

A 'SINGULAR CALAMITY'

WATTISHAM is a small village near the centre of Suffolk. In 1762 an event occurred there which is commemorated by an inscription in the north west corner of the parish church. The tablet reads as follows:

This Inscription Serves to Authenticate the Truth of a Singular Calamity, Which Suddenly Happened to a poor Family in this Parish, Of which Six Persons lost their Feet by a Mortification not to be accounted for. A full Narrative of their Case is recorded In the Parish Register & Philos: Transactions for 1762.

There are five contemporary accounts of this incident. It was reported to the Royal Society by Dr. Wollaston, a physician in Bury St. Edmunds, on 13 April and by the Reverend James Bones, the Minister of Wattisham. A short report appeared in the *Ipswich Journal* on 17 April. On 1 May a statement was published in the same paper that 'as the truth of that very melancholy and extraordinary case . . . is doubted by many' a more complete account of good authority would be published shortly. On 8 May a very detailed story appeared which was based on information from Dr. Wollaston. Later in the year a full account was written by hand on the last three pages of the parish register. All these versions agree about the main facts, and the variations can be explained by the fact that they were written at different times. In addition Dr. George Baker must have written to the Reverend Bones asking certain specific questions. The answers to these questions are contained in a second letter that the Reverend Bones sent to the Royal Society.

The story concerned John Downing, a poor labourer in the village, his wife Mary and their six children. They were all quite well until January 1762. The youngest child had been born recently, having been baptised on 8 November 1761.

On Sunday 10 January the eldest daughter Mary, aged fifteen, complained of severe pain in the left leg, particularly in the calf. By nightfall the pain had become excruciating, she likened it to being gnawed by dogs. The same evening another daughter also suffered from similar pain and by the next day the mother and a further child were also in pain. By Tuesday the whole family except the father and the baby had similar symptoms, some in one leg and some in both. The pains continued for several days, then the diseased limbs developed blue spots as though they had been bruised and the affected parts gradually turned black and gangrenous. The flesh sloughed off the bone and in most cases the surgeon simply cut through the dry bone.

The eldest girl lost one leg below the knee but by April the gangrene in the other leg had spread to involve the ham with a large abscess beneath it. Although the surgeon evacuated the abscess she died. She was buried on 21 May. Mrs. Downing, aged forty, lost both legs below the knees. Her hands and arms were numb and her fingers contracted. The last record of her in the parish register is that 'She is now almost well and likely to live many years'. Elizabeth, aged fourteen, lost one leg below the knee and the other foot. Susan, aged ten, lost one foot, the other was slightly affected but recovered. Robert, aged eight, lost both legs below the knees while Edward, aged four, only lost his feet.

John Downing was attacked by the disease about a fortnight after his family and to a much less degree. The pain was confined to his fingers, two on his right hand

News, Notes and Queries

became shrunken and ulcerated. The nails on his left hand turned black and he lost two of them. The baby had been taken from her mother's breast at the onset of the illness. She seemed to be in some pain but she lived for about eight weeks in the care of a nurse. After death it was said that her hands and feet turned black. She was buried on 5 March.*

As the result of Dr. George Baker's questions it is known that the family drank water from a local pond and brewed their own beer in a large brass kettle. In the winter they lived on pickled pork, pease, milk, cheese and bread. In the period just before Christmas 1761 they had eaten ewe mutton. They did not eat rye bread. However, they had eaten bread made from poor wheat. This wheat, grown by the local farmer, had lain on the ground for a long time. It appeared discoloured so it had been threshed separately from the rest of the crop. Around the Christmas period several people in the village had used it but it made 'bad bread and worse pudding'. Although most people in the village had not been affected by the disease, at least one labourer in addition to the Downing family had had symptoms. On 9 January and for the next four weeks this man had complained of numbness and coldness of his limbs and the ends of his fingers had peeled. He had still not recovered entirely by May.

Dr. Wollaston wrote that it was an exceptionally mild January so that the disease could not have been caused by the cold and that a nurse lived in the house with the family while they were ill and was not affected.

The clinical picture of a group of people in good health who simultaneously develop severe pains in the limbs followed by gangrene but who are otherwise not toxic is characteristic of ergot poisoning. It is also typical that one of those affected had blackening and subsequent loss of finger nails. Although this family had not eaten rye bread, it is known that at the relevant time they had eaten bread prepared from damaged and discoloured wheat. Others in the village had eaten this wheat but only one other poor man had been affected. However, this wheat had made 'bad bread' so that it is quite likely that all those who could afford it turned to more attractive flour leaving the poor people to finish the damaged food.

The consumption of ergot must have occurred in December 1761 and the first week of January 1762. Mrs. Downing had given birth to a child in November so that it is unlikely that she could have ingested any ergot before that time since it is particularly lethal to pregnant women and their babies.

It seems probable that the Downing family suffered from gangrenous ergotism. The diagnosis, however, must be in doubt in regard to the baby. She was still breastfed when Mrs. Downing became ill. She was presumably wet nursed from that time on. She died almost eight weeks later. The mortality amongst such infants was very high in any case. Furthermore, it is difficult to understand how such a small baby could have swallowed an appreciable quantity of the damaged flour.

There is no record of the fate of the survivors after 1762. A 'John Downing' died in Wattisham in 1773 but it was probably not the father of this family because in all previous references to him in the register he is called John Wethersett alias Downing.

The *Ipswich Journal* appealed for charity for this unfortunate family. The parish register shows that over £500 was collected. Annuities of three shillings a week were

*This entry in the register is blurred and could be 5th, 15th or 25th.

obtained for the two surviving daughters Elizabeth and Sarah. This money was to be paid out in any parish where they might choose to live. An account of this money was to be kept in the Parish Chest. Unfortunately this account has not been found.

This calamity occurred in a small village whose population was less than 150 (154 in the 1801 census), yet it produced a considerable reaction including newspaper articles, letters to the Royal Society, a collection from the county of £500, a full account in the parish register and a memorial tablet in the church. Such a reaction must indicate that such a medical condition had not been known in this part of the world for at least several generations. Previous outbreaks of gangrenous ergotism would surely have left some trace in the oral traditions and superstitions of the countryside. Instead this calamity came entirely 'out of the blue' so much so that John Downing believed it was all due to witchcraft.

In the countries of Western Europe gangrenous ergotism was common in the twelfth and thirteenth centuries. As a result a religious tradition in the name of St. Anthony had developed. St. Anthony was depicted in a dark cloak, in company with a boar and a crippled child. There is no such tradition in Suffolk nor are any of the five hundred or so pre-reformation Suffolk churches dedicated to St. Anthony. This disease called St. Anthony's fire occurred spasmodically in Western Europe. The cause of the disease, the corn smut or fungus *claviceps purpurea*, was recognized by the seventeenth century (the University of Marburg may have a just claim for 1597). Certainly by the latter half of the seventeenth century the cause was well known in France. In 1709 there was a severe outbreak in the Orleans District and Noël, physician to the Orleans hospital, wrote an account of it. This paper was available at the Royal Society and comparisons were made between the disease in France and that in Wattisham but without any definite conclusions being reached.

The fact that the 'calamity' was reported to the Royal Society may be the result of Dr. Charlton Wollaston being consulted as the physician. This young man (b.1733) had become a Fellow of the Royal Society in 1756. He was appointed physician to the Middlesex Hospital in 1757. He practised in Bury St. Edmunds for four years only, 1758–1762, returning to London later in 1762. The letter he wrote to the Royal Society was his only publication concerning Suffolk.

Barger, in his monograph on ergotism, accepted the diagnosis of the Downing family as being the only recorded instance of gangrenous ergotism due to eating contaminated cereals that has occurred in this country. His only doubts about the diagnosis were that the rest of the villagers were not seriously affected and that John Downing had less gangrene than the rest of his family. It is not known how much of the damaged wheat was eaten by the Downing family or by the rest of the village. The Reverend Bones, who supplied the information about the wheat, also lodged with the farmer who grew the wheat. This farmer obviously had an interest in minimizing the part that his corn might have played in such a tragedy. As regards Barger's second doubt, any disease affecting a group of people seldom affects them all to an equal degree.

A small quantity of rye has been grown in Suffolk for at least two hundred years. There is no record that it has been contaminated with *claviceps purpurea*. Barger maintains that rye is more likely to be affected than other cereals because it has to be cross pollinated. However, he admits that wheat can be affected on occasions.

News, Notes and Queries

If this was the only instance of gangrenous ergotism due to damaged grain that has been recorded in England, then the person who wrote the inscription in Wattisham Church used a particularly apt expression when he called it 'A singular calamity'.

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