## BRADWELL HISTORICAL SOCIETY



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## **Up-coming events**

This month's talk with the intriguing title of 'Journeys of Discovery' will be given jointly by Jayne Borrowdale and Julia Bigley. They will be staying much nearer to home than did Paul Downing. The talk will take place at 8 pm in the Methodist Hall on Tuesday 15<sup>th</sup> April.

## Sheffield's Human Guinea Pigs.

A shorter version of this article appeared in the Bradwell News for March 2025

When the Prime Minister Neville Chamberlain introduced the National Service (Armed Forces) Act to parliament in September 1939 he was fully supported by both houses. The then Archbishop of Canterbury Cosmo Gordon Lang welcomed the clause allowing for Conscientious Objectors (COs). At the same time it was established that would-be COs must make their case before a properly constituted Tribunal. The *Derbyshire Times* for that year reported that the appeal of Ralph Walker of Bessie Lane not to be called up had been rejected. Ralph had explained to the Tribunal in Derby that he was the sole employee of a grocery store in Tideswell, (implying that the store would have to close without him?) He went on to state that as a member of the Methodist Church in Bradwell he believed war was a futile thing altogether and no good would come out of it. But when, as a religious man, he was asked to give a quotation from the Sermon on the Mount he was unable to do so – his case was dismissed.

Nevertheless the contribution of a group of men whose cases as COs were accepted arguably made a much more significant contribution to the war effort than if they had been called up. They became known as the Sheffield Human Guinea Pigs. Their previous occupations had included a milk rounds man, a ladies hairdresser, a baker, an electrician, a maths teacher, a laboratory technician and someone who'd 'tried everything from spot welding to winkle boiling'. The idea to assemble this group in a house in Broomhill called Fairholme was that of Kenneth Mellanby who was an entomologist, working in the University as the Sorby fellow, who had been placed on the register of reserved occupations. Such people were usually the likes of physicist

who would clearly be working on radar. But no one had a clue what to do with an entomologist. This did not suit Mellanby who asked around the City about diseases for which neither the cause nor the treatment was really understood. One answer came loud and clear – scabies (also known as 'the itch'). There was a high incidence amongst returning soldier. So Mellanby's idea was to recruit this group of COs to wear and sleep in the uniforms and pyjamas of affected soldiers. So the paradoxical position arose that men who did not wish to serve in the military spent most of their time in uniform. Officers visiting the Unit set up in Broomhill where the COs were living appreciated the sacrifices these men were making on behalf of the military.

We can trace the arrival of some of the 'guinea pigs' to Sheffield. Notable amongst these was Walter Bartley. As a Quaker living in Brighton and working as a laboratory technician his claim to be a CO was accepted but nevertheless his Collage employers sacked him. Walter heard of what was going on in Sheffield and decided he wanted to volunteer both as a guinea pig and a laboratory technician. Walter's coming in the city could hardly have been worse timed for that was on 12<sup>th</sup> December 1940 on which day the city suffered severely in the blitz. The roof was blown off his hotel whilst be was out at the Scala Cinema which was later itself badly damaged. On that night the home of another of Mellanby's recruits was also destroyed. He was a refugee restaurant owner from Vienna called Mr Roth who was to cook meals for the guinea pigs. With all this destruction both men moved straight into the house in Broomhill. This was a fortunate chance for Walter who in 1942 married Mr Roth's daughter Mella who herself was to become one of the guinea pigs.

The original plan was once the 'itch' appeared for the volunteers to be treated with the only treatment available at that time. This was quite as painful as the disease itself. So there was a great focus on prevention. For this reason they were not just passive sufferers in the study but were soon able to recognise the mite causing the disease in the population and in the laboratory (in which Walter Bartley and others worked). They were soon able to go out into the city to search for the mite among schoolchildren and advise on avoidance. By this time it was known from the COs work that exposure to infected clothing or surfaces took much longer to appear than was originally thought. Even then some of the volunteers allowed themselves to continue to be exposed when the disease was first recognised when immediate treatment was originally planned. This they said would allow the full course of infection to be followed. The extent of this sacrifice is clear in reports that the COs found their night ware had been torn to shreds in the morning.

Both in the laboratory and himself as a Human Guinea Pig Walter Bartley proved an outstanding worker and after the war went on to become Professor of Biochemistry in the University. You can find a magnolia tree in his memory.in the Botanical Garden.

Even when they were undergoing this study there was underlying humour as when they decided their motto should be 'Itch Dien'. One of their ranks summarised their finding in the form of a poem that read

Recondite research on *Sarcoptes*Has found that infections begin
On leave with your wife or your children
Or if you are living in sin
Except in the case of the clergy
Who achieve remarkable feats
And catch scabies and crabs
From door handles and cabs
And from blankets and lavatory seats.

Next time we will learn the role the COs played in the production of the "National Loaf' and the dietary requirement for vitamins A and C. In this part of the study we find the name of Mella Roth by then Mella Bartley as one of the volunteers and the name of Hans Krebs taking over from Kenneth Mellanby as the organiser. The name of Krebs is known to generations of biological scientist as the discoverer of the Krebs Cycle. Part of this work for which he received the Nobel Prize was carried out in Sheffield in a converted cinema.