	014	-	111	51 20 7	78			
1 1 2	00 03	11-	140	63	- 00	79 27 13	119			
44	01 01	-	61 60	-11	111	75 30 12	111			
63 -		111	111	111	111	37 15 6	58			
1-1	0101-	111	-11	63	-	22 8	59			
-		111	1-1	11-	01	16 13 6	35			
60-1	-11	111	-11	111	1-1	24 10 7	41			
67 10 -1	64	-11		1 8	111	149 133 45	327			
Improved	Stationary or Worse	Disease	Much Improved	Improved	Stationary or Worse	Summary	TOTAL			
Group III Group										

