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The Open-Air Schools of Bristol and Gloucester

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By JEANNIE SHOREY DUCKWORTH

In the early years of the 20th century an observer in any of our big towns and cities would have been aware of many young children roaming the streets, sitting on doorsteps or staring out of windows and may have wondered why they were not attending school. After all, education was free and compulsory. In fact, most of these children had been ‘excluded’ – banned – from attending school, either because they were suffering from an infectious disease or considered too weak to benefit from instruction. In the crowded conditions of the classrooms it was feared that cross-infection would be prevalent, particularly from children suffering from tuberculosis, and if a child was too weak or, as it was termed, ‘delicate’ to attend school, it was thought that it would probably not survive to adulthood anyway. Thus such children were condemned to illiteracy.

There were a few charitable bodies which were concerned about the situation, among them the Bristol Civic League which around 1910 was discussing a new idea which might help the excluded children. This was special schooling in the open air where there would be less risk of cross-infection and which would be designed especially to cater for the needs of weaker children, providing a more relaxed time-table and offering nourishing food and medical help.

On 21 April 1913 the League suggested the foundation of an open-air school for the education and treatment of tubercular and ailing children. The general scheme was explained to the meeting by Miss F. M. Townsend.

It is proposed to start an Open Air day school for Bristol schoolchildren who are in the early stages of phthisis, and for those who are pre-disposed to the disease by weakness or ill-health; children for instance who are suffering from anaemia, malnutrition, tubercular glands, and other ailments. For such children the conditions of ordinary school life are unsuitable, even injurious. They need fresh air, plenty of nourishing food, some hours of rest each day, and special medical treatment. If these needs can be supplied, the children already attacked by tuberculosis will have a good chance of recovery, while those who are only threatened with the disease can be built up in health and rendered sufficiently strong to fight the scourge successfully.¹

Miss Townsend pointed out that there were on record in Bristol 120 children with tuberculosis as well as 347 with anaemia and 104 with serious malnutrition who were receiving no education and little medical attention. What was needed was a school in a healthy neighbourhood. Open sheds would serve as classrooms, rest rooms and dinner rooms in bad weather. In good weather children would work, play and rest in the open air.

The Elementary Education (Defective and Epileptic Children) Act of 1899² required education authorities to make provision for the education of any defective children in their area by establishing special schools. However, as building special schools was costly and parents or poor-law guardians would have to contribute to the education of their defective children, and the fact that the authorities had no idea how to treat them, the Act seems to have been largely ignored.

Fresh air and sunshine had long been recognised as therapeutic for many consumptives. Victims who could afford it were sent abroad to clean air areas in the mountains or the seaside 'for their health'. The open-air school movement was an adaptation of this idea, starting in Germany and Switzerland in the final years of the 19th century. The first such school in England had been opened on ground owned by the Royal Arsenal Cooperative Society at Bostall Woods near London in 1907.³ The Bristol education committee was among the first in the country to become aware of this new method of education and in 1912 had been emphasising the need for such a school in the city. During that year a number of conditions (see Table 1) had been found during routine medical examinations and 3,044 children excluded from school accordingly.⁴

Table 1. Conditions of children excluded from Bristol schools in 1912.

Medical Condition	Number of Children
Nutrition below normal	1,250
Nutrition bad	93
Cases of Pulmonary TB	53
Glandular and Osseous TB	28
Rickets	100
Enlarged glands	775
Anaemia	346
Non TB lung disease	399
Total	3,044

Another 1,052 had been excluded for shorter periods suffering from other non-infectious diseases such as epilepsy, mental illness, ringworm or vermin. The children would have been returned to their original schools only on a doctor's order.

The authorities realised that it would have been impossible to provide open-air accommodation for such a formidable number but a start was made when on 20 October 1913 the Bristol Open Air School at Knowle (Fig. 1) was opened with help from the Civic League, voluntary contributions and a grant from the Board of Education.⁵ The school⁶ consisted of a large shed which served as a school and rest room, a dining room and kitchen, a bathroom which was fitted with six sprays and six dressing cubicles, a teachers' room, a doctors' room and separate cloakrooms for girls and boys. Twenty-two children were admitted on the opening day and by 31 December the number had risen to fifty-seven. The staff consisted of three teachers, a trained nurse, a caretaker who also acted as cook and a kitchen maid.

Table 2. Typical weekly menu of school dinners at Knowle open-air school in 1914.

Monday	Pea Soup and dumplings, bread
Tuesday	Rolled oats and milk with bread and jam
Wednesday	Hashed beef and vegetables, bread
Thursday	Brown haricot soup and dumplings, bread
Friday	Cocoa with raisin and currant bread

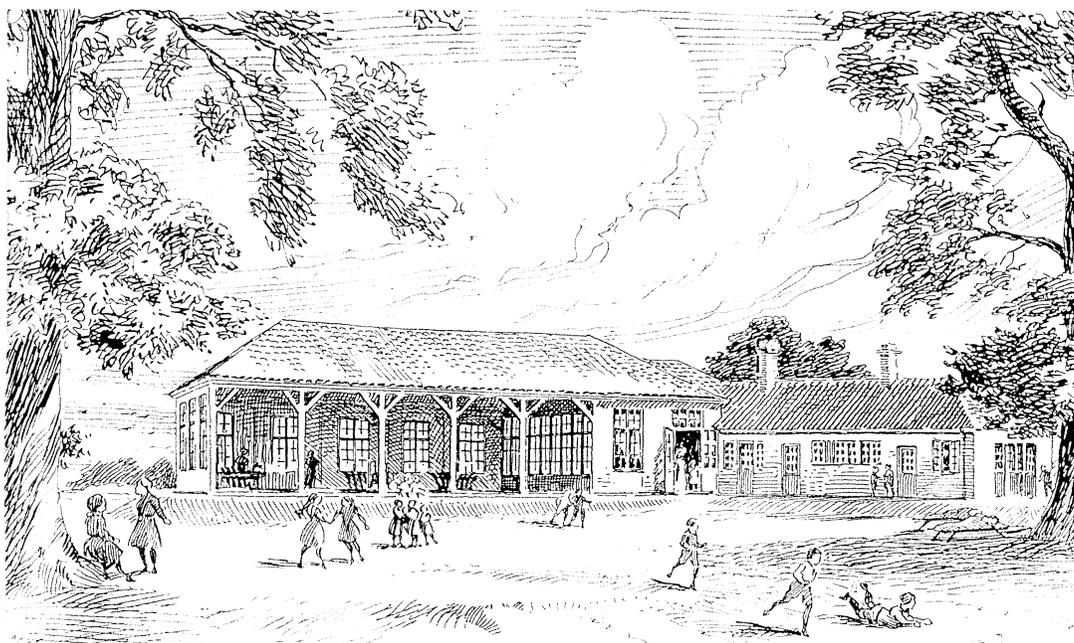


Fig.1. Drawing of Knowle open-air school (Bristol Reference Library, S. Loxton Collection).

Great attention was paid to proper diet. The children received three meals a day, breakfast, dinner and tea, and a pint of milk. A typical menu for a week of school dinners in those early days is given in Table 2.⁷

As for warmth, personal hygiene and dress, initially every child was provided with a thick rug, an overcoat, a pair of clogs with leather uppers, a pair of warm stockings and a brush, comb and toothbrush. Each child had a bath at the school at least once a week. As the children's diet and hygiene were so important the school was kept open throughout the year, closing only for a few days at Christmas. On rainy or very windy days lessons were taken inside although the sliding French windows in the walls were always kept open, so that most of the time pupils sat at their desks with blankets wrapped round them. Lessons were kept short and after lunch the mid-day rest of 1½ hours was rigorously observed. Folding deck-chairs and couches were provided along with a small sack for the children to put their legs and feet into while resting; this prevented the soiling of the couches and also proved useful in adding to their warmth while asleep in cold weather.

The surviving time-table (Fig. 2) gives an excellent idea of how the school functioned. It is interesting to note a daily slot was devoted to weather observations – very relevant to an open-air class.

On 19 October 1914 a second open-air school was started, established by the University Settlement Committee on its grounds at Barton Hill. The new school had accommodation for 20 children but only girls were admitted. The buildings consisted of a large shed which was entirely open on one side, a kitchen and two smaller rooms which were used for examining the girls. In 1915 a rest terrace was added.⁸

One aspect of the problem of helping tubercular children is shown in a report by the Bristol Civic League dated 1914.

The Open Air School and the new Open Air class at the University Settlement are doing admirable work but do not nearly cover the ground which visitors constantly report that the children they visit need. There are many needing such treatment but there is no place for them. The great difficulty as regards consumptive children seems insuperable and must be so until special schools can be found for them. They come back from the sanatoriums to play in the dirty streets and eat unsuitable food and then share beds and rooms with other members of the family. They are not fit for ordinary school and may be excluded for years so that should they live to grow up they become most difficult members of society.⁹

One of the original purposes of the open-air school system was to serve as a preventative measure against the spread of tuberculosis. It must be stressed that only children in the non-infectious stage of the disease, i.e. the quiescent stage, were allowed to attend the schools and that is why regular medical checks were essential. If their T.B. became active again, hospitalisation was necessary. Unfortunately, for a city with a school population of 59,000, two open-air schools with accommodation for no more than 100 did not have a significant influence on the incidence of the disease.

In 1920 the two open-air schools, until then managed by a voluntary committee, were taken over by the city education department and at a meeting on 17 March 1920 it was resolved that 'an effort be made to start open-air classes for delicate children in some of the city parks'.¹⁰ It was decided to start experimental classes at the Victoria and Eastville parks. The schools came into being very quickly; by 11 June equipment had been ordered which consisted of 60 deck-chairs with leg rests, 60 small folding chairs, 6 folding tables, 2 wind screens and 2 folding chairs for teachers.

On 21 June 1920, just three months after the project was conceived, the Victoria Park open-air class was opened with 29 names on the register, the teacher being Miss Rendell. Four days later the Eastville Park open-air class opened under the control of Miss Imlach. These classes were actually based in the park bandstands and in June 1921 another class opened in the bandstand in St. George's Park (Fig. 3) with Miss Dutson in charge. At this time the Barton Hill school was closed and all the girls were transferred to the new 'school' in St. George's Park.

All the open-air schools were kept open throughout the year and it is a striking testimony that attendance was usually well over 90% even during bad weather. In cold, rain, fog, frost, damp or gales the children turned up despite the adversities of their illnesses and uncomfortable surroundings. Some indication of the weather conditions is provided by the following entries in the log book of the Victoria Park open-air school, which is lodged at the Bristol Record Office.

December 1921 During very cold weather the class takes frequent exercises to keep up their circulation.

March 1928 This week the weather has been intensely cold. On Tuesday and Wednesday the ink was frozen into solid blocks so we could do no written work.

February 1929 School opened this morning with 13 children in attendance. During the night a snow blizzard swept the country and the temperature has been the lowest on record.

Apparently there was 2 ft (61 cm) of snow in the park; it is admirable to think that 13 children did make the effort to get to school.

It is difficult for us now to appreciate the situation. These were children who were ill; they all had a medical condition. There were up to 32 in a class and their ages ranged from seven to fourteen, all in one class with one teacher. Some had had little formal education; some only stayed for one or two terms. Now anyone who has been involved in teaching will know that this is an almost impossible situation, but with dedicated teachers and motivated pupils, the system worked.

OPEN-AIR SCHOOL, KNOWLE, BRISTOL.
Time Table.

Day	9.0-9.30	9.30-9.35	9.35-9.55	9.55-10.0	10.0-10.30	10.30-10.35	10.35-10.40	10.40-11.10	11.10-11.20	11.20-11.50	11.50-11.55	11.55-12.25	12.25-12.45	12.45-1.15	1.15-1.30	1.30-3.15	3.15-3.30	3.30-4.45	4.5-4.10	
Mon.	Assembly and Breakfast	Placing Chairs in position for Lessons—Playground	Prayers: Hymns: Scripture	Marking of Registers	I. Arithmetic II. " III. "	Physical and Breathing Exercises	Weather Observations	Nature Study " " " "	Recreation	Drawing or Painting " " " "	Physical and Breathing Exercises	Composition Writing { Geography or History Writing	Preparation for Rest. Placing Chairs and Couches. Dinner	Cleaning Teeth and preparing for Rest—Playground	Rest	1.30-3.15	Packing and putting away Chairs—Playground	3.15-3.30	Modelling or Canework Gardening Handwork Gardening Handwork " " 4-hr. Recitation: Free & Organised Games, 1-hr. Gardening, 1-hr. Recitation, 4-hr. (B) Woodwork (G) Needlework (B) Woodwork (C) Needlework Drawing or Painting & Handwork Gardening	
Tues.					I. Arithmetic II. " III. "	Physical and Breathing Exercises		Singing " " " "		Reading " " " "	Physical and Breathing Exercises	Reading " " " "								
Wed.					I. Arithmetic II. " III. "	Physical and Breathing Exercises		Geography " " " "		Composition Clay Modelling " "	Physical and Breathing Exercises	History " " " "								
Thurs.					I. (B) Woodwork (G) Arithmetic II. " III. "	Physical and Breathing Exercises		(B) Woodwork (G) Needlework History " " " "		(B) Woodwork (G) Needlework Composition Writing " "	Physical and Breathing Exercises	(B) Woodwork (G) Needlework (B) Woodwork (G) Reading Singing " " " "								
Fri.					I. Arithmetic II. " III. "	Physical and Breathing Exercises		Reading " " " "		Composition Writing " "	Physical and Breathing Exercises									

Household Employment.

Boys.
Class I. and II.—Every day, 9.30-10.0.
Class II.—Monday, Wednesday, and Thursday, 3.30-4.45.
Class I.—Friday, 3.30-4.45.

Girls.
Monday. Class I.—9.30-12.45 & 3.30-4.45. Class II.—3.30-4.45.
Tuesday. Class I.—3.30-4.45.
Wednesday. Class I.—10.30-12.45. Class I and II.—3.30-4.45.
Thursday. Class II.—9.30-12.45 and 3.30-4.45.
Friday. Class I. and II.—10.30-12.45. Class II.—3.30-4.45.

Fig. 2 Knowle open-air school time-table 1913 (Bristol Education Committee Records, in Bristol Record Office, Report on Medical Inspection of Special Schools and Institutions 1913).



Fig. 3 The bandstand in St. George's Park (Bristol Reference Library, M. J. Tozer Collection).

It is interesting to note that the teachers in these special park classes received £10 per annum above the normal scale – they deserved it. If it was fine and dry the classes were held on the grass, but those days were few and far between. The only form of protection from the weather was the bandstand which had a roof but open sides. Tarpaulins and wind screens were provided but these were constantly being blown down or ripped in the wind; it was always draughty. Children sat on folding chairs and worked at a large folding table. On breezy days they could not use paper and ink and had instead to use what has been described by ex-pupils as 'millboards', a hard board similar to an old-fashioned slate, which they rested on their knees, using chalk for written work.

The park classes did not have breakfast or tea provided. For their mid-morning break their teacher heated milk on an oil stove or primus. Washing-up was done at the park tap. For lunch they had to walk to the nearest school, sometimes quite a long walk. On returning from lunch the children fetched their deck-chairs with leg rests which they used for the 1½ hour afternoon rest period. However, at any sign of rain they were whisked away to the park hut, bandstand or garden sheds. This constant getting out and putting away of furniture was tiresome work for the delicate children.

As with the Knowle school, a doctor visited frequently to monitor the children's health. There were no baths, of course, but there were public toilets nearby in all three parks; these at least had taps for hand and face washing but were notorious for freezing up each winter.

In 1938 the teacher-in-charge of the Victoria Park school became so desperate about wet conditions that she wrote to the education committee asking for the provision of wellington boots for her class to wear in wet weather.¹¹ She did not get them but one can appreciate her concern

as she witnessed her pupils moving about in mud and getting soaked to the skin when it rained; the bandstands did not give much protection against driving rain.

As the parks were public places one of the biggest problems the classes had to face was the curiosity of the general public. The bandstand class must have been the focus of attention and it would have been difficult to pass it without staring at the motley group of children. The classes were popularly known as 'The T.B. Schools' so people would have kept their distance but they went on using the facilities of the parks as they had always done. Perhaps they enjoyed hearing the children reciting their tables, chanting a poem or singing to a wind-up gramophone.

During 1922 1,564 children were checked at the Bristol T.B. Clinic of whom 1,067 were old cases and 497 new.¹² Throughout the city there would be three times as many others suffering from malnutrition, anaemia, bronchial complaints, crippling diseases and the many other afflictions of pre-penicillin days. The four schools in Bristol came nowhere near to providing the necessary accommodation for all these needy children.

Throughout the 1930s the country suffered from the effects of an economic depression and the consequent rise in unemployment and fall in standards of living. As poverty in the cities increased so did the incidence of T.B. Tuberculosis is a social disease. It thrives on overcrowded conditions, particularly on weakened people, and children were especially vulnerable. As the decade continued another affliction became even more common than T.B. – it was described as malnutrition. By 1937 malnutrition was a serious problem among schoolchildren in Bristol. The city clinics treated 151 cases where treatment consisted of the provision of food, cod liver oil and malt. As many as possible were sent to the open-air schools when a place became available. In 1938 the Bristol T.B. officer examined 1,035 children with T.B., 536 of them old cases and 469 new; there were still only 200 places available in the open-air schools to cater for these and the ever growing number of the malnourished.¹³

The situation was well understood but the difficulty was in finding another suitable building with the funds available. Eventually, the old Novers Hill Hospital, which had previously been an isolation hospital for smallpox victims, was bought and adapted to cater for 315 children. It would be known as the South Bristol Open Air School and on 15 January 1940 pupils from the Knowle school were transferred there, followed three months later by pupils from the three park schools. The well-established open-air routine was carried on at the new school. However, the early days can hardly have been satisfactory for they coincided with the Bristol blitz.

The city of Gloucester was much later in adopting the principles of open-air schooling. It was first suggested in 1926 but nothing matured until 1931 when the city's education committee considered adapting Oak Bank House on the south-facing lower slopes of Robinswood Hill at Tuffley as an open-air school for delicate children. However, because of economic restraints caused by the depression it was to be 1935 before the project made progress and even then application had to be made to the Ministry of Health for sanction to borrow £3,940 to meet expenditure and to spread repayment over 20 years.¹⁴

The school eventually opened to pupils in September 1936 with Miss Thomas as headmistress. It was initially known as the Open Air School and was designed to cater for around 100 children. The official opening took place on 29 January 1937.¹⁵ 'Here Gloster Children will be Made Strong' was the headline the following day in the local paper¹⁶ followed by headlines such as 'Fresh Air for the Delicate' and 'Attention to Weaklings'. As in Bristol, children were admitted on the advice of the school medical officer 'to aid their recovery from weakly and debilitated conditions'.

The Gloucester school comprised a system of treatment which included fresh air and sunlight, proper diet, rest, hygiene, medical treatment and special educational methods. The medical advisers of the time really believed in building resistance and adaptability to cold which was thought could only be achieved 'if the capillaries of the skin learned their gymnastics by exposure to widely

different temperatures'.¹⁷ In fact, the biggest aid to recovery was in removing the children from the smoke-polluted atmosphere of the city. Feeding was important because most of the children were initially malnourished and underweight and it was thought that the open-air conditions would stimulate their appetites for good wholesome food. The children were weighed regularly to indicate any improvement in their condition. Personal hygiene was not only taught but practised and lived, for the school was provided with well-equipped bathrooms which would have been used assiduously.

As for the special educational methods, in his speech at the school opening ceremony, Dr. J. Alison Glover, who was the Senior Medical Officer of the Board of Education, said 'The education which the delicate child received here was not merely to fill the gap in his learning caused by his absence from elementary school ... Every lesson was designed to interest, so that there was no strain on the children. It was as informal and non-academic as possible'.¹⁸

The classrooms at Oak Bank were built away from the house and had one side completely open and the windows all open on the other. As long as it was not raining the children had their rest period out in the garden under the trees, lying on folding beds (Fig. 4). This was considered an important part of the cure of delicate children, as the authorities believed that late hours and the disturbed sleep of children living in overcrowded dwellings were a potential cause of the debility. The midday rest was arranged after dinner for a period of one to two hours and always taken in the open unless weather conditions made it impossible. A flat canvas stretcher or trestle bed was used as these were comparatively inexpensive and much more satisfactory than deck-chairs.¹⁹

For their lessons they sat at individual desks with rugs over their knees. They needed to, for a report in *The Citizen* for 30 January 1937 stated 'Freezing all yesterday in Gloucester. Snow, frost, temperatures did not rise above freezing, the highest temperature was 28°F, four degrees of frost'.

After the Second World War the situation with regard to open-air education changed dramatically. New treatments, including antibiotics had been introduced and new ideas formulated for dealing with 'delicate' children. Standards of living improved and the incidence of T.B. declined. More and more physically handicapped children were sent to the schools, particularly after the

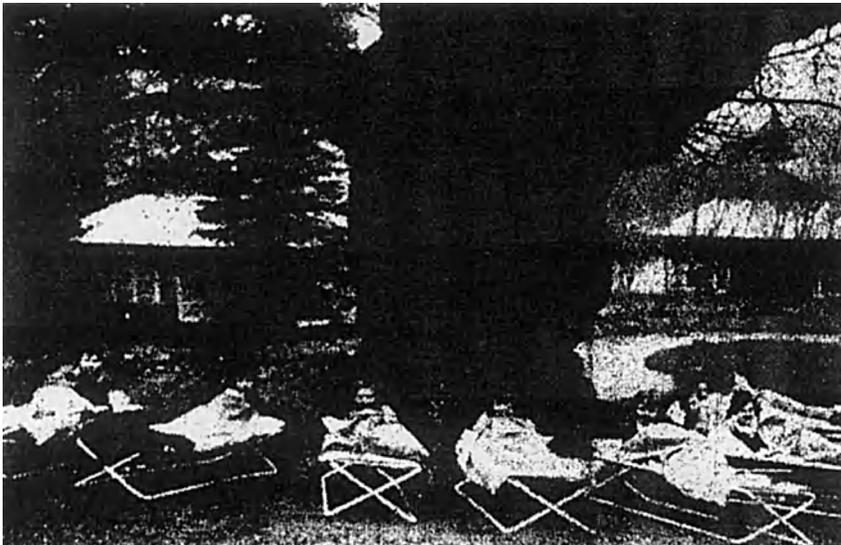


Fig. 4 Rest time at Oak Bank House, Gloucester (*Gloucester Journal*, 6 February 1937).

poliomyelitis epidemic of 1950. At the South Bristol School in 1953 the school medical officer reported a marked fall in the old type of 'open-air child' suffering from malnutrition or chronic ill health and in 1955 indicated that most of the children at the school were handicapped as a result of poliomyelitis and that crippling lesions resulting from tuberculosis were rarely seen.²⁰ At the Gloucester school in 1957 the premises were adapted so that physically handicapped children could be accommodated and the official name was changed to Oak Bank School.

For nearly 45 years the open-air schools and park classes had given many unfortunate children an opportunity for education, albeit harsh, which they grasped eagerly, and despite the discomfort many improved in health and some recovered completely. Their recovery, and in some cases survival, was a testimony not necessarily to the system but to the dedication of the teachers, doctors and helpers involved and especially to the tenacity of the children.

Acknowledgement

Part of this article appeared in pamphlet no. 78 of the Bristol branch of the Historical Association.

Notes

1. *The Bristolian*, May 1913, p. 120.
2. 62 & 63 Vic. c. 32.
3. London Metropolitan Archives, P22.54(CHA).
4. Bristol Education Committee Records (Br. Ed. Com. in Bristol Record Office), School Medical Officer Report 1912.
5. *Ibid.* Special Report on the Medical Inspection of Special Schools and Institutions 1914.
6. Knowle Health Centre, Broadfield Road, now stands on the site of the open-air school.
7. Br. Ed. Com., Special Report on the Medical Inspection of Special Schools and Institutions 1914.
8. *Ibid.* School Medical Officer Report 1914.
9. Bristol Civic League Annual Report 1914.
10. Br. Ed. Com., Elementary Education Sub-Committee, 17 March 1920
11. *Ibid.* Special Schools Sub-Committee, 17 January 1938.
12. *Ibid.* School Medical Officer Report 1922.
13. *Ibid.* School Medical Officer Report 1938.
14. Gloucester Borough Records (GBR in Gloucestershire Record Office), B 3/71(1), p. 69.
15. A brief history of the school is given in 'The Gloucestershire Schools Gazette' (typescript in Gloucestershire Record Office).
16. *The Citizen*, 30 January 1937.
17. *Gloucester Journal*, 6 February 1937.
18. *Ibid.*
19. Annual Report of Chief Medical Officer, Board of Education, 1923.
20. Br. Ed. Com., School Medical Officer Report 1955.