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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)

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PRESIDENT :  
HIS MAJESTY THE KING

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## THIRTY-FOURTH ANNUAL MEDICAL REPORT

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JULY 1939 to JUNE 1940

MEDICAL SCIENCES

19 JUN 1941



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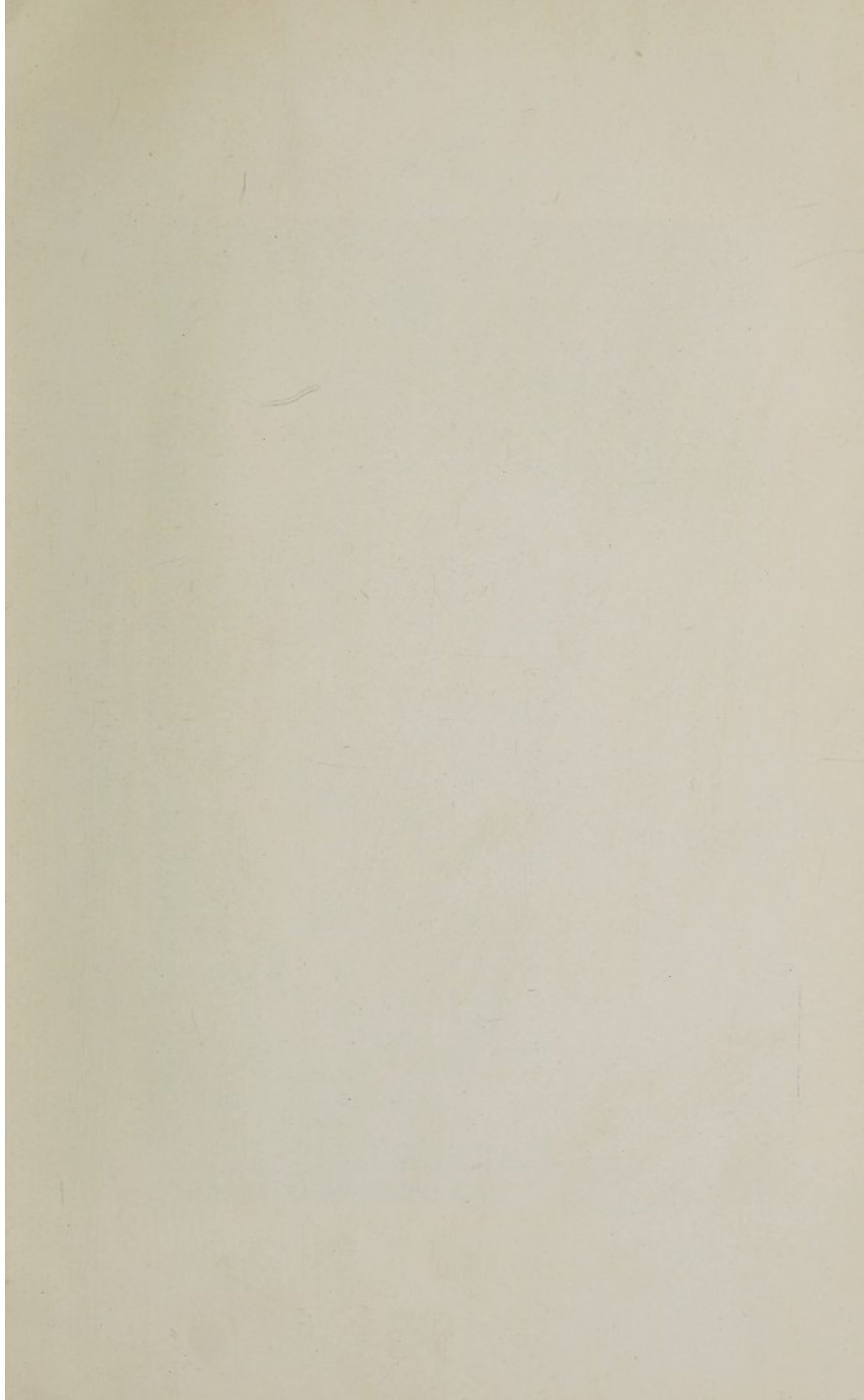
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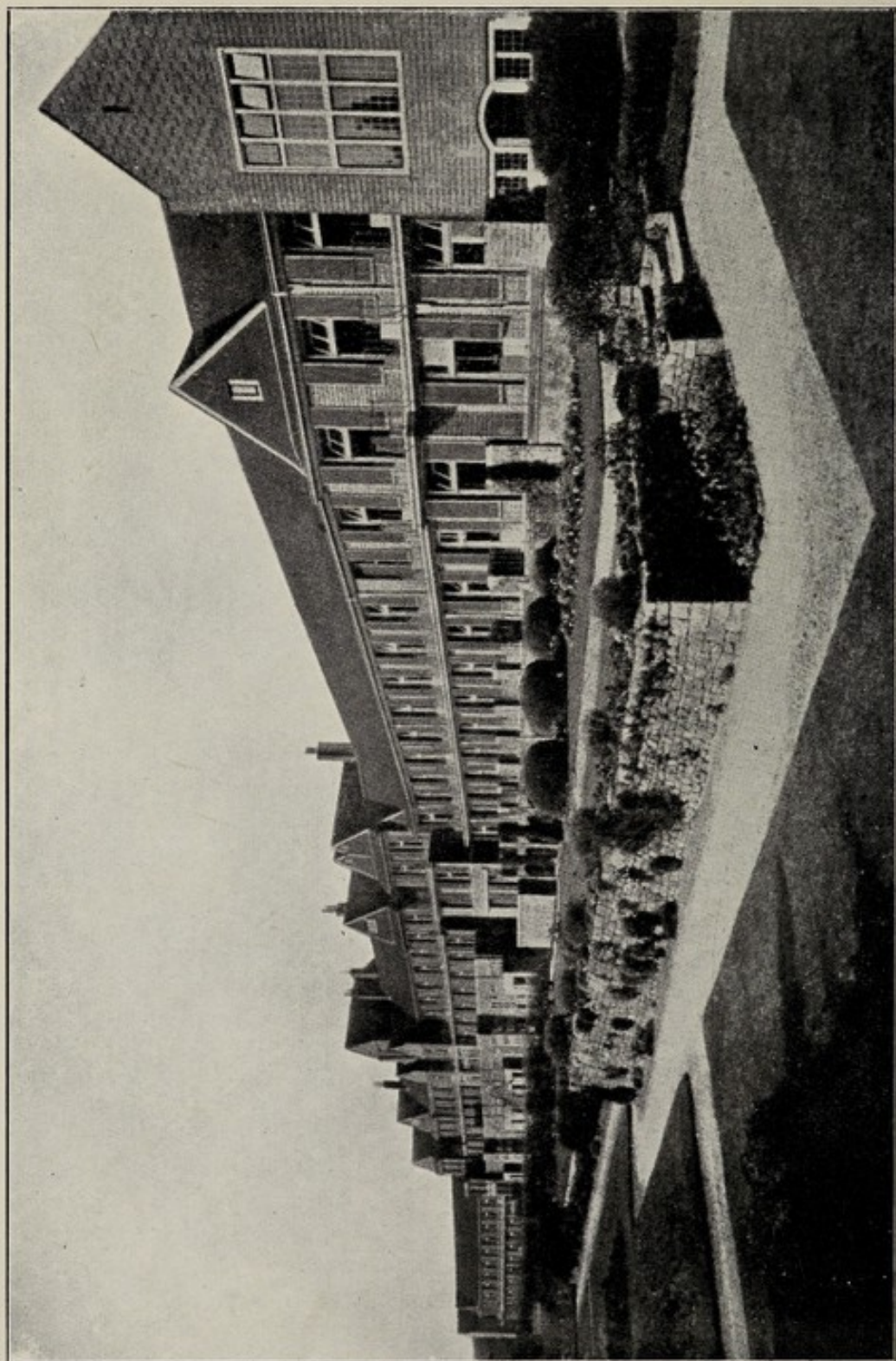
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KING EDWARD VII SANATORIUM, MIDHURST  
South Elevation of Patients' Block



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# KING EDWARD VII SANATORIUM MIDHURST

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## Thirty-fourth Annual Medical Report JULY 1939 to JUNE 1940

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**D**URING the period July 1st, 1939, to June 30th, 1940, 142 patients were admitted to the Sanatorium, 32 of these being readmissions.

During the same period, 172 patients were discharged, and 10 died in the Sanatorium. Of those discharged, 20 were in the Sanatorium less than nine weeks and are not followed up in the after-history records, and 35 were readmissions who are considered in a later section of the Report. The remaining 117 patients were grouped according to condition on admission, as follows:—

Group I	...	...	...	...	...	20
Group II	...	...	...	...	...	78
Group III	...	...	...	...	...	15
Group IV	...	...	...	...	...	4

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

Applications for particulars of admission totalled 290, and the average waiting list was 15 for men and 14 for women.

On account of the war we have now stopped seeing patients at Chandos Street, but in order to safeguard the admission of only suitable cases, we always ask for the latest X-ray to be sent with the medical certificate.

We have endeavoured to keep the patients' minds off the war as much as possible. Moving pictures have been shown once a week, and various staff concerts were organised and were extremely well attended and appreciated by patients and staff alike. Two recitals were given in the lounge by the well-known violinist, Miss Murray Lambert, and the tenor singer, Mr. A. Vidler, supported at the piano by Dr. Stanley Herington, and we are very grateful to these artistes for coming. Another unusual feature was the singing of carols on Christmas Eve by the Easebourne Choral Society.



The patients have had their usual bridge and whist drives and outdoor competitions at various times during the year.

The library has been kept up-to-date, numerous books having been added at frequent intervals. The patients find the library a great boon and a large number of books are always in circulation.

In spite of the war, several new lines have been added to the shop, and it has proved even more popular than in peacetime, owing to the restricted postal and delivery service, which makes it more difficult for the patients to obtain articles from outside.

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.

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 we add our sincere thanks for their loyal co-operation and devotion to duty during a hard and trying year.

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## EMERGENCY HOSPITAL SCHEME

On the outbreak of war, half the Sanatorium was taken over by the Ministry of Health for the treatment of surgical chest cases among officers of the three services. Although a large number has not been admitted owing to the peculiar nature of the war, some very useful results have been obtained, and some interesting chest complications treated. It is not proposed to discuss the individual cases here, but in a future medical report at the end of hostilities, or before, if the number of cases necessitates it, a full analysis will be given of the cases treated.

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## GENERAL STATISTICS

The following tables show an analysis of the 117 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 I—PLACE OF RESIDENCE

Place of Residence	Number of Patients	Place of Residence	Number of Patients
London ... ..	35	Berkshire ... ..	1
Surrey ... ..	15	Wiltshire ... ..	1
Irish Free State ... ..	9	Hertfordshire ... ..	1
No fixed residence ... ..	9	Warwickshire ... ..	1
Middlesex ... ..	8	Bedfordshire ... ..	1
Yorkshire ... ..	8	Buckinghamshire ... ..	1
Sussex ... ..	7	Northumberland ... ..	1
Hampshire ... ..	4	Worcestershire ... ..	1
Kent ... ..	3	Lancashire ... ..	1
Essex ... ..	3	Scotland ... ..	1
Devonshire ... ..	3	India ... ..	1
Wales ... ..	2		
			117

TABLE II—OCCUPATION

Occupation	Number of Patients	Occupation	Number of Patients
Housewives ... ..	22	Solicitors ... ..	2
Nil ... ..	10	Advertisers ... ..	1
Clerks... ..	8	Farmers ... ..	1
Bank Officials ... ..	7	Machinists ... ..	1
Secretaries ... ..	6	Linotype Operators ... ..	1
Medical Practitioners ... ..	5	Film Directors ... ..	1
Royal Air Force ... ..	5	Wholesale Butchers ... ..	1
Civil Servants ... ..	5	Furriers ... ..	1
Accountants... ..	4	Typists ... ..	1
Managers ... ..	4	Masseuses ... ..	1
Teachers ... ..	4	Housekeepers ... ..	1
Nurses ... ..	3	Outfitters ... ..	1
Engineers ... ..	3	Insurance Officials... ..	1
Army ... ..	3	Representatives ... ..	1
Schoolchildren ... ..	3	Violinists ... ..	1
Hotel Proprietors ... ..	3	Travellers ... ..	1
Salesmen ... ..	2	Students ... ..	1
Navy ... ..	2		
			117

TABLE III—AGE AND SEX

Years	Males	Females	Total
Under 20 ... ..	3	3	6
20-25 ... ..	10	11	21
26-30 ... ..	15	10	25
31-35 ... ..	8	10	18
36-40 ... ..	13	9	22
41-45 ... ..	11	6	17
46-50 ... ..	3	2	5
Over 50 ... ..	1	2	3
	64	53	117

TABLE IV

Married	...	...	59
Single	...	...	58
			<u>117</u>

TABLE V—MODE OF ONSET OF DISEASE

Mode of Onset						Number of cases	Percentage
Cough	...	...	...	...	...	54	46.2
Hæmoptysis	...	...	...	...	...	17	14.5
Other Modes	...	...	...	...	...	14	12.0
Lassitude	...	...	...	...	...	12	10.2
Influenza	...	...	...	...	...	10	8.5
Loss of Weight	...	...	...	...	...	1	.9
Pleurisy	...	...	...	...	...	9	7.7
						<u>117</u>	<u>100.0</u>

TABLE VI—DURATION OF DISEASE

Average Duration	...	...	2 years 4 months.
Extremes	...	...	6 weeks-24 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 1939-40.

Group on Admission	Number of Cases	Arrested	Much Improved	Improved	Stationary or Worse	Died in Sanatorium
IA ...	16	13	1	2	—	—
IB ...	4	3	—	—	1	—
IIA ...	31	24	4	2	1	—
IIB ...	47	21	21	2	3	—
IIIA ...	5	1	3	1	—	—
IIIB ...	13	1	4	5	—	3
All Cases	116	63	33	12	5	3
IV { Patients in whom no definite evidence of Pulmonary Tuberculosis was found }		4				

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

The percentage of patients discharged with disease arrested is 54%, as compared with 55% in the previous year. It will be noted that the number of patients discharged with disease arrested has not declined appreciably, and we ascribe this to the continued use of active treatment of various kinds in a great number of cases.



As regards Group IV cases, the number is small owing to the fact that the long waiting list allows most cases to be thoroughly investigated and diagnosed before the patient can be admitted.

## 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

<i>On Admission</i>				<i>On Discharge</i>			
Positive	...	...	62	Positive	...	...	23
Negative	...	...	27	Negative	...	...	60
No Sputum	...	...	24	No Sputum	...	...	30
Group IV	...	...	4	Group IV	...	...	4
			<u>117</u>				<u>117</u>

In 35 cases, sputum which was T.B. Positive on admission was negative on discharge. In 4 such cases, sputum cleared up completely. In 6 cases, sputum which was T.B. Negative on admission cleared up completely. Thus, sputum condition improved in 45 cases.

On looking at the above table, it will be noticed that fewer cases have been discharged from the Sanatorium during the year under review. This is due to the fact that half of the Sanatorium has been in use as a surgical unit for chest casualties among officers of the three services.

It is our practice to follow up all positive cases and see that they do not return to work until they are negative. They are also thoroughly trained in the disposal of any sputum and, in our opinion, are thus in no way a danger to others. As in previous years, a large number of those discharged positive are living in the district and being treated as out-patients, in order to make room for urgent admissions.

TABLE VIIIB—ANALYSIS ACCORDING TO TREATMENT, OF SUCCESSFUL SPUTUM RESULTS, 1939-40.

Treatment				T.B. Positive to Negative	T.B. Positive to Nil	T.B. Negative to Nil	Total
Artificial Pneumothorax	...	...		15	1	2	18
Sanocrysin	...	...		4	2	—	6
Routine	...	...		2	1	3	6
Extrapleural Pneumothorax	...	...		2	—	—	2
Extra-Intrapleural Pneumothorax	...	...		3	—	—	3
Phrenic Evulsion and Sanocrysin	...	...		2	—	—	2
Thoracoplasty	...	...		7	—	1	8
				<u>35</u>	<u>4</u>	<u>6</u>	<u>45</u>

TABLE IX—WEIGHT

Weight			Group I	Group II	Group III	Group IV	Total
Gained	...	...	11	57	9	4	81
Lost	...	...	8	15	6	—	29
No change	...	...	1	4	—	—	5
Not weighed	...	...	—	2	—	—	2
			<u>20</u>	<u>78</u>	<u>15</u>	<u>4</u>	<u>117</u>



### READMISSION CASES

Of the 172 patients discharged, 35 were readmission cases, as compared with 51 last year and 56 the year before. The following table compares the clinical condition of these cases on their previous discharge with that on their readmission.

TABLE I

Group						Number of Cases	
						On previous discharge	On Readmission
I	...	...	...	...	...	4	4
II	...	...	...	...	...	26	22
III	...	...	...	...	...	4	9
IV	...	...	...	...	...	1	—
						35	35

As in previous years, many returned for further treatment of an active kind, and the following table shows the treatment the patient was receiving on previous discharge, if any; treatment prior to readmission, again if any; and the treatment received after readmission to the Sanatorium.

TABLE II

Treatment, if any, on Previous Discharge			Treatment, if any, before Readmission			Treatment after Readmission			No. of Cases
Nil	...	...	Nil	...	...	Phrenic Crush	...	...	1
Nil	...	...	Nil	...	...	Phrenic Evulsion	...	...	3
Artificial thorax	Pneumo-		Maintained	...	...	Maintained	...	...	1
Artificial thorax	Pneumo-		Maintained	...	...	Maintained, Gas-replacement of fluid			2
Artificial thorax	Pneumo-		Maintained	...	...	Maintained, Sanocrysin, Phrenic Evulsion			1
Nil	...	...	Artificial Pneumo- thorax			Maintained	...	...	2
Nil	...	...	Nil	...	...	Artificial Pneumothorax	...	...	1
Nil	...	...	Nil	...	...	Artificial Pneumothorax, Phrenic Evulsion			1
Nil	...	...	Nil	...	...	Extrapleural Pneumothorax	...	...	3
Extrapleural Pneu- mothorax			Maintained	...	...	Maintained	...	...	1
Nil	...	...	Nil	...	...	Thoracoplasty	...	...	3
Nil	...	...	Nil	...	...	Bronchoscopy	...	...	1
Nil	...	...	Nil	...	...	Artificial Pneumothorax, and later, Extrapleural Pneu- mothorax			4
Extra - intrapleural Pneumothorax			Maintained	...	...	Maintained and Artificial Pneu- mothorax induced on other side			1
									—
									25

The remaining 10 returned for further routine treatment.



TABLE III—GENERAL RESULTS OF TREATMENT OF RE-ADMISSION CASES.

Group	Arrested	Much Improved	Improved	Stationary or Worse	Died in the Sanatorium	Total
I ...	4	—	—	—	—	4
II ...	13	7	—	2	—	22
III ...	2	2	5	—	3	12
						—
						38
						—

On looking through Table III, one is impressed by the number of readmission cases discharged arrested or much improved. This is almost entirely due to active treatment, but in those cases which were only under ordinary sanatorium routine it shows that supervision plays an extremely important part in the treatment and after-care of pulmonary tuberculosis. If one carefully goes into the history of each readmission case from the time of the last discharge, it is generally possible to discover some misdemeanour that has led to the breakdown, and which could not have occurred had the patient been under medical supervision. This, however, is not always the fault of the patient, but may be due to overwork in circumstances over which he has no control.

### REPORT OF THE THROAT DEPARTMENT

Of the 172 patients discharged during the year, the larynx of 153 was examined by Sir St. Clair Thomson. Definite tuberculous disease was present in 5 cases, as compared with 16 last year, while the larynx in the remaining 148 cases was found to be normal.

One case of tuberculosis of the ear was discovered, and this was not quiescent on discharge, although the chest condition was much improved.

Of the 5 patients suffering from disease of the larynx, 3 were thoracoplasty cases, and one was receiving Sanocrysin treatment. The remaining patient did not receive active 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.

Classification	Number of Cases	Arrested	Much Improved	Improved	Stationary or Worse	Remarks
Group I	—	—	—	—	—	Since died
Group II	4	1	—	3	—	
Group III	1	—	—	1	—	
Total ...	5	1	—	4	—	

There were no negative cases this year.

### ARTIFICIAL PNEUMOTHORAX

During the period 1925-39, Artificial Pneumothorax was attempted in 303 cases, of which 240 were successful.

Of these 240 patients, 182 (76 per cent) are known to be alive. Seventeen of this number have received further surgical treatment and, therefore, are not included in this table, which deals with Artificial Pneumothorax treatment only, but are dealt with in a later section of the Report.

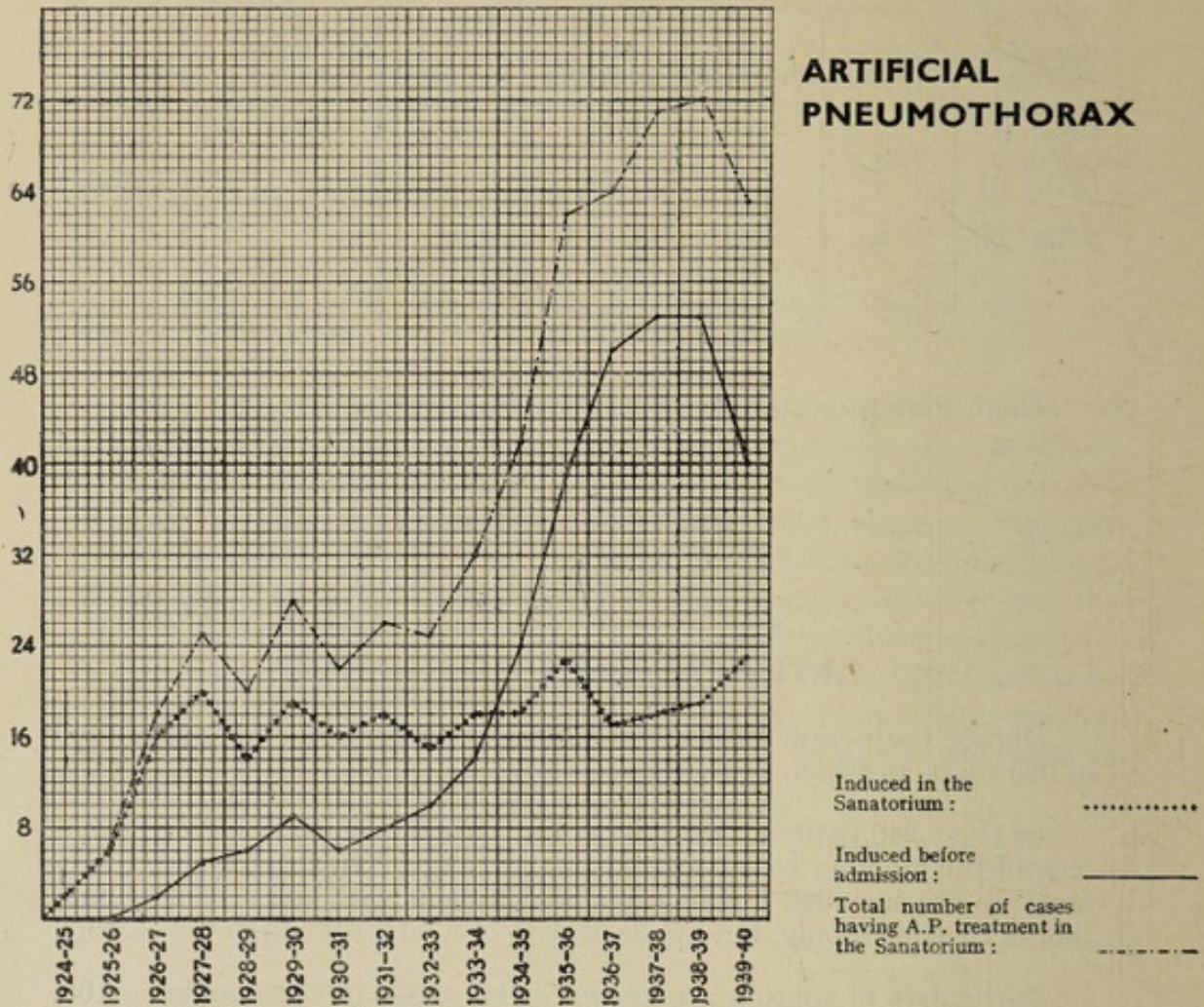
Particulars of sputum are known in 121 cases of the remaining 165, and are as follows :—

TABLE I

	No Sputum	T.B. Negative	T.B. Positive	Sputum Not Tested	Total
Ceased Refills ...	54	1	6	7	66
Continuing Refills ...	32	10	6	5	55
	86	11	12	12	121



The total number of patients receiving artificial pneumothorax treatment during the year under review was 63. We again show the annual figures graphically.



Once again we must draw attention to the fact that apparently quite a small number of pneumothoraces are induced in the Sanatorium (23). This is due to the long waiting list, a considerable number of patients having received this treatment before admission.

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 Admission		Sputum on Discharge	
	No Sputum or T.B. Negative	T.B. Positive	No Sputum or T.B. Negative	T.B. Positive
Choice I ... ..	2	3	4	1
Choice II ... ..	3	10	11	2
Choice III... ..	—	4	1	3
All Cases ... ..	5	17	16	6

One patient died in the Sanatorium.

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

Sputum before induction of Artificial Pneumothorax		Sputum on Discharge	
T.B. Positive	No Sputum or T.B. Negative	T.B. Positive	No Sputum or T.B. Negative
32	8	7	33

TABLE IV—AFTER HISTORY OF PATIENTS WHO HAVE RECEIVED FURTHER TREATMENT IN ADDITION TO ARTIFICIAL PNEUMOTHORAX.

Nature of further Treatment	No Sputum	T.B. Negative	T.B. Positive	Not Tested	Not Stated	Total Number
Thoracoplasty ...	3	—	—	1	1	5
Thoracoplasty and Phrenic Evulsion	2	—	—	2	2	6
Upper Thoraco- plasty, lower Artificial Pneu- mothorax main- tained ... ..	1	—	—	—	1	2
Extrapleural Pneu- mothorax ...	1	—	—	—	—	1
Extrapleural Pneu- mothorax and Phrenic Crush...	—	—	1	—	—	1
Extrapleural Pneu- mothorax, Sano- crysine and Phre- nic Evulsion ...	1	—	—	—	—	1
Upper Thoraco- plasty, Phrenic Crush and Sano- crysine ... ..	—	—	1	—	—	1
						<u>17</u>



### SANOCRYSIN

The after-history of the 354 cases who have had Sanocrysin treatment in previous years shows that 91 are now dead, while of the remaining 263, 254 are known to be alive. Particulars of sputum are known in 200 cases, as follows :—

No Sputum ...	...	...	...	...	87
T.B. Negative ...	...	...	...	...	49
T.B. Positive ...	...	...	...	...	26
Sputum Not Tested ...	...	...	...	...	38
					<hr/>
					200
					<hr/>

Nineteen cases have been treated with Sanocrysin during the year under review, as compared with 29 last year. Of these, 16 ceased the treatment because of various complications. These complications are in no way serious, as we always discontinue the injections if albumen appears in the urine.

We have continued our practice of previous years of commencing with a very small dose and never giving above .2 gramme per week. As each year proceeds we are becoming more convinced that the number of cases who benefit from Sanocrysin is extremely small.

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### SURGICAL DEPARTMENT

The following table shows the nature of the 112 major operations :—

Thoracoplasty (on 20 cases)...	...	...	44
Extrapleural Pneumothorax	...	...	6
Extra-Intrapleural Pneumothorax	...	...	3
Phrenic Evulsion	...	...	15
Phrenic Crush	...	...	5
Thoracoscopy and Division of Adhesions	...	...	26
Thoracoscopy...	...	...	5
Thoracotomy and Division of Adhesions	...	...	1
Other Operations	...	...	7
			<hr/>
			112
			<hr/>

Although the Sanatorium has only been partly used for the treatment of tuberculosis, the number of operations performed has not decreased proportionately. Major active treatment is being employed more and more in the treatment of pulmonary tuberculosis.

It was mentioned in the previous report that the whole of the surgical cases treated since the theatre was opened would be dealt with in a separate report in the near future. This has been postponed owing to the war and the shortage of paper.



Further instruments and modern equipment have been added to the theatre during the year in order to keep it fully up-to-date to deal with any emergency that may arise.

## THORACOPLASTY

### AFTER-HISTORY

Of the 23 Group II cases who have undergone this treatment up to the beginning of the year under review, 12 are known to be working or fit for work, 4 are well though not working, one has died, 3 are keeping in fair health, and 3 have been readmitted.

Of the 15 Group III cases who have had the operation during the same period, 6 are known to be working or fit for work, 2 are well though not working, 5 have died, and 2 are keeping in fair health.

### CASES DISCHARGED DURING THE YEAR

Grp.	Blood Sedimentation Rate		Sputum		Working Capacity	
	Before Operation	After Operation	Before Operation	After Operation	Before Operation	After Operation
II ...	10	29	Negative	Negative	In bed	Light work
II ...	35	5	Positive	Negative	In bed	Quiet life
II ...	25	11	Positive	Negative	In bed	Full work
II ...	7	3	Positive	Negative	Up all day	Quiet life
II ...	7	2	Negative	No Sputum	Up to lunch, tea, dinner	Quiet life
II ...	30	4	Negative	Negative	In bed	Full work
II ...	31	11	Nil	Nil	In bed	Quiet life
II ...	26	6	Negative	No Sputum	In bed	Full work
II ...	25	11	Positive	Negative	In bed	Quiet life
II ...	36	2	Positive	Negative	In bed	Quiet life
II ...	27	23	Positive	Negative	In bed	Quiet life
II ...	30	10	Positive	Negative	In bed	Quiet life
III	30	6	Positive	Negative	In bed	Very quiet life
III	67	50	Positive	Positive	In bed	Very quiet life
III	30	8	Positive	No Sputum	Up to tea	Quiet life
III	42	13	Positive	Positive	Up all day	Quiet life
III	15	45	Positive	Positive	In bed	Very quiet life

Two patients died in the Sanatorium.

## EXTRA AND EXTRA-INTRAPLEURAL PNEUMOTHORACES

### AFTER-HISTORY

During the period 1937-39, Extra or Extra-Intrapleural Pneumothorax was attempted in 25 cases, of which 22 were successful. Two out of this



number have died, and the present state of health of the remaining 20 is set out below :—

Group	Well and Working or Fit for Work	Well, not Working	Fair Health	Receiving further Sanatorium Treatment
Extrapleural Pneumothoraces—				
II ... ..	7	2	1	—
III ... ..	1	1	—	—
Extra-intrapleural Pneumothoraces—				
II ... ..	1	2	3	1
III ... ..	—	—	—	1
	9	5	4	2

#### CASES DISCHARGED DURING THE YEAR

Grp.	Blood Sedimentation Rate		Sputum		Working Capacity	
	Before Operation	After Operation	Before Operation	After Operation	Before Operation	After Operation
Extrapleural Pneumothoraces—						
II ...	40	7	Positive	Positive	In bed	Well, not working
II ...	16	3	Positive	Negative	Up all day	Well, fit for work
II ...	24	12	Nil	Nil	Up to tea	Well, not working
II ...	14	4	Positive	Negative	Up all day	Well, not working
Extra-intrapleural Pneumothoraces—						
II ...	28	5	Positive	Positive	In bed	Well, not working
II ...	6	6	Positive	Nil	Up all day	Well, fit for work
II ...	10	9	Positive	Positive	Up to tea	Fair health
II ...	12	10	Positive	Negative	Up to tea	Well, not working
II ...	20	8	Positive	Negative	Up to tea	Well, not working
III	8	3	Positive	Positive	Up to tea	Readmitted
III	40	87	Positive	Positive	Up all day	Not well

One patient died in the Sanatorium.

#### ANALYSIS OF CASES IN WHICH EXTRAPLEURAL PNEUMOTHORAX WAS INDUCED BEFORE ADMISSION

Sputum before Extrapleural Operation		Sputum on Discharge	
No Sputum or T.B. Negative	T.B. Positive	No Sputum or T.B. Negative	T.B. Positive
2	1	2	1

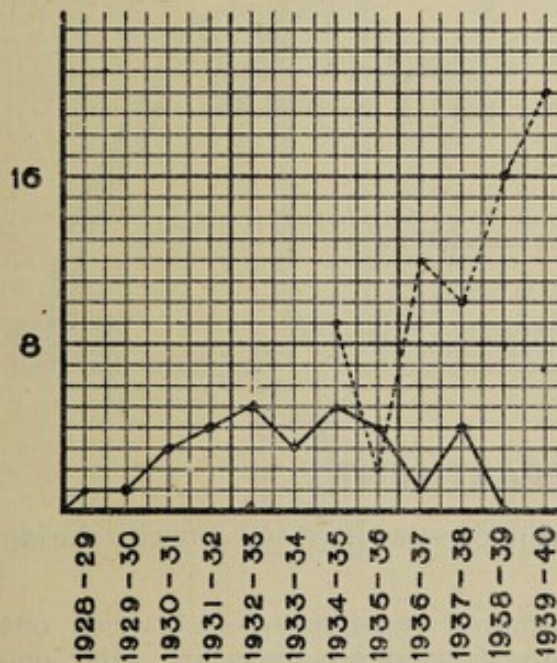


## PHRENIC OPERATIONS

## CASES DISCHARGED DURING THE YEAR

Group				Blood Sedimentation Rate		Sputum	
				Before Operation	After Operation	Before Operation	After Operation
I	...	...	...	10	12	Positive	Negative
I	...	...	...	2	1	Negative	Negative
II	...	...	...	4	5	Negative	Positive
II	...	...	...	22	27	Negative	Negative
II	...	...	...	13	5	Positive	Negative
II	...	...	...	25	11	Positive	Negative
II	...	...	...	9	2	Positive	Negative
II	...	...	...	7	2	Positive	Negative
II	...	...	...	11	20	Positive	Positive
II	...	...	...	4	2	Negative	Negative
III	...	...	...	30	6	Positive	Negative

One patient was in the Sanatorium for one week only.



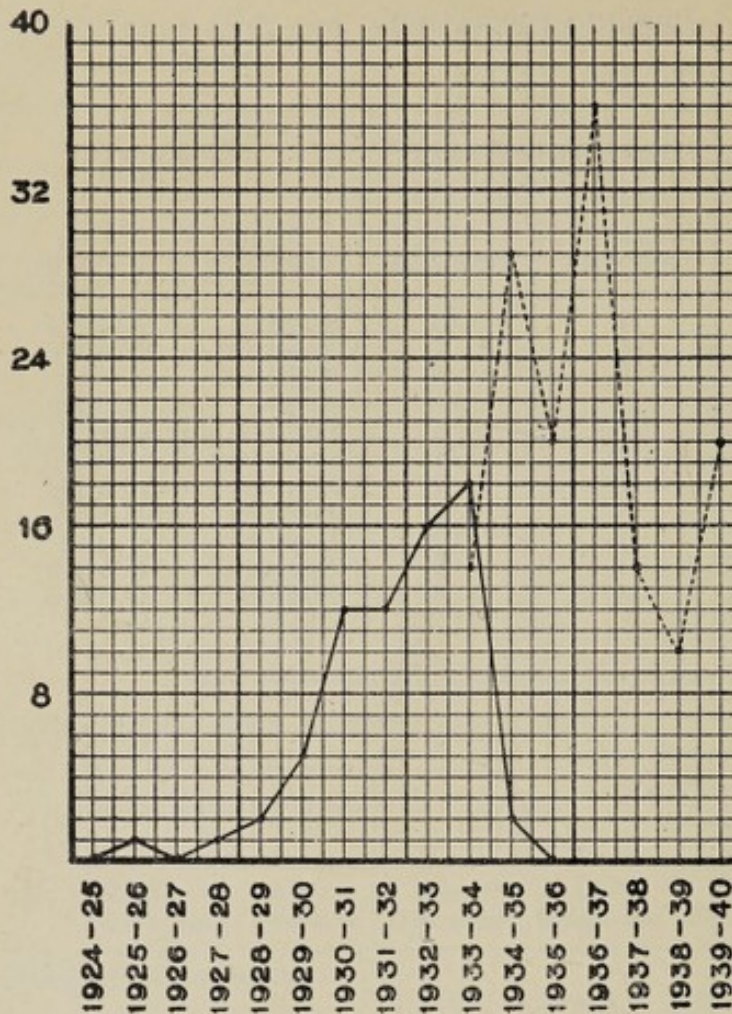
## THORACOPLASTY OPERATIONS

Cases operated on in the Sanatorium :

Cases discharged for operation :

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## PHRENIC OPERATIONS

Cases operated on in the Sanatorium : .....

Cases discharged for operation : \_\_\_\_\_

## X-RAY DEPARTMENT

The X-Ray Department has continued to work at full capacity during the whole of the year.

Screening of Artificial Pneumothorax cases has been carried out weekly, as before. All patients are X-rayed on admission, after one month, and every six weeks thereafter. Should any complications arise, the patient is X-rayed at once, if necessary.

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



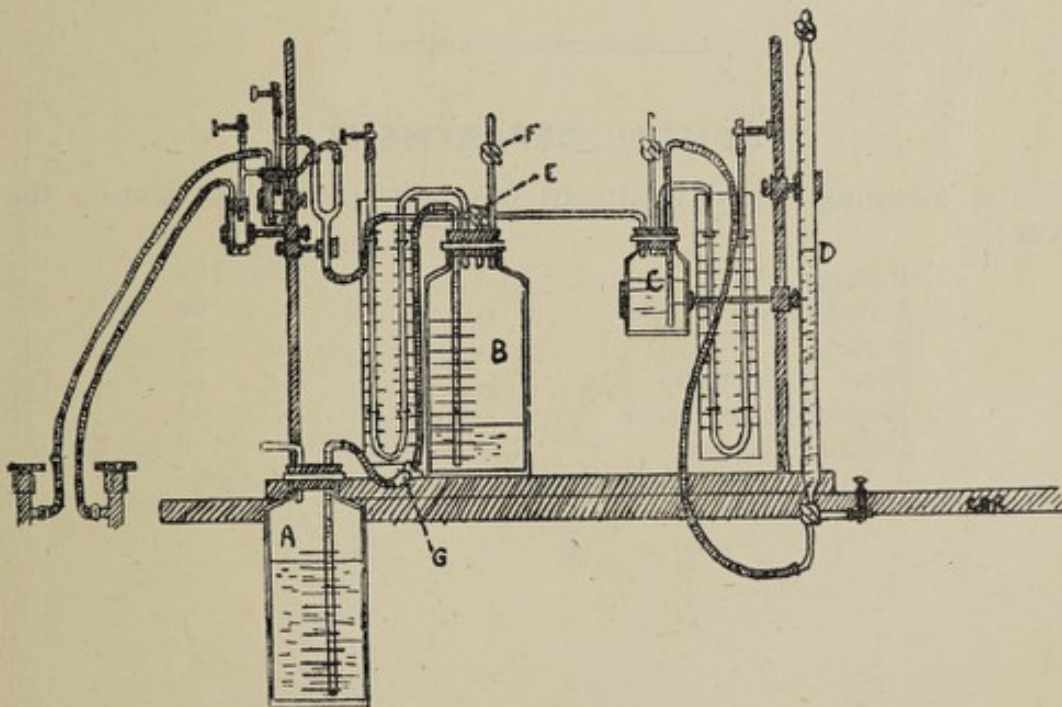
## PATHOLOGICAL DEPARTMENT

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

Sedimentation Rates	...	...	...	1670
Sputum Examinations	...	...	...	1181
Urine Examinations	...	...	...	390
Pleural Effusions	...	...	...	345
Milk Examinations	...	...	...	24
Water Examinations	...	...	...	24
Blood Counts	...	...	...	221
Miscellaneous	...	...	...	78
Cultures for Tubercle Bacillus	...	...	...	380
				4313

The total number of investigations of a routine nature has fallen in direct relation to the fewer number of patients. The investigation into the cultural requirements of the Tubercle Bacillus continues.

An apparatus has been designed to produce different concentrations of carbon dioxide and oxygen in Novy Jars, in which the cultures are contained.



- A. L. & P. Pneumothorax Apparatus Bottle (1 litre).
- B. L. & P. Pneumothorax Apparatus Bottle (1 litre).
- C. Bottle (200 ccs.).
- D. Winkler-Hempel Gas Burette (100 ccs.).
- E. Three-way Tap.
- F. One-way Tap.
- G. Clip closing rubber tubing between Pneumothorax Apparatus bottles.

The apparatus consists of a pair of Pneumothorax Bottles with a manometer and a similar but smaller system, containing acidulated water for the storage and delivery of carbon dioxide.

Carbon dioxide is passed from a cylinder through a small "water bubble" flow meter (100 cc/min.), and thence through the three-way tap E into the bottle C. This drives the acidulated water into the burette D (reading to .1 cc.). The volume which has been delivered is then measured on the burette scale after levelling.

Oxygen is then passed through a similar flow meter *via* the three-way tap E into the bottle B. The volume is measured on the scale of the bottle after levelling.

Tap E is then adjusted so that bottles B and C are in communication. By raising the burette D carbon dioxide can be passed into B and the volume passed measured after levelling on the burette D.

If the tap E is now put in the closed position, air can be drawn in through tap F by opening clip G and lowering bottle A ; the volume taken in being, of course, measured after levelling.

If the bottle B is connected to the Novy Jar through tap F, the mixed gases can be passed into the jar by raising bottle A.

In this way cultures are being performed in atmospheres of 50 per cent oxygen and varying amounts of carbon dioxide up to 10 per cent.

### DENTAL DEPARTMENT

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

Fillings	...	...	...	...	...	161
Extractions	...	...	...	...	...	66
Scaling	...	...	...	...	...	18
Root Treatments	...	...	...	...	...	2
Repairing Dentures	...	...	...	...	...	11
Dentures	...	...	...	...	...	2



**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 7,267. 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 327, or 4.5 per cent.

The statistics of the ultimate results of the enquiry are shown in the following tables :—











TABLE A3.—STATISTICS OF ULTIMATE RESULTS

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

Group II considered separately

Year of Discharge	Number Discharged	Number reported "Well" or "Alive" in each successive year after Discharge																										Number Dead in 1940	No. lost sight of in 1940				
		1908-14	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939			1940			
1906/07	57	243	24	23	18	19	18	17	17	17	17	17	16	15	15	15	14	14	13	13	12	12	12	12	11	10	11	9	46	2			
1907/08	85	287	31	33	35	32	28	24	25	24	23	24	23	22	19	18	18	17	16	16	15	15	15	15	15	15	13	12	69	4			
1908/09	94	260	32	38	40	36	34	34	33	31	31	31	29	28	26	25	24	24	24	22	23	22	22	22	22	22	20	19	70	5			
1909/10	99	210	36	36	33	32	28	26	26	24	25	25	24	23	22	21	21	20	19	19	19	19	19	19	19	17	17	18	80	1			
1910/11	100	160	40	37	37	35	29	28	23	22	22	21	19	18	16	16	15	14	14	13	13	12	12	12	12	11	11	11	84	5			
1911/12	110	124	49	43	41	38	34	33	32	29	29	28	25	22	21	20	20	20	19	17	17	16	16	16	15	14	14	15	88	7			
1912/13	101	77	68	53	51	45	33	38	35	35	32	29	28	25	25	25	24	24	24	22	22	22	22	22	20	20	20	19	81	1			
1913/14	95	—	74	54	55	54	51	50	47	42	40	34	32	31	28	29	26	24	24	23	23	19	17	17	14	13	13	13	77	5			
1914/15	99	—	—	74	74	69	57	57	51	46	43	38	36	36	36	33	30	29	28	27	27	26	25	21	19	19	19	79	1				
1915/16	71	—	—	—	54	49	35	33	28	24	22	17	14	12	12	12	10	10	10	9	9	8	8	8	8	7	8	8	62	1			
1916/17	99	—	—	—	89	89	72	65	62	56	50	44	46	43	43	42	40	39	39	39	37	34	32	31	30	28	27	25	69	5			
1917/18	86	—	—	—	—	—	63	65	54	50	48	40	41	36	38	38	36	34	34	33	32	32	32	31	31	28	28	27	53	6			
1918/19	98	—	—	—	—	—	—	86	72	69	64	60	59	56	55	53	50	48	47	45	44	42	41	38	38	36	35	36	57	5			
1919/20	69	—	—	—	—	—	—	—	63	55	48	46	43	42	39	35	31	30	30	29	26	26	26	26	25	24	22	21	46	2			
1920/21	62	—	—	—	—	—	—	—	—	56	47	38	31	28	26	24	24	24	24	23	21	21	20	19	18	18	18	18	42	2			
1921/22	48	—	—	—	—	—	—	—	—	—	43	35	31	27	23	23	19	17	15	15	15	15	15	15	14	12	11	11	36	1			
1922/23	28	—	—	—	—	—	—	—	—	—	—	27	24	23	21	21	18	17	17	16	15	14	12	12	11	11	10	11	17	0			
1923/24	29	—	—	—	—	—	—	—	—	—	—	—	26	25	22	21	17	15	14	14	14	13	11	11	10	10	10	10	18	1			
1924/25	59	—	—	—	—	—	—	—	—	—	—	—	—	52	50	43	39	35	33	28	27	25	25	24	23	21	22	19	38	2			
1925/26	46	—	—	—	—	—	—	—	—	—	—	—	—	—	42	40	38	35	33	31	31	28	26	25	24	23	22	22	24	0			
1926/27	69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	66	63	61	59	56	53	46	45	45	41	39	40	36	29	4			
1927/28	69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	61	60	55	51	50	48	48	44	38	34	34	32	34	3			
1928/29	86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	79	71	65	57	56	56	50	49	41	42	40	42	4			
1929/30	103	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	90	84	73	68	62	53	50	42	42	42	42	4			
1930/31	99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93	91	86	82	71	65	54	49	47	53	3			
1931/32	82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	81	73	65	58	54	48	42	48	48	46	5		
1932/33	92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	86	71	61	58	46	47	44	35	3			
1933/34	45	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	81	71	60	60	61	60	26	6			
1934/35	59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	81	39	36	30	30	29	15	1			
1935/36	73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	55	49	41	40	17	2	2	0		
1936/37	71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	69	66	63	62	11	0	0	0	
1937/38	62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	70	68	66	5	0	0	0
1938/39	68	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60	60	2	5	5	5







TABLE A5.—STATISTICS OF ULTIMATE RESULTS

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

All cases considered together

Year of Discharge.	Number Discharged	Number reported "Well" or "Alive" in each successive year after Discharge																										Number Dead in 1940	No. lost sight of in 1940		
		1908-14	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939			1940	
1906/07	24	128	16	18	19	21	21	19	18	18	18	18	16	17	18	18	16	14	15	16	16	15	12	11	11	9	10	8	11	5	
1907/08	51	248	35	37	40	39	38	37	35	36	34	34	33	33	32	32	31	30	29	28	27	24	24	24	22	19	19	20	45	6	
1908/09	66	223	40	38	40	44	43	44	44	42	43	43	43	39	37	39	40	39	38	38	36	36	33	32	32	31	32	32	28	6	
1909/10	59	195	42	47	49	49	43	43	42	42	42	41	40	39	38	37	36	36	35	35	34	31	29	28	28	28	27	26	20	13	
1910/11	48	112	37	40	38	37	34	34	33	31	30	32	31	31	30	30	30	30	30	28	26	26	26	25	24	22	23	22	20	6	
1911/12	48	68	36	34	36	36	29	31	27	27	27	27	27	27	27	27	25	25	25	25	24	24	24	24	24	23	23	24	20	4	
1912/13	31	29	28	25	28	28	24	26	25	24	25	24	23	23	23	23	22	22	22	21	20	20	20	19	19	16	15	14	11	6	
1913/14	41	—	37	31	37	36	33	35	33	32	33	33	34	34	34	32	32	33	32	32	30	29	28	27	26	23	22	18	10	3	
1914/15	35	—	—	28	30	29	31	24	23	20	22	22	21	20	20	21	20	20	20	20	17	18	17	17	16	15	16	15	14	6	
1915/16	59	—	—	—	53	51	47	47	44	45	44	43	44	43	42	41	40	37	37	36	36	35	33	32	31	28	27	25	26	8	
1916/17	58	—	—	—	—	56	53	53	47	50	47	48	48	50	49	49	47	47	47	45	44	44	43	41	41	37	37	37	15	6	
1917/18	117	—	—	—	—	—	108	105	102	95	98	97	97	98	95	92	89	89	89	85	84	83	81	81	81	78	75	75	30	12	
1918/19	119	—	—	—	—	—	—	115	112	109	107	104	103	102	101	99	99	96	96	92	92	87	85	84	82	77	78	76	30	13	
1919/20	78	—	—	—	—	—	—	—	75	74	72	71	68	68	66	65	63	62	61	61	59	58	57	55	54	51	51	52	20	6	
1920/21	66	—	—	—	—	—	—	—	—	66	66	64	64	63	61	60	62	63	63	62	61	60	55	55	55	54	53	52	52	7	7
1921/22	93	—	—	—	—	—	—	—	—	—	92	84	82	81	79	78	75	73	73	71	68	67	64	63	60	59	59	56	26	11	
1922/23	51	—	—	—	—	—	—	—	—	—	—	46	44	44	43	40	38	36	35	35	35	34	34	34	33	31	31	30	18	3	
1923/24	68	—	—	—	—	—	—	—	—	—	—	—	65	63	60	59	58	56	55	53	52	52	50	50	47	44	46	45	18	5	
1924/25	72	—	—	—	—	—	—	—	—	—	—	—	—	71	68	66	62	62	60	60	59	59	58	58	58	55	54	54	10	8	
1925/26	70	—	—	—	—	—	—	—	—	—	—	—	—	—	67	67	65	63	61	60	59	57	54	54	53	50	50	50	13	7	
1926/27	41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	39	39	39	39	36	36	34	34	33	31	27	29	29	10	2	
1927/28	55	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	54	54	50	48	47	46	44	42	40	40	35	35	34	16	5
1928/29	53	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	50	50	48	47	46	43	41	39	34	39	40	10	3	
1929/30	35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	33	33	33	31	30	30	29	28	28	26	7	2	
1930/31	44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	43	42	38	38	37	36	36	32	33	32	10	2
1931/32	64	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	62	58	57	56	55	50	50	53	57	7	3
1932/33	56	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	53	54	51	51	45	46	47	8	1	
1933/34	89	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	83	76	74	69	65	61	24	4	
1934/35	83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	81	80	71	70	70	10	2	
1935/36	75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	74	70	71	69	4	2	
1936/37	78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	74	74	74	4	0	
1937/38	66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	65	65	1	0
1938/39	78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	76	76	2	0



TABLE A6.—STATISTICS OF ULTIMATE RESULTS

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

Group I considered separately

Year of Discharge	Number Discharged	Number reported "Well" or "Alive" in each successive year after Discharge																				Number Dead in 1940	No. lost sight of in 1940							
		1908	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933			1934	1935	1936	1937	1938	1939	1940
1906/07	16	91	11	13	13	15	15	14	13	13	14	14	13	14	14	14	12	12	12	13	13	12	10	9	9	8	9	7	6	3
1907/08	31	160	22	24	26	25	24	24	22	23	23	23	23	23	23	23	22	22	21	21	19	18	18	18	16	14	14	15	12	4
1908/09	39	141	25	23	25	28	27	28	29	27	28	28	28	26	25	26	25	25	25	23	23	23	21	20	20	19	20	20	14	5
1909/10	42	143	30	34	35	35	32	33	32	32	32	31	31	30	30	29	28	28	27	26	26	24	22	22	22	22	21	20	11	11
1910/11	37	88	29	31	29	29	27	27	26	24	24	25	24	24	23	24	24	24	24	23	22	22	22	21	21	20	21	21	12	4
1911/12	26	44	23	20	21	21	20	20	18	18	18	18	18	18	18	19	19	19	19	19	19	19	19	19	19	19	19	19	7	0
1912/13	19	18	17	16	18	17	14	15	14	15	15	15	14	14	14	14	13	13	13	13	12	12	12	11	11	9	9	8	7	4
1913/14	28	—	26	21	28	27	25	26	25	24	25	25	26	26	26	24	24	24	25	25	23	22	21	21	21	18	17	13	5	10
1914/15	17	—	—	13	15	14	9	13	11	11	12	12	12	12	11	11	12	12	12	12	9	10	9	9	8	7	8	8	5	4
1915/16	32	—	—	—	31	32	29	29	27	28	27	27	28	29	29	29	28	26	26	26	26	25	24	23	23	20	20	19	8	5
1916/17	34	—	—	—	—	—	31	33	28	31	29	31	30	32	32	32	29	30	30	30	29	29	23	23	23	24	24	24	2	2
1917/18	51	—	—	—	—	—	47	48	46	42	44	45	45	46	46	45	44	44	44	41	41	41	41	41	41	41	41	41	5	5
1918/19	35	—	—	—	—	—	—	34	34	33	33	32	34	43	42	41	41	41	41	39	39	39	38	37	35	34	35	27	4	4
1919/20	50	—	—	—	—	—	—	—	—	48	48	47	47	46	44	43	45	47	47	47	47	47	43	43	43	42	40	39	10	5
1920/21	48	—	—	—	—	—	—	—	—	—	50	49	48	47	46	46	46	45	45	44	42	41	39	39	38	39	39	38	9	4
1921/22	51	—	—	—	—	—	—	—	—	—	—	33	32	32	32	31	29	28	27	26	26	25	25	25	24	24	23	22	5	4
1922/23	35	—	—	—	—	—	—	—	—	—	—	—	43	42	40	39	39	39	38	38	37	35	35	33	33	31	32	31	8	4
1923/24	43	—	—	—	—	—	—	—	—	—	—	—	48	46	45	45	42	42	42	40	40	41	40	40	40	39	38	38	5	6
1924/25	49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	43	43	43	43	42	40	40	39	39	38	35	36	37	3	4
1925/26	44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1
1926/27	25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	4
1927/28	35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10	1
1928/29	32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	2
1929/30	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1
1930/31	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2
1931/32	35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	0
1932/33	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	1
1933/34	26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	2
1934/35	22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	0
1935/36	29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	0
1936/37	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	0
1937/38	22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	0
1938/39	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	0



TABLE A7.—STATISTICS OF ULTIMATE RESULTS

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

Group II considered separately

Year of Discharge	Number Discharged	Number reported "Well" or "Alive" in each successive year after Discharge																				Number Dead in 1940	No. lost sight of in 1940					
		1908-14	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933			1934	1935	1936	1937	1938
1906/07	7	35	5	5	6	6	6	5	4	4	4	3	3	4	4	4	3	3	3	3	3	3	2	2	2	1	1	4
1907/08	18	81	12	12	13	13	13	12	12	10	10	10	10	9	9	9	8	8	8	8	7	7	6	6	6	5	5	12
1908/09	25	78	14	14	14	15	15	14	14	14	14	14	12	11	11	12	12	12	12	12	12	11	11	11	11	11	13	
1909/10	15	44	11	12	12	12	9	9	9	9	9	8	8	8	8	8	6	6	6	6	8	7	7	6	6	6	7	
1910/11	10	24	8	9	9	8	7	7	7	7	7	7	7	7	7	6	6	6	6	6	4	4	4	4	4	4	11	
1911/12	20	23	12	13	14	14	8	10	9	8	8	8	8	8	8	7	7	7	7	7	7	7	7	7	6	5	5	
1912/13	9	9	9	7	8	8	8	8	8	7	7	7	7	7	7	6	6	6	6	6	6	6	6	5	5	5	11	
1913/14	11	—	9	9	8	8	7	8	7	7	7	7	9	9	9	9	8	8	8	8	8	8	8	8	4	4	4	
1914/15	14	—	—	13	13	13	10	15	15	15	15	14	14	12	11	11	10	10	10	9	9	8	8	8	7	6	6	
1915/16	23	—	—	—	19	16	15	16	15	15	15	17	18	17	17	18	17	17	17	15	15	15	15	12	11	15	15	
1916/17	24	—	—	—	—	23	22	20	19	19	18	17	18	17	43	41	41	41	40	39	39	52	50	39	36	31	21	
1917/18	59	—	—	—	—	—	55	51	50	48	48	47	47	45	61	63	62	61	57	57	57	17	16	15	14	14	18	
1918/19	71	—	—	—	—	—	—	68	67	68	68	66	64	62	19	18	18	17	17	17	17	10	9	8	8	9	5	
1919/20	20	—	—	—	—	—	—	—	20	20	20	20	18	19	19	13	12	12	12	19	19	19	18	16	15	14	6	
1920/21	14	—	—	—	—	—	—	—	—	14	14	13	13	13	25	22	21	21	20	19	19	9	8	8	8	9	2	
1921/22	28	—	—	—	—	—	—	—	—	—	28	26	27	27	26	25	22	21	20	19	19	19	18	16	15	14	8	
1922/23	9	—	—	—	—	—	—	—	—	—	—	8	7	7	6	6	5	5	5	5	5	5	5	5	4	5	5	
1923/24	15	—	—	—	—	—	—	—	—	—	—	—	14	14	14	14	14	13	13	13	13	13	13	12	11	12	2	
1924/25	18	—	—	—	—	—	—	—	—	—	—	—	18	18	17	16	16	16	16	15	15	15	15	15	15	13	3	
1925/26	19	—	—	—	—	—	—	—	—	—	—	—	—	19	19	17	15	14	14	14	13	11	11	11	11	10	8	
1926/27	11	—	—	—	—	—	—	—	—	—	—	—	—	—	10	10	10	10	9	9	9	8	8	8	8	8	2	
1927/28	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17	15	14	14	14	14	12	11	11	11	1	
1928/29	19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17	17	17	16	16	16	16	15	15	15	6	
1929/30	14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17	17	16	16	14	14	14	13	12	1	
1930/31	22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17	17	16	16	14	14	14	13	12	1	
1931/32	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16	16	14	14	14	13	12	1	
1932/33	26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22	21	18	18	17	16	15	1	
1933/34	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26	26	20	20	20	21	22	20	
1934/35	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	
1935/36	43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8	
1936/37	49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	
1937/38	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	
1938/39	46	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	







TABLE B1.—STATISTICS OF ULTIMATE RESULTS

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

Condition on Admission	Discharge	Discharged during the Year																										Condition in 1940	
		1906/14	1914/15	1915/16	1916/17	1917/18	1918/19	1919/20	1920/21	1921/22	1922/23	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	1938/39		
Group I	Disease Arrested	41 59 6	2 6 1	3 4 1	5 7 —	2 1 1	3 — —	10 1 —	20 3 1	8 5 —	8 9 —	7 3 1	6 2 2	6 2 1	7 2 —	9 1 —	7 2 —	21 5 3	11 2 1	6 1 —	9 — 1	6 1 —	2 — —	6 — —	3 — —	3 — —	3 — —	6 — —	
	Much Improved	37 80 7	3 5 1	1 4 1	7 2 —	5 4 —	4 1 1	6 8 1	7 12 —	4 7 —	7 5 —	4 4 —	2 — —	— 1 —	6 2 —	1 1 —	1 — —	2 1 —	— — —	— — —	2 — —	3 — 1	6 — —	2 — —	2 — —	4 — —	1 — —	— — —	
	Improved	2 7 2	— 1 —	— — —	— 1 1	— — —	— — —	1 2 —	1 — —	— 1 —	— — —	— 1 1	— 1 —	— — —	1 — —	4 1 —	1 — —	1 1 —	— — —	1 1 —	— — —	— — 1	— — —	1 — —	— — —	— — —	— — —	— — —	2 — —
	Stationary or Worse	3 14 —	1 — —	2 — —	— 1 —	1 1 —	— — —	— — —	— — —	— 1 —	— — —	— — —	— 1 —	— — —	— — —	— — —	1 1 —	— 1 —	— — —	— 1 1	— — —	— — —	— — —	— — —	— — —	— — —	— — —	— — —	2 — —
II	Disease Arrested	40 66 6	4 9 1	2 5 —	4 5 1	1 4 1	7 — 1	7 1 1	7 5 —	4 4 —	6 4 —	4 5 —	5 5 —	4 1 —	9 5 2	9 5 1	14 5 2	11 6 2	11 1 —	13 4 1	24 5 3	5 1 —	7 1 —	15 1 —	23 — —	32 — —	28 1 —		
	Much Improved	60 267 17	13 41 —	5 31 —	20 42 3	19 32 4	26 36 3	11 36 1	11 30 2	7 24 1	3 13 1	6 12 1	11 14 2	8 5 —	12 6 1	11 11 —	10 6 2	18 8 —	16 11 1	14 9 1	15 6 1	20 4 1	22 9 1	33 4 —	23 1 —	22 1 —	25 1 —		



Group	Improved	13	—	9	—	13	1	7	2	3	—	5	—	7	1	—	1	2	9	13	8	14	14	15	11	16	3	9	11	19	4	11	Alive Dead Lost sight of
		127	4	—	—	10	—	7	14	7	—	—	—	—	—	—	—	17	9	14	9	18	25	15	11	8	7	6	5	3	1	2	
Group III	Improved	5	2	1	1	1	1	—	1	—	—	—	—	—	—	—	—	1	1	2	4	2	4	6	6	5	1	2	3	1	2	—	—
	Stationary or Worse	133	20	13	11	10	7	—	7	2	—	2	—	1	—	—	—	2	9	4	9	13	14	19	11	7	3	1	1	1	—	1	—
	Disease Arrested	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—	—	—
	Much Improved	4	—	5	5	5	11	7	7	7	30	56	2	5	10	11	2	2	6	1	4	—	—	—	1	3	6	10	8	2	5	3	—
	Improved	129	18	13	—	—	21	—	1	5	37	24	—	3	1	—	—	5	4	5	3	2	1	2	7	3	4	10	5	6	9	5	—
Group III	Stationary or Worse	3	32	28	25	24	19	—	—	—	8	—	—	—	2	—	2	10	11	10	15	6	10	—	2	1	5	2	3	3	4	3	—
	Summary	210	29	20	45	41	56	51	58	51	135	139	6	34	40	37	41	36	41	60	51	53	73	62	62	79	53	74	86	85	83	85	—
	Summary	1199	160	130	158	133	132	139	135	139	122	125	4	139	122	125	78	71	71	60	67	60	76	65	59	54	42	42	28	18	8	8	—
	Summary	51	4	4	9	10	10	6	4	6	3	4	—	3	3	4	2	4	2	7	3	5	6	7	4	8	5	2	1	—	—	—	—
	TOTAL	1460	193	154	212	184	198	196	197	196	176	165	166	176	165	166	128	114	127	121	118	155	134	125	141	100	118	115	103	91	93	—	—







Group	Improved	5	—	—	2	4	5	4	1	1	1	2	1	1	2	1	1	2	1	1	2	1	1	3	3	1	3	1	2	2	1	1	6	4	3	—	—	—	Alive Dead Lost sight of																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
		6	1	1	—	4	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Stationary or Worse	6	—	1	2	2	3	—	1	—	—	—	1	1	—	—	2	—	—	—	—	—	2	2	—	—	—	—	1	2	—	—	—	—	—	1	—	—	1	—	—	Alive Dead Lost sight of																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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