

A GREAT DELIVERANCE

UPPINGHAM'S TYPHOID EPIDEMIC 1875-7

Nigel Richardson



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BRIEF GLOSSARY OF TERMS

RSA	Rural Sanitary Authority	MOH	Medical Officer of Health
LGB	Local Government Board	PWLB	Public Works Loan Board
MO	Medical Officer	USA	Urban Sanitary Authority



Edward Thring (1821-87), Headmaster of Uppingham School 1853-87.

Front Cover: Uppingham from the south-east, 1871.

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There is a twin publication, *A Spring Invasion*, which describes the school's time in Borth in 1876-7 in greater detail: ISBN No. 978-1-9196205-1-0.

With thanks to Uppingham School for the use of many pictures from its archive, and to the Uppingham Local History Study Group and others as indicated in the text.

This publication is dedicated to the memory of Peter Lane: a good neighbour and a distinguished local historian who shared his knowledge generously.

BACKGROUND

‘A Great Deliverance’ was Revd. Edward Thring’s description of what Uppingham School experienced after the typhoid epidemic which struck it three times in 1875-6, causing its temporary migration to the Welsh Coast. He likened the school’s upheaval to the wanderings of the Israelites in the Old Testament.

For the town, these events represented a deliverance of a different kind. It emerged from its previously hazardous state of public health, thanks to the provision of a greatly improved sewerage system and new mains water supply - achieved after much pain, recrimination and expense.

In 1975-6 whilst teaching history at the school I came across a slim book in the library by JH Skrine, one of Thring’s masters, entitled *Uppingham by the Sea* (1878). It paints a vivid picture of the heroic school battling against indifferent, even vindictive, town leaders.

From this came a research path of almost four decades: in the school archives, amongst census records and business directories at the Leicester Record Office, the back-numbers of the *Stamford Mercury* and several provincial and national papers. It also prompted the first of many visits to Borth, and to the National Library of Wales in Aberystwyth. A documentary play was performed in the Uppingham Theatre in 1977 to mark the centenary of the school’s return.

At that point I had only uncovered material which was highly sympathetic to the school. In 1993 after moving elsewhere I had a great piece of good fortune: the discovery of many boxes of papers in the National Archive at Kew relating to the town’s dealings with the Local Government Board (the government department which oversaw local authorities in Victorian times). These documents demonstrated how well-

documented Uppingham was for a town of its relatively small size, and also that the challenges faced by the town’s leaders were formidable. The dispute was more complex than had previously been thought.

In 2004-6 I brought the two strands of research together in a Ph.D. thesis for University College, London. The thesis became a published monograph: *Typhoid in Uppingham; Analysis of a Victorian Town and School in Crisis 1875-1877* (Pickering and Chatto, 2008).

That book is no longer in print, but I hope this abridged version will make the events of 1875-7 accessible to a larger number of readers. A twin publication, *A Spring Invasion*, describes events in Borth. I have aimed to avoid too much overlap between the two booklets, but it is necessary to explain how events in Uppingham and Borth interacted.

Ironically, the time to work on both of them resulted from the weeks of self-isolation demanded by the Coronavirus-19 epidemic of 2020-21. Uncertainties about the spread of that disease and the need for drastic action to overcome it provide interesting parallels with what Uppingham, albeit on a more local scale, went through 150 years earlier.

Many people have helped me along the way, notably my supervisor, Professor Anne Hardy, at the Wellcome Trust Centre for the Study of the History of Medicine, two former Uppingham colleagues, Dr Malcolm Tozer and Jerry Rudman, the school archivist, and Helen Palmer, County Archivist at *Archifdy Ceredigion Archives*. Others are acknowledged in my monograph, and in *Thring of Uppingham: Victorian Educator* (University of Buckingham Press, 2014) which explains Thring’s wider significance.

Nigel Richardson,
Harston, Cambridge, July 2021.



Boys leaving a lesson held in the Elizabethan schoolroom.



Engraved at Sturtevant's Hall

Uppingham. 2
(From the South West)
Published by John Heathorn, Uppingham.

Printed

Uppingham from the south west in 1870. Left to right: the Lower School and its gardens, West Bank, West Deyne, Lorne House, Thring's 1863 school room, the chapel and the parish church. Houses built on this large scale greatly stretched the town's limited health and water provision.

INTRODUCTION: THE VICTORIANS AND TYPHOID

The typhoid epidemic of 1875-7 which ravaged Uppingham is a notable event in the nineteenth century history of public health and of education.

Most public health research has centred on cities and large towns, but England in the 1870s also contained over 400 market towns with populations of up to 10,000 and many more inhabitants in their surrounding villages.

In many of these smaller communities records are hard to come by, but Uppingham's epidemic is almost uniquely well-documented. It also provides us with a snapshot of how little was known in the 1870s, especially in rural areas, about the causes of typhoid.

Modern science has shown that typhoid is a systemic infection caused by the bacterium *salmonella typhi*. Untreated, it lasts 3-4 weeks, killing about 10% of its victims and leaving 2% as permanent carriers. It is progressive: marked by the gradual onset of a sustained fever with headaches, coughing, severe digestive discomfort and generalised weakness.

It can cause spleen and liver enlargement, and it is sometimes marked by a rose-spot rash. The attack rate of the disease is in proportion to the number of organisms ingested. Almost unique among the *salmonellae*, its bacilli are adapted only to humans.

It is normally waterborne, contracted through drinking water contaminated with the bacterium *salmonella typhi*, and often transmitted via sewage-contaminated water, or by flies which carry the bacterium from infected faeces to food.

The bacillus can survive for many weeks in water and ice. Rivers, ponds and wells are all infected by carriers, either directly

or via excreta washed down by rains or faulty sanitary systems.

Prevention therefore depends crucially on separating sewage and drinking water. The disease can also be spread through contaminated food (especially by carriers handling milk, ice cream, fruit and salads, or as a result of shellfish in contaminated water), infected vomit, and typhoid pus.

The typhoid patient usually ceases to excrete the bacillus within a month of onset, but convalescent carriers may do so for up to about six months, and it can remain in chronic carriers for some years.

Symptomless carriers represent a special danger because their existence is often picked up only during the investigation of an epidemic, if at all. Around 3% of people who have been infected continue to excrete bacteria in either urine and/or faeces once restored to health, and thus become 'healthy carriers' who may infect others through handling foods, etc if hygienic precautions are lax.

The Victorians' knowledge of typhoid went little beyond the fact of its being acute and highly infectious. Doctors and civil servants had a broad understanding of its water-borne (and sometimes milk-borne) nature, but gained little insight into precisely how this occurred, other than through 'an excrement-sodden condition of the soil'.

At the 1867-9 hearings of the Royal Commission on water supply, germ theories had still been speculative. It was not clear why faecally polluted water only occasionally produced epidemic disease. Previous decades had seen the gradual rise of the germ theory (water-borne 'poison') against the miasma theory (foul air or gases) and theories of contagion (person-to-person touch).

Understanding was achieved in stages: notably through the connection made in the 1840s by William Budd between typhoid outbreaks and faecally contaminated food and water, which was subsequently confirmed by John Snow's medical mapping of the effect of the Broad Street pump during the 1864-5 London cholera outbreak.

Even though the germ theory gathered momentum, there was continuing disagreement about its precise nature, and a reluctance to abandon the miasma theory altogether. This was an age which associated odours very closely with disease. Moreover, medical knowledge gained in London and other cities filtered down only slowly to rural areas.

This explains why, throughout the Uppingham epidemic, several causation theories were pursued simultaneously. It was only in the decade just *after* the Uppingham crisis that key discoveries in bacteriology were made: the cholera and typhoid bacilli were identified and cultured, a diagnostic test was devised, and finally a vaccine was produced in 1900-2.

Meanwhile in the 1870s, in cases of water-borne typhoid (as opposed to outbreaks caused by contaminated milk or food), a few epidemics were dramatic - with a succession of patients rapidly affected when a normally safe water supply became seriously contaminated. Mostly, however, there was a slow, on-going series of single cases or small groups appearing over quite a period of time, resulting from low-level pollution.

All but the chronic carriers were hard to identify and isolate, although in an age when nearly all domestic work and cooking was done by females, it was recognized that chronic carriers typically tended to be middle-aged or elderly women.

Methods of treatment were haphazard at best. They included the depletion of blood, improving the diet, pouring cold water over the surface of the body, 'shaving the scalp and applying cold embrocations', or ordering that all windows be kept open. There were herbal treatments based on hellebore root and alcohol (especially champagne) for the wealthy, and elm or holly bark concoctions for the less affluent.

In 1876 the *British Medical Journal (BMJ)* estimated that about 100,000 people contracted typhoid each year - with perhaps another 40,000 undiagnosed cases. The average case lasted up to five weeks, and the *Journal* estimated that nearly 14,000 were ill at any one time.

Estimates of deaths per year varied; *The Times* suggested 10,000-12,000. Optimists noted that fatalities had been declining for fifteen years, but a more pessimistic Medical Officer of Health (MOH) wrote that, despite skilled nursing and careful medical treatment, typhoid's course remained 'prolonged and perilous... excepting diphtheria it has probably the highest death-rate of all the infectious diseases prevalent in this realm'.

It was no respecter of class. Whereas louse-borne typhus and to a lesser extent cholera (water-borne) tended mostly to affect poorer city dwellers, typhoid was less confined to urban areas and could affect the highest in the land. It had claimed the life of Queen Victoria's husband Albert, the Prince Consort, in 1861 and nearly carried off her eldest son, the Prince of Wales a decade later.

The limitations of knowledge in mid-Victorian Britain can be seen in a leading article in *The Times* on 13 January 1876, in which the paper hedged its bets between the miasma and germ theories. It described how typhoid was:

‘A sort of smallpox, which affects the bowels instead of the skin... It is spread abroad chiefly by discharges from the intestine [which then] find their way into cesspools and sewers [rendering them] poisonous and also the gas which is evolved from them...

... The fever is reproduced mainly in three ways - first, by poisoned sewage obtaining direct access to drinking water, by leakage or soaking, and so being swallowed; secondly by the poisoned gas escaping from the sewers into water mains or cisterns, so that it is absorbed or dissolved by the water, and so swallowed; and thirdly by the poisoned gas making its way, through badly-trapped drains or other channels, into dwelling or sleeping rooms, and so being breathed by the occupants...’

Even a medical expert as famous as Sir John Simon (the first MOH for the City of London) had once believed that typhoid was spread by ‘sewer atmosphere’, although shortly before 1875 he had come to accept that a more likely cause was ‘molecules of excrement’ and ‘microscopical forms’, as the new germ theory gained acceptance. *The Lancet* (another well-known medical journal) was similarly uncertain: in that year it reported several typhoid cases among men exposed to sewer gas.

Uppingham’s epidemic also aroused great interest in educational circles in the 1870s.

The growth in the school’s size and national reputation since Thring’s arrival there in 1853 was well-known. He was understandably keen to draw the public’s attention to the threat which the epidemic posed to its very existence, not least because he and his housemasters had so much of their own capital and livelihoods bound up in the school.

The fact that typhoid had existed in small towns like Uppingham for many years had

made few headlines, but once there was a threat to the sons of the rising middle classes, it provoked a highly-publicised crisis of confidence amongst influential parents living right across the country and beyond.

However, Uppingham was not the only small town with a large boarding school. Many such schools flourished in the wake of the economic growth symbolised by the Great Exhibition of 1851.

Their development led initially to big economic and employment benefits for their local communities while times were good, but when harder economic conditions arrived in the 1870s, tensions grew. By the end of the century, with the growth of the railways and of a more sophisticated retail network, schools had come to rely less on local tradesmen and more on national distributors.

Nor was Uppingham the only boarding school to be hit by epidemic disease. Each year, after relatively healthy summers, the coming of autumn coincided with the new school year and posed a special threat.

By their very nature, highly concentrated, residential communities of young people were always at risk, and they were hit by (amongst others) smallpox, influenza, scarlet fever, diphtheria, measles, mumps, whooping cough, tuberculosis, pneumonia, meningitis, septicaemia and acute rheumatism.

Waterborne infections spread rapidly: in *Tom Brown’s School Days* at Rugby, the description of the illness of Tom’s friend suggests enteric fever. Its famous headmaster, Dr Thomas Arnold, once took large numbers of pupils to the Lake District to escape cholera in the town.

Conditions in boarding schools were often primitive. Thring’s own schooldays in the 1830s were spent in the notorious Long

Chamber at Eton, with no basins and no piped water. At Westminster rats ate the boys' clothing as well as their food. The contents of Winchester College's privies (outdoor toilets) passed into a stream outside the College gate, joining up with town sewage. In Rugby, piggeries, kennels and stables were part of everyday life in the town, and after the annual fair the filth in the streets took over a week to remove. Ditches and cesspits existed alongside wells used for drinking water.

Many boarding schools were affected, including Charterhouse, Christ's Hospital, Cranleigh, Epsom, Haileybury, Lancing, Marlborough, Radley, Rossall, St Paul's and Wellington. Prep schools suffered too - including Oxford's Dragon School and Summer Fields.

As demands for better public health grew after 1850, there was a clamour for improved conditions in schools. *The Lancet* called repeatedly for better hygiene and food, comprehensive record-keeping, notification by parents of diseases suffered at home, medical examinations of pupils on their return to school and the appointment of medical officers (MOs) in all boarding schools.

Only with mains water and better drainage at the end of the nineteenth century and with the development of new drugs fifty years later did the epidemic problem largely disappear.

In the century after Thring, historical writing described the Uppingham epidemic almost entirely from the viewpoint of the school. While in no way playing down his leadership and organisational skills and his bravery, this account - 150 years after the events that shook Uppingham to its foundations and threatened it with permanent closure - seeks to show that earlier accounts of the battles between town and school were too simplistic.



JH Skrine (1848-1923), Captain of the School 1865-7 (as shown in this photograph), he returned to teach there from 1873-87.

His book *Uppingham by the Sea* (1878) gave a romanticised picture of the school's time at Borth. Later he was Warden of Glenalmond College.

Extract from *Uppingham by the Sea*

'There is something magnetic in a famous site: it attracts again a like history to the old stage. Thirteen centuries and a half after the finding of Taliesin (a child in Welsh mythology, drifting in a coracle until discovered by fishermen), the same shore became once again an asylum for other outcasts, whose fortunes we propose to chronicle...'

English schools have always honoured their traditions, counting them the better part of their wealth. Some have majestic memories of royal benefactors, or can point to a muster-roll of splendid names... Such traditions are not ours. But a tradition we have henceforward, which is all our own and wholly single in kind. We persuade ourselves that in far-off years those who bear our name will say, that in the memory of a great disaster overcome, no mean heirloom had been left to them...'

The 1871 census: Town and School

One of themes running through many of the events of 1875-6 was the way in which the town and the school overlapped, physically as well as economically (and still do). Census extracts confirm this. Immediately below are extracts from the three pages which relate directly to people in Thring's own boarding house.

In extract 1, the Nichols and Thring households are listed as living in School Lane; thus Thring's nearest neighbour was a town confectioner. It lists Thring's three daughters and their governess: his two sons were boarders elsewhere in the school. Extracts 2 and 3 list the Thring family's domestic servants: parlourmaid, matron, upper housemaid, kitchenmaid, under housemaid, under nurse, footman, page and nurse.

The under-mentioned Houses are situate within the Boundaries of the									
Civil Parish (or Township) of	Municipal Borough of	Municipal Ward of	Parliamentary Borough of	Town of	Village or Hamlet, &c., of	Local Board or (Improvement) Commissioners District of	Ecclesiastical Parish of		
Uppingham				Uppingham					
No. of Schedule	ROAD, STREET, &c. and No. or NAME of HOUSE	HOUSES (No. of Cottages, &c.)	NAME and Surname of each Person	RELATION to Head of Family	CON-DITION	AGE of	Rank, Profession, or OCCUPATION	WIVES BORN	
								Male	Female
60	School Lane	1	Thring Nichols	Head	Engl.	42	Confectioner	Northampton	Northampton
			Ernest Nichols	Wife	Engl.	39		Northampton	Northampton
			Emily Nichols	Daughter	Engl.	15		Northampton	London
61	do	1	Edward Thring	Head	Engl.	47	Minister of the Gospel	Northampton	Northampton
			Emily C. Thring	Wife	Engl.	36		Northampton	Northampton
			Samuel C. F. Thring	Son	Engl.	14		Northampton	Northampton
			Margaret L. Thring	Daughter	Engl.	12		Northampton	Northampton
			Thomas G. Thring	Son	Engl.	4		Northampton	Northampton
			Amelia W. Lebbin	Governess	Engl.	42	Governess	Northampton	Northampton
			William M. Common	Parish Clerk	Engl.	48	Parish Clerk	Northampton	Northampton
			Philip W. French	Son	Engl.	18		Northampton	Northampton
			Arthur C. Lewis	Son	Engl.	16		Northampton	Northampton
			Charles S. Clough	Son	Engl.	14		Northampton	Northampton
			Arthur Arnold	Son	Engl.	14		Northampton	Northampton
			Emma Elbe	Servant	Engl.	20	Domestic Servant	Northampton	Northampton
			Lady Burbridge	Son	Engl.	20		Northampton	Northampton
			Mary Beadell	Son	Engl.	20		Northampton	Northampton
			Walter Beadell	Son	Engl.	18		Northampton	Northampton
			Mary A. Jackson	Son	Engl.	16		Northampton	Northampton
			Emma Weston	Son	Engl.	14		Northampton	Northampton
			Thomas Whaley	Son	Engl.	14		Northampton	Northampton
61	School Lane	1	Charles Pettit	Servant	Engl.	18	Domestic Servant	Northampton	Northampton
			Samuel Frye	Son	Engl.	18		Northampton	Northampton

On the pages from which extracts 1 and 2 are taken, there are also the names of 33 'scholars' (of whom only five are shown here, the last being Arthur Arnold at the top of Extract 2). Their places of birth range from Leicester to places right across the country, Dublin and India, illustrating how Thring had taken the school away from its historic roots as a country grammar school.

The Rector, Revd. William Wales, would emerge as a severe critic of Thring. He was Chancellor of the Diocese of Peterborough, married to a wife with private means. This may help to explain the six servants on the census return. Although the Rectory at 2 London Road (opposite the parish church) was one of the best houses in the town, his neighbours seem to have been less affluent. They are not shown here, but the census lists them as a laundress and a teacher of music on one side, and a gasfitter and publican on the other. Those listed at the top of the census's next page are a labourer, confectioner, baker, baker's apprentice and dressmaker.

57	Market Place	1	William Wales	Head	Engl.	52	Rector of Uppingham	India	Bombay
			Louisa W. Wales	Wife	Engl.	50		Leicester	Leicester
			Henry S. Spencer	Servant	Engl.	18		Leicester	Leicester
			Reginald Barlett	Servant	Engl.	16		Leicester	Leicester
			Mary A. G. Malins	Son	Engl.	14		Leicester	Leicester
			Ellen W. Hill	Son	Engl.	12		Leicester	Leicester
			Ann Goodwin	Son	Engl.	10		Leicester	Leicester
			Samuel Stapleton	Son	Engl.	10		Leicester	Leicester
			James Price	Son	Engl.	10		Leicester	Leicester

The 1871 Census: town and school on High Street West

This is another example of how town and school intermingled, as the following two pages from the census show. No. 22 was a school boarding house. No. 23 was owned by a local GP, Dr Thomas Bell, who was also the school's Medical Officer. He too had living-in servants.

William Campbell, the housemaster of Lorne House (25 High Street West), had a large family of his own - which helps to explain his entourage of domestic servants. As with Thring's house, Campbell's boys came from across the whole of England - as the page in the census which follows these two (but is not shown) confirms.

No. of Schedule	ROAD, STREET, &c. and No. or NAME of HOUSE	HOUSES Unoccupied (No. of Houses)	NAME and Surname of each Person	RELATION to Head of Family	CON-DITION	AGE of Person	Rank, Profession, or OCCUPATION	WHERE BORN	No. of Children
22	High street	X	Charles R. Bingham	Head		28	Scholar	Hunts, Ramsey	
			Richard L. Abornian	Son		18	Do	London	
			Martha M. Raymond	Do		18	Do	York - Driffell	
			Henry L. Wright	Do		18	Do	London	
			Benny J. Tucker	Do		18	Do	Liverpool	
			John G. Clutter	Do		18	Do	Sussex - Walsington	
			Algernon S. M. Clark	Do		18	Do	Do	
			Gertrude S. Mackintosh	Do		18	Do	Herts - Berkham	
			Thomas S. Brewer	Do		18	Do	Middlesex - Hampstead	
			Henry J. J. Jones	Do		18	Do	London	
			Lawrence W. H. Dickman	Do		18	Do	Gloucester - Lydney	
			Alfred Bicknell	Do		13	Do	Do	
			Edward L. Pudge	Do		13	Do	Worfolk - Fakenham	
			Robert S. Latham	Do		13	Do	Worke - Horstead	
			Samuel S. Johnson	Do		13	Do	Richmond	
			George M. Edwards	Do		13	Do	Wiltshire - Blandford	
			Edward S. Edwards	Do		13	Do	Do	
23	High street	1	Thomas Bell	Head		30	General Practitioner (F.R.C.P.S., F.R.S., F.R.C.S., F.R.C.O.)	Rutland - Appleton	
			Louisa M. Bell	Wife		37		Cambridge - Northway	
			Margaret K. Bell	Servant		5		Rutland - Appleton	
			Allie M. Bell	Do		4		Do	
			Charles V. Bell	Son		2		Do	
			Edward M. Bell	Son		1		Do	
			Mary G. Harding	Servant		30		Cambridge - Leaton	
Ann Taverner	Servant		30		Somerset - Taunton	Rutland - Appleton			
23	High street	X	Ann M. Race	Servant		16	Domestic Servant	Essex - Boston	
			Margaret Dudley	Do		16	Do	Co. Wick - Blackstone	
			Elizabeth Brown	Do		15	Do	Rutland - Waddington	
24	Do	1	George Williamson	Head		38	Tailor & Confectioner	Essex - Chelmsford	
			Harriet Williamson	Wife		35		Do - Boston	
			Martha A. Williamson	Servant		6		Rutland - Appleton	
			Frank W. Williamson	Son		5		Do - Do	
			Henry F. Williamson	Son		4		Do - Do	
25	Do	1	Edith A. Williamson	Servant		3		Do - Do	
			William Campbell	Head		39	Chapman's M.B. (without name of firm)	Wiltshire - Devizes	
			Fanny Campbell	Wife		36		Wiltshire - Devizes	
			Emily Campbell	Servant		12		Wiltshire - Devizes	
			Louisa G. Campbell	Servant		10		Wiltshire - Devizes	
			John F. Campbell	Son		8		Wiltshire - Devizes	
			Fanny G. Campbell	Servant		6		Rutland - Appleton	
			Agnes S. Campbell	Servant		4		Do - Do	
			William G. Campbell	Son		1		Do - Do	
			Martha Campbell	Servant		16		Wiltshire - Devizes	
			Elizabeth Martin	Servant		16		Wiltshire - Devizes	
Elizabeth Poby	Do		12		Co. Wick - Driffield				
Ann Templeman	Do		12		Do - Housewife - Cambridge - Whitwell				
Maude Walker	Do		12		Do - Wiltshire - Kimberley				
Ann Walker	Do		12		Do - Do				
Sarah Lunn	Do		12		Do - Nurse - Wiltshire - Mearns				
Sarah Whitmore	Do		12		Do - Nurse - Wiltshire - Mearns				

Not shown are George Williamson, 'tailor/confectioner', at No. 24, and William Beardsworth, 'plumber and painter', at No. 26. No. 27 was occupied by the curate and his wife. At No. 28 was Eliza Baverstock, 'clergyman's widow'. Her late husband had been one of Thring's masters in his early years at the school.

CHAPTER 1: TOWN AND SCHOOL IN 1875

Uppingham in 1875 was a typical rural market town of just over 2600 people living in c450 properties. Small, close-knit and with a strong sense of stability, as yet it had no railway, so omnibuses departed six times a day for the stations at Manton and Seaton.

Forty-five local carriers provided goods and passenger links to Oakham or nearby villages. Daily papers did not arrive until lunchtime. Letters arrived and were despatched twice a day and once on Sundays.

The town covered about 50 acres, with its High Street running east-west. The narrower North Street and South Lane ran parallel on either side of it, with shorter lanes running at right angles.

There had been a settlement for twelve or thirteen centuries, but most buildings were less than a century old. They were built with material from nearby quarries - although workings which had once been close to the western edge of the town had now given way to housing.

Local trade directories show the area as overwhelmingly agricultural. Most people drew their income from working on the land as agricultural labourers, gardeners and in farm-related trades, or as saddlers, blacksmiths, shepherds and herdsmen.

The market had been in existence since 1281 and was now held every Wednesday, with music, singing and dancing. Revellers bought hot pies and gingerbread from local street sellers. During cattle fairs in March and July, pens of sheep and other animals occupied much of the High Street, giving off very pungent smells. Horses, cows and pigs were kept in groups all through the town and they often escaped.

Horse racing and feasts took place through the year, along with Guy Fawkes celebrations which included cartloads of

effigies of well-known figures to be burned. These events sometimes got out of hand, causing the local constable to intervene. In 1841 this had led to a near-riot with shots being fired.

The population included some familiar family names: Baines and Cliff(e), Dorman and Ellingworth, Thorpe and Tyers. Just over half the family businesses in the 1876 Directory had also appeared in 1850, which is not surprising: over half the people in the town had been born there and most of the rest within twelve miles. Of married men born in the town, over 60% had chosen local brides.

The spire of the fourteenth century parish church had recently been restored: services were held there at least twice each Sunday. It was closely linked to the national school which could cater for 360 children. The Rector, William Wales, and his three churchwardens had all been in post for two decades, assisted by sidesmen who were mostly shopkeepers or farmers, along with one of the local doctors, Thomas Bell.

The 200+ small businesses included nearly 30 builders, joiners, carpenters plumbers and those offering domestic services such as clock repairs and chimney sweeping. 35 derived their income from farming and agriculture; there were a dozen innkeepers and nearly 60 shopkeepers - including seven butchers, five bakers, seven grocers, a greengrocer, florist, photographic artist, and no fewer than fifteen dressmakers, tailors and milliners - along with three doctors and surgeons and one vet.

Many shopkeepers were members not of the parish church but of one of the several dissenting chapels.

The *Stamford Mercury* appeared each Friday. Its advertisements and announcements included the meets of local hounds, the workhouse Christmas treat, lectures, concerts and dances.

Theatre performances were held in a barn in the grounds of the Hall in High Street East. The reading room contained a subscription library of newspapers and 1,000 books for 300 subscribers. The town boasted one club for football and two for cricket.

There was a fire station on the Glaston Road and a small police station with two cells on Stockerston Road. Gas lighting had been installed in the 1830s and improved thirty years later, but supplies to houses and streets were not always reliable and the local company's charges were hotly disputed. There was no electricity.

The town's affairs were overseen by a hierarchy of professional men who, knowing a great deal about their clients' affairs, exercised strong influence and patronage. A county court was held every two months at the Falcon Hotel, and four local magistrates took turns to sit in local courts on the first Friday in each month.

Two law firms (the Sheild brothers and W.H. Brown) were based in the town, acting as coroner, registrar, land agent, bailiff, treasurer or legal adviser to local organizations including the guardians who oversaw local government and their sub-committees for sanitary and workhouse matters.

The lawyers were also local agents for five insurance companies. They lent money, carried out property transactions and arranged mortgages for clients, many of whom ran shops and small businesses. Bank manager J.C. Guy represented four further insurance providers. Other local government officials included the Registrar of births, marriages and deaths, and the Inland Revenue Officer.

The Mutual Improvement Society, which was planning to acquire reading rooms and classrooms, had the Rector as its president. John Hawthorn, his deputy, ran the main bookshop, two book distribution outlets

and a printing business. Guy was the Society's secretary and ironmonger Charles White its treasurer.

Uppingham also contained a school sub-community comprising in term-time nearly 15% of its total population. The small Elizabethan grammar school, founded in 1584 and based in the schoolroom next to the church, had barely a dozen pupils until mid-century, but since 1853 it had been transformed by its forceful headmaster, Revd. Edward Thring.

Thring created a boarding community of over 300 boys and well over 100 adults (masters, their families and house servants) who occupied a dozen boarding houses: some of Uppingham's newest and largest properties. The growth of the school had put great additional pressure on the town's inadequate public services.

Town and school interconnected in a number of ways. The school invited townspeople to its concerts and plays: Thring was keen to foster good relationships, conscious that the school had better facilities than the town. It gave an annual Christmas party for children from the workhouse on the Leicester Road.

Unlike those major boarding schools built around a single campus, Uppingham School was a community of houses, spread out right across the town. This caused continuous daily contact between town and school - as pupils and masters went to and fro from houses to lessons (taught by housemasters in their house halls and by other staff in makeshift classrooms and laboratories), or to visit friends in other houses, or during afternoon sport, races, paper-chases and following hounds along the surrounding roads and fields.

Housemasters and their families lived in Uppingham all year-round, and the wives ran the domestic and catering side of the house, so there was plenty of contact (and friendship) with townspeople. There were

occasional tensions too, as when pupils strayed on to private property, or when town boys made fun of school pupils' caps or put stones in snowballs. Some pupils went round after dark only in groups.

Some townspeople were wary of the school, speaking of 'them dratted scholars'. A few even claimed that Uppingham would be better off without the school altogether, although most recognised its benefits for the local economy. The large number of shops and small businesses in relation to the town's size reflected the school's purchasing power and pupils' impact as customers in bakery, grocery and sweet shops.

Other townspeople sold, repaired or cleaned items of uniform. John Hawthorn at the post office had provided stationery, stamps and books to masters and boys for half a century: he was one of the school's strongest supporters - although he also supplied service sheets and other items to the Rector for the church.

Pupils and staff at the school all had to be accommodated, fed and provided for. With pupils feeding in their houses and no central catering or purchasing system, each house made its own decisions about suppliers. The houses employed nearly 100 living-in staff *in toto*; the 1871 census showed that four of them had between 7 and 9 each - including governesses, a few footmen, numerous cooks, nurses, parlour-maids and kitchen-maids, and one 'boots'.

In addition there was a large army of people living in the town but working in the school by day: self-employed or on piece-work. Houses had to be repaired and altered; some were still being developed. Furniture and equipment had to be bought and maintained, and gardens tended.

All in all, town and school were highly interdependent economically: the school could suffer in reputation and well-being if local businesses failed. For those

businesses the presence and goodwill of the school was a key factor in their continuing prosperity and development. Farm produce was purchased locally by the houses, so the food shops must have noticed a big drop in their turnover when the holidays began.

The interlocking set of social and economic relationships between town and school is highlighted by the 1871 census returns for the High Street.

It includes several houses, each with a dozen or so adults and children and around thirty boarders, interspersed with well-to-do neighbours: Guy the bank manager, Bell the doctor, Pateman the solicitor, Peter Fryer who was a master butcher and multiple shopkeeper, and two successful farmers, William Mould and John Shield. Sandwiched in between them all lived a network of less well-to-do small businessmen, traders and artisans representing a huge range of goods, trades and services. The personal and business relationships of the housemasters and their wives greatly overlapped.

By 1875 Thring had been headmaster of Uppingham School for 22 years.

Born in 1821, the third son of a Somerset country gentleman and rector, he progressed after Eton to King's College, Cambridge. Ordained in the Church of England in 1846, he served a curacy in a run-down area of Gloucester - a difficult time which included some elementary teaching and resulted in a breakdown.

After travel in Europe and a whirlwind romance, he returned to England and, despite the scepticism of his family and his limited experience of working in schools, he was appointed to his post in Uppingham in 1853, shortly before his marriage.

Archdeacon Robert Johnson had endowed schools and almshouses in Uppingham and Oakham in 1584 on a modest scale, but Thring's arrival coincided with a great

expansion in middle-class education as the Victorian industrial boom began.

Thanks to the growth of railways, between 1853 and 1875 Uppingham acquired its national catchment of boarders, but as the school moved well away from its local free grammar school roots, the places for local day-boys were largely phased out.

Thring's original 43 pupils grew to 100 within six years and he reached his chosen ceiling of 300 in 1865. A dozen came from abroad: the rest from all over Great Britain and Ireland, notably from Liverpool, Manchester and London: areas of the country which had recently made the greatest advances in public health. Significantly for future events, some of the school's most influential and assertive parents were doctors: they would have been highly aware of recent national developments in issues of health and medicine - and the popular and political expectations driving them - even before the school became stricken with typhoid.

By 1875 Thring had over 20 teaching staff - a big running cost, but one which he believed to be essential. He decreed that 23 boys should be the optimum size for a class and 31 for a boarding house, although most crept up above that number. He and 11 of his staff were housemasters: individuals contributing different but complementary temperaments, capabilities and outlooks.

After some early appointments which he came to regret, the housemasters of the 1870s were a more settled group. They were nearly all graduates of Oxford or Cambridge and mostly from professional families, although few had any background in teaching. Several would run their houses for over thirty years. Including Thring himself, seven were in holy orders.

Nearly all of them were married, and Thring himself had five children. He

regarded the part which the housemaster's wife played in each house as one of the most humanizing influences on it. Some housemasters were more disciplinarian than others; some more financially astute; some more extrovert. Revd. Robert Hodgkinson ran the Lower (junior) School: a legally and financially separate institution but one which sent many pupils on to Thring.

Unlike their modern counterparts, housemasters ran financially separate entities. They had to be men of private means, able to commission architects and builders. Some converted an existing house in the town or bought one which was already a going concern.

A few started off in a small town house and then built a much larger one on the outskirts. Several took out large mortgages. The distance between houses and their individual catering arrangements gave each house a distinctive ethos - and gave the school a plumbing system of uneven quality. Boys washed in the mornings in chilly stone-floored washrooms, with rows of stone basins filled with water from cisterns which took up to two hundred strokes of the pump serving them.

Thring had one very direct instrument of control if housemasters developed baronial tendencies and resisted his way of running things. They made profits (or, occasionally, losses) from their houses, and were paid comparatively little in fixed salaries as classroom teachers. Thus they relied on Thring's recommendation.

Any housemaster whom he judged to be inadequate could soon be starved of prospective parents. They had to conform to his standards of food, accommodation, supervision and care or they risked being rapidly frozen out. He was determined not to let them increase their numbers to increase their revenue.

The school's scheme of management had been revised as a result of the Endowed Schools Act of 1869 and the Taunton Commission which resulted from it. Parents paid boarding fees to the housemaster and tuition fees to the school's trustees, who also controlled the income from the Johnson charity which paid for the small number of local dayboys who still attended the school. This resulted in a complex system of notional and actual payments between the trustees and the housemasters, which had led to Thring's own finances becoming inextricably enmeshed with those of the school.

Effectively being shareholders in the enterprise as a whole, he and other housemasters had to decide what proportion of any profits to contribute to the school's building projects. It is clear from Thring's statement to the Commissioners in the 1860s about the cost of education at a good boarding school that he felt that Uppingham's fees were barely adequate.

He had formed distinctive ideals about education, developed over many years in writings and published sermons. An academically average boy should have as much time and money spent on him in the classroom as a brilliant scholar - in contrast (he claimed) to the philosophy of the famous Dr. Thomas Arnold of Rugby.

Classes should be allocated to staff according to their teaching talents rather than their seniority: 'to teach an upper class requires more knowledge, a lower more skill as a teacher'. A good school needed good facilities - its 'machinery'.

As the school grew the housemasters had therefore subscribed to many building projects which the trustees were unable or unwilling to finance - including the school's chapel and an ambitious gymnasium. By the mid 1860s over 90% of the school's buildings, land and equipment had been financed by Thring

and his staff, while the trust had provided a mere 8.75%; by 1875 the masters had spent over £40,000 on buildings.

The school was prospering, but if times were to change for any reason housemasters would have plenty at risk - with Thring set to lose most of all. He was always in debt, and he was forced to take out loans which were a great source of worry. There was also the potential for dispute between the masters and the trustees in any time of economic downturn. In a small country town there would be few alternative uses for, and buyers of, large properties.

Thring was visionary, extrovert and enthusiastic - at times impulsive. He had a brain which moved in intuitive leaps and drove a passionate personality. He was committed to spiritual simplicity. Unlike the high-church rector of Uppingham's parish church, William Wales, he had little time for ritualism or doctrinal minutiae. It was unlikely that the two men would ever warm to each other.

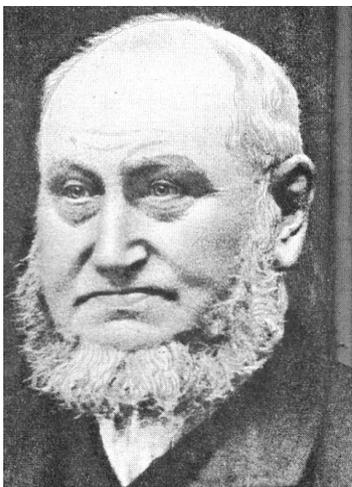
Thring always fought tenaciously to protect his school: it represented his livelihood and his life's work. In 1875 he was just emerging from a period of prolonged battles to protect the school externally - against the attempts of the government-appointed Endowed Schools' Commissioners to restrict the independence of schools and their headmasters. One by-product of this had been the creation of the Headmasters' Conference (HMC), whose first meeting had been in Uppingham in 1869.

As two headmasters of famous schools travelled north by train to Uppingham across the sodden countryside of the East Midlands to that first conference, one told the other: 'Thring must be a wonderful man to have made a school like this in the midst of such a howling wilderness'. It was perhaps a harsh verdict, from a man missing the familiar leafy lanes of Kent.



Boys outside their studies: 1860s.

Below: three figures living in the town and mentioned in the census and/or trade directories in the 1870s: (by kind permission of the family of the late Peter Lane and of the Uppingham Local History Study Group).



Edmund Robinson:
once Thring's porter, in 1870 he dealt in
corn and china, living in Brick Yard.



Fred Southwell:
the town crier and sexton, who
lived in Ragman's Row.



Jim Riddle:
a chimney sweep, who lived
in Dean's Terrace.

CHAPTER 2: LOCAL SOCIETY AND LOCAL GOVERNMENT

Rutland in the 1870s was quintessentially rural. Nearly 82% of its acreage was under cultivation, and the influence of the leading members of its gentry was exercised largely through the ownership of land and property. It was a society with three distinct landowning groups.

At the top, it had the highest proportion of country houses per acre of any English county, and the four greatest landowners owned half of Rutland between them. In the middle, 10,000 acres were owned by 'great and lesser yeomen' or men working medium-sized farms. Compared with other counties, a large proportion of this group was made up of clergymen. At the bottom of the social scale there was an unusually high proportion of small-scale landholders: the average size of a holding in the county was almost the lowest in England and Wales.

Of 258 people listed in the land tax assessment for 1874-5, three stand out. Lord Gainsborough was a large-scale landowner with property in three counties: erstwhile High Sheriff, Lord Lieutenant and Whig MP. Sir Charles Adderley, another three-county landlord, was a Tory MP and former President of the Board of Trade. He never lived in Uppingham but had tenants in the Hall.

The third came a long way behind the first two but is significant. The rector, William Wales, was a school trustee (governor) *and* a member of the town's board of guardians (responsible for local government matters), as well as being chancellor of the Diocese of Peterborough. He enjoyed rents from those leasing his glebe land, manorial rents and fines from his copyhold tenants, and pensions in lieu of former tithes.

The Rectory manor included much of the area on which the school and its houses stood. Wales's rent collection was overseen by the solicitor William H.

Brown, who, like his legal rivals the Sheild brothers, had attended the school.

The 1873 return of owners of land produces a similarly revealing picture in Uppingham itself. Five men held more than 100 acres: Wales, two other trustees of the school, and two members of the town's board of guardians, the solicitor William Sheild and a Preston farmer, John Parker. Those in the 50-100 acre category included several other guardians, Thring and five of his housemasters.

The list of owners of houses and buildings, dominated by Gainsborough and Adderley, includes three important groups: the professionals (one surgeon, three solicitors and two bank managers), housemasters, and twenty leading shopkeepers representing a wide range of businesses, many of which supplied goods and services to the school as well as the town.

The landed influence was also very strong within the board of trustees responsible for the schools in Uppingham and Oakham. The board included four of the twelve largest landowners; and numbered 19 in all. It was chaired by 'the right male heir of the Founder', Mr AC Johnson. Several members were magistrates or had been High Sheriff.

The two trustees nominated by Thring and the masters under the school's scheme of governance were different from the rest: Thomas Birley and Wensley Jacob were businessmen; both had sons at the school; they lived far away in an area which had a very strong concentration of pupils, the industrial North-West. Both had been members of a parent group that had rallied to Thring's support against the Endowed Schools Commissioners a decade earlier.

Bishop Mandell Creighton of Peterborough, a trustee himself *ex officio* and thus not at the centre of their affairs,

admitted: 'There are several bad governing bodies in England, but none nearly so bad as ours'. Thring never enjoyed an easy relationship with his trustees, believing them to be out of touch, 'mean-spirited consequential dignitaries'. Few had academic interests or experience. None had been educated at the school; very few (other than Birley and Jacob) had been school parents. They were sensitive to criticism within the town that the school had turned its back on the local community and had been handed over to the new rich.

Baffled by Thring's driven character and relentless sense of purpose, they thought him high-handed and unpredictable. They were men of conservative outlook and financial prudence, who found his ambitious plans hard to understand. Once responsible for a school of only a few dozen day pupils, they now found themselves in charge of a much larger, financially complex, enterprise - yet having allowed its boarding side to grow, they now had little control over much of the school's income.

One local board member appears to have been highly influential: the rector William Wales, who enjoyed so much influence and prestige in other respects. The parish church and its fine rectory were right in the heart of the town. He was a man of private means who had married well. Because his father died young, he had attended Christ's Hospital which existed to educate boarders whose parents had fallen on hard times: a far cry from many of Thring's prosperous clientele. Although now nearing retirement he was also chairman of the managers of the town's national school, president of the subscription library, a magistrate and president of the town's Mutual Improvement Society. Like Thring, he had been in Uppingham for many years.

He had given handsomely to the church restoration, and the Peterborough diocese saw his parish as thriving and well-

organised: rightly so, as he drew congregations of 500 each Sunday morning and evening.

As an Anglo-Catholic, he strongly disapproved of dissenters and of Thring's evangelical fervour. He also greatly disliked what the headmaster had done to Uppingham's former grammar school, and the building of the large school chapel which had taken the boys away from attending the parish church.

Although successful in his previous living in Northampton, he had made vociferous enemies there. Never a man for humour or compromise, his enemies drew cartoons of him and nicknamed him *Billy Wales, the black slug*. His sermons suggest an imperious, distant and aloof, albeit godly man with a strong sense of public duty.

He was friendly with a number of the masters (notably Hodgkinson at the Lower School) but resentful that they cited lack of time in declining to take any Sunday services to relieve his workload. It would be understandable if Thring, who had committed so much of his own financial resources into his school, was at least a little envious of Wales' much greater wealth, both personal and institutional.

In addition to all his other positions Wales was also a leading guardian (board member) of the Uppingham Union. In 1834 parishes had been grouped together by legislation to form 700 local authorities responsible for poor relief and sanitation. Market towns were usually their focal point, being accessible and convenient. JPs were guardians ex-officio, and the other board members were elected each year by the ratepayers. They tended to be public spirited men of good intention but much less technical expertise.

Thus decision-making about the town's affairs centred round property owners, farmers, shopkeepers and small-scale

professional men, who tended to be the principal ratepayers and employers.

The dominance of property interests can be seen in this body of men too. Most of them were farmers around Uppingham - responsible for oversight of local services in the Uppingham Union, an area of 35 parishes (mostly, but not all, in Rutland), of which Uppingham was much the largest community. The 25 guardians met each Wednesday.

Their paid officials included a clerk, WH Brown, the solicitor who acted for the rector over his rents. They also employed an overseer and collector of poor rates and taxes, an inspector of nuisances, a medical officer and public vaccinator, a chaplain, a workhouse master, matron and assistant, and a schoolmistress. The workhouse on the Leicester Road had been completed in 1837, initially for 140 inmates but later increased to 170.

The Union's key sub-committee was the Rural Sanitary Authority (RSA). Its minute book suggests that members strove to carry out the increasing responsibilities devolved onto them since the 1872 Public Health Act carefully and conscientiously.

They accounted in detail for workhouse expenditure. Local government taxation returns for 1874 show that the sums they raised in rates and loans were already way ahead of all but a handful of RSAs across the country - much of their income being spent on sewer construction. Expenditure on lighting was well in line with other unions. To finance this work they had taken out one of the largest fifteen loans in England and Wales by such a body: one which would take many years to pay off. Overall, their spending ran well ahead of their local counterparts, in real terms and relative to their population.

They consulted the Local Government Board (LGB) in London on a wide range of issues, as they were legally bound to do.

They lobbied over several years up to 1875 for greater powers (bye-laws) and the status of an Urban Sanitary Authority (USA), believing that this would put them in a stronger position to enforce building regulations, organise sanitary upgrades and borrow further money or raise rates to pay for improvements. The LGB doubted the need for this greater status, and a stand-off continued throughout the period between the passing of the 1872 Public Health Act and 1875 when the typhoid crisis threatened to overwhelm the RSA.

Inevitably, some guardians had conflicted interests: a public duty to promote sanitary reform whilst also as landowners being concerned to control costs and rate rises. This conflict existed in many small towns, but for men like Wales it was exacerbated by being a trustee of the school and thus having a duty of care to protect the lives of its pupils. The trustees had a responsibility to set fees which were not exorbitant, yet which allowed for essential expenditure.

There was an additional dimension to the school's increasing clamour for costly improvements in the town: as a charity it was exempt from some rate charges. Land endowed by Archdeacon Johnson in 1584 on which it had built classrooms was an example - and a source of further local resentment. However, the boarding houses were liable for full rates as commercial ventures, and two of the houses appeared high up in the list of assessed properties. In justifying his sanitary demands, Thring claimed that 'we are large ratepayers'.

The chairman of the guardians was Revd. Barnard Smith, rector of neighbouring Glaston. He had long experience in this role, and his commitment to the Union and its sub-committees was strong and time-consuming: he did not miss any of the 87 meetings of the guardians in the three years up to January 1877. Busy farmers and professional men were happy to leave many of the week-to-week affairs to him (and to Wales). The scale of his

responsibilities and the burden on the clerk from a huge range of legal, financial and other issues can be seen in the weighty volumes of LGB papers.

Although Barnard Smith and Thring were both clergymen, they were very different in temperament. Thring was a classicist while Barnard Smith was a mathematician: the successful former Bursar of a Cambridge college who wrote inventive textbooks. Dry, logical and tidy in mindset, he had far more in common with Wales than with Thring, who was a man of big-picture vision rather than detail. Like Wales, Barnard Smith had no children, and unlike Thring but like Wales, he was a man of financial means.

The local rating system had been devised nearly 300 years earlier (1601) and was calculated almost entirely on ownership of land and buildings. Its workings, and the increases in rates which it generated, were never popular with rural landlords, especially during agricultural recessions when it became harder to pass demands for payment on to tenants.

In 1875 landowners had faced periodic steep rises in both county and local poor rates, especially recently. While times were good this had not been a major issue: farming productivity increased; the growing population boosted demand, and new railways helped to transport produce to cities. However, the early 1870s brought a national agricultural recession. It was a time for landowners to restrict their spending, both personal and institutional.

The effects of a poor summer in 1873 and the very wet autumn in 1875 - coinciding with foot-and-mouth disease, other animal infections and the growing import of cheap food from the vast prairies of North America - affected local farmers very badly. Bishop Creighton stated that communities in his diocese suffered more than most. Rents declined and returns for landlords reduced, which led them to call

for rate reductions. Belt-tightening further down the social scale meant reduced spending in local shops. Again, agricultural workers in Rutland were hard-hit, causing severe depopulation. Many small traders had large mortgages - some of them handed down from one generation to the next - and borrowers who had overreached themselves ran into trouble. They feared that rate increases would be passed down to them by landlords when rent reviews took place.

For all these reasons, the Uppingham guardians, like their rural counterparts right across England and Wales, feared a ratepayers' revolt if they launched into bold and expensive programmes of sanitary reform. The RSA calculated that the school had reached a steady state of numbers, so the local population increase was largely over. There had hitherto been no major epidemic of cholera or typhoid.

No government inspector had significantly criticised the town's local leadership or demanded extensive new sanitary work. To do so would have gone against the prevailing attitude amongst all classes that centralisation and interventionist legislation were somehow foreign to the national spirit. Parliament liked power to be devolved to local communities, and it did not intervene except in extreme cases of neglect or incompetence. Central government inspectorates developed only slowly, and where inspection did take place there was a widespread local suspicion of new officials such as MOHs.

Much therefore depended on the initiative of the local guardians, especially in small towns and rural areas. Some of their paid officers were inefficient, and in many areas amateurism and local autonomy were still the order of the day. There was little coordination with neighbouring guardians across untidy boundaries. The separation of bodies responsible for nuisance (i.e.

pollution hazards) and sewerage was a particular problem.

By the 1870s the measures introduced in cities and towns over the previous two decades to improve sanitation and water supply needed to be applied to the nation as a whole, and the well-known medical journal, *The Lancet*, began a special section on public health matters. New legislation set out, in 343 sections, a formidable list of requirements on guardians and RSAs: everything from nuisances, public health and infectious diseases to burials, offensive trades, food inspection and slaughterhouses. They were also expected to provide an adequate water supply, drainage and sewage disposal.

Enforcement of these responsibilities proved slow and difficult. Guardians dragged their feet, fearing to upset ratepayers, conscious of their own lack of technical expertise, daunted by the size and costs of loans, and by the workload that this all implied. Some found it hard to prioritise; others hesitated to pay for outside expertise or got into disputes amongst themselves or with their officials.

Determined central government direction was needed, but the two departments which dealt with the 27,000 different authorities - the LGB and the Public Works Loan Board (PWLB) - were ineffective, slow and overwhelmed with work. As departments, they were unglamorous: pay and prospects of promotion were poor, and their senior leadership was often mediocre. It sometimes took officials twelve months to answer a letter, and there were frequent battles within the LGB about what was essential or merely desirable, along with disputes between technical experts, medical advisers, and bureaucratic administrators who often carried the day.

Some personnel wanted to force the pace with the RSAs much faster than those who believed in gradual persuasion, concerned

that an RSA, deciding its own timescales and appointing its own consultants, should feel that its role really was worthwhile. The latter group included Robert Rawlinson, the Board's chief engineering inspector, who would play a major role in Uppingham. He declared: 'If persons are unwilling to receive you, you must shake the dust from your boots and go elsewhere... you cannot compel unwilling men [and] an unwilling community'.

The LGB retained expert doctors and engineers as an inspectorate for use in really contentious or difficult cases, but too often the key criterion was not that the appointee was an expert, but that he was a gentleman. Thus the very first generation of inspectors tended to be drawn from the minor branches of landed political families or the gentry. Many held office for decades; they often oversaw just one or two districts, and they continued to persuade rather than to instruct.

The proportion of public expenditure spent on local government rose sharply after 1870, but Treasury oversight remained strict to keep spending under control and to minimise waste. The LGB's medical department was criticised for demanding bigger budgets and more staff. In 1873 the LGB won a small victory in getting the interest rate on loans to RSAs reduced from 5% to 3.5%, but two years later the Treasury reversed this in all but the most urgent cases and capped the total sum lent each year. It is small wonder that many RSAs preferred to raise money commercially rather than borrow from the slow and cumbersome LGB and PWLB.

The writers of *An Outline of Local Government and Local Taxation in England and Wales* (1884), concluded: 'The defectiveness of local government overwhelms the LGB'. Given the range and scale of all its problems, it was no better equipped for the challenges of the Uppingham epidemic than the guardians themselves.



School and town in the mid 1860s: Thring's boarding house is on the left. The new chapel and schoolroom show the scale of his ambition compared with what had gone before.



Revd. Barnard Smith,
Chairman of the Uppingham Guardians
and RSA 1863-76 (Glaston Parish Council).



Revd. William Wales,
Rector of Uppingham 1859-79
(Northamptonshire Record Office).

CHAPTER 3: LOCAL MEDICINE AND PUBLIC HEALTH

Between 1800 and 1850 the population of England and Wales almost doubled, coinciding with a period of rapid industrialisation. Many cities became densely packed with low-quality, low-cost housing with few planning controls.

In rural areas the health hazards were just as real. Few villages had drains, and local people threw everything - sewage, rubbish, slops and household waste - into simple pits or the midden (rubbish) heaps which lay outside many houses, into any handy field or ditch, or on to the street or village green. Livestock grazed and wandered largely unrestricted, leaving behind the inevitable physical evidence of their presence for days or even weeks to come.

Local people drew water from springs and wells. These were relatively unpolluted while the population was still sparse, although summer droughts could cause water shortages and a 'stink'. Some form of fever might then break out, and infant mortality rose through what some locals called 'summer diarrhoea' or 'infantile cholera'. However, the rains returned in autumn and usually made everything at least bearable again - unless they led to some form of epidemic.

Many city dwellers first began installing new-fangled water closets after experiencing them when they visited the 1851 Great Exhibition. In contrast to this, rural people mostly continued to relieve themselves into holes in the ground behind their cottages, or in alleyways or fields with streams.

Gradually, large sewage buckets or closets were introduced through which waste material would not leak. Soils or ash were thrown in to cover the contents, turning them into a solid mass. Medical authorities called repeatedly for pail closets to be installed in houses but even zealous RSAs found it hard to make residents conform

because bye-laws were often inadequate. Even where cesspits existed, they needed large amounts of water to drive the waste out of houses, which was hard to achieve if the water had to be manually drawn from a well in the absence of any mains supply. Drainage gradients needed to be generous to prevent the build-up or rushing-back of waste when systems were full, especially where drains were shared between houses.

Pits had to be leak-free, and sited well away from houses if cellars were not to be flooded. Regular, careful emptying was needed by local scavengers or night-soil men taking waste to sites a safe distance away from wells and springs, and fenced off from animals to avoid the risk of cross-contamination. Too often however, pits were left to overflow until a local farmer came to collect the waste. The cost to the local authority of checking and cleaning the cesspits was often deemed prohibitive.

In Uppingham before the 1850s there were open channels of water along each side of the High Street. They turned blue on Mondays from the blue-bag and soap used on washing day, and green on Wednesdays when they became polluted by the urine of the market's sheep and horses. Some inhabitants and many inns brewed beer with water from these channels: grey/brown in colour and strong in smell.

In 1875 there were still complaints that dead animals were being thrown into muddy ponds, and that waste of all sorts was being dumped into pits behind dwellings. Some householders had built privies over old ash-pits, mixing waste with water or dry earth and ash, but many houses shared exit pipes. Most of the cobbled streets were still largely dirty and ill-drained.

These problems had been increased by the town's growing population, densely

crammed into houses in yards behind the street-front shops and often with restricted access through them or down short lanes next to them. Many people were forced to live in the same buildings in which they worked. Rag(man's) Row, off North Street West was one of the worst examples, with 36 people housed in eight shacks with very low doors and unglazed windows. Innocents Yard had a density of occupation of 122 persons per acre.

The acquisition by the school of many properties along the south side of High Street West drove even more families into yard-housing. Wealthier citizens often moved to the edge of the town.

In 1857-8 a main sewer was laid through the northern part of Uppingham, followed by a deeper southern one in 1872 and a sewage outfall works two years later. After that, however, many properties remained unconnected to the new system: three-quarters of them still drained into cesspits - including the small number whose owners had installed water closets.

It was all seriously inadequate to serve a growing town and school, but Uppingham seems to have been no worse than its neighbouring towns. Possibly it was better, because the East Midlands was far from being in the forefront of sanitary reform.

Leicester had a notoriously high rate of infant mortality between 1860 and 1899. Few streets in Stamford possessed sewers. Oakham residents complained bitterly in 1856 that their drains could not cope, drawing unfavourable comparisons with Uppingham's (by then) imminent north sewer. In 1871, with cholera looming, the local paper reported Oakham's 'abominable stench' near the market place.

The national picture of water provision was little better than the sanitary one, although the expansion of cities in mid-century led to an increased demand for

better supplies of drinking and washing water, as cholera and typhoid became more frequent. Even where there were water closets and piped water to service a community, there were problems of sporadic supply, leaking joints, continuing water impurity and pollution – as well as the high cost to consumers.

There was also a continuing debate about whether water should be provided by public authorities or private companies. The mid-century saw a shift towards private schemes. Only later did municipalities return to the field, sometimes expensively buying out the established private companies.

Parliament tried to prevent monopoly abuse and inter-company rivalries, but it recognised that even if private entrepreneurs (including some MPs) tended to act for short-term gain, they could often get things done more quickly than bureaucratic, slow public authorities.

The poor fared worst. Rural communities were expensive to supply with water, and had limited funds for installation. The public health legislation introduced during the 1870s obliged RSAs to provide a supply, but in many cases it was limited. Many homes had only one tap, and received water for only a few hours per week. The poorest had to rely on street standpipes. Some authorities delayed, or ignored their legal obligations. Others pared schemes down to the minimum.

There was increasing analysis of water impurities but, lacking any bacteriological knowledge, inspectors concentrated on the water's visual state or its chemical additives. Murky, polluted water was easy to spot, so clear, sparkling water was frequently taken to be a sign of purity - even though it might easily hide just the pathogenic organisms which caused cholera and typhoid.

Uppingham in 1875 also reflected the national situation in respect of its water supply. It still had no waterworks, relying on well-water for drinking and for servicing any water-closets. As yet, schemes for using water from springs outside the town had come to nothing.

The better properties - including the boarding houses - had private wells in basements or gardens, but others had to rely on rights of access to a pump in a neighbour's yard, or on trundling water-carts or carrying buckets from public supply points spread across the town, including one in the market place. There were pumps in many yards and 'a fine stone drinking trough' at the bottom of Leamington Terrace.

A small tributary of the River Welland flowed through the town, and the geology and landscape of the area (steep hills separated by fertile valleys) suggested that the wells should be healthy. No amount of sound geology, however, could make up for pollution caused by manure heaps next to springs, wells or pumps.

A former housemaster drew on his memories twenty-five years later, (by which time bacteriology had moved on apace), to suggest that while 'Uppingham was by tradition a healthy place [with] bracing breezes and plentiful springs... those sparkling wells sported millions of bacteria, enough to account for whole consorts of fevers'.

Again, the East Midlands area was no leader. Leicester had no piped water at all until the 1850s. In Stamford, severely hit by typhoid in 1868-9, a report criticised how its underlying geology had been broken up by building and quarrying. The river passing through the town was 'a most offensive cesspool', liable to frequent flooding, and parts of the town would remain without piped water a decade later, as the council spent seven years debating

improvements. In Oakham in 1868, 'hundreds of poor families have to go two miles for fresh water'.

Country doctors were key figures in the battle against winter coughs, colds, influenza, chest infections, diarrhoea and typhoid and other fevers. The term *general practitioner* (GP) was introduced in the 1820s for those who practised all types of medicine, including surgery, midwifery and pharmacy. An 1858 Act established registration by the state of qualified doctors and set up the General Medical Council to govern the profession.

However, GPs' more systematic training and increased status did not necessarily imply a high degree of expert knowledge. New medical discoveries were handed down only slowly from laboratory scientists in cities to GPs in country areas. The medical schools were geared more towards academic medicine and the production of specialists than the needs of an aspiring GP, whose work was not yet accepted as a specialism in its own right.

Local doctors were taught to look for symptoms, but diagnosis and prognosis were very inexact skills. GPs dealt humanely with their patients, but there was little training in precise measurement, and few effective drugs were available. Often doctors could only reassure patients and console relatives. From 1874 they were also expected to certify and notify causes of death.

Country GPs enjoyed - and fiercely protected - their territory and status. Socially they might rank alongside rectors and lawyers, but professionally they were fighting for patients, as growing numbers of new doctors emerged from medical schools and an increasing variety of specialists threatened their livelihood. They needed a core of middle-class, fee-paying patients to offset the bad debts of poorer patients who could get cheaper

advice from assistants, prescribing chemists, homeopaths and unqualified charlatans. Some patients rejected all these agencies and resorted to home remedies. Medical books and patent medicines were widely available in local shops.

GPs' livelihoods and incomes were built up carefully and nurtured over many years. They needed organisational and entrepreneurial skills; many worked from a room at home, with their wives acting as book-keeper and practice organiser. They instinctively distrusted going into partnerships, and younger sons often inherited practices from their fathers.

Rural GPs made many more home visits compared with in-surgery consultations than their urban counterparts did, and they travelled greater and costlier distances. Some augmented their income as public vaccinators, coroners, workhouse MOs or registrars of births, deaths and infectious diseases. Other became MOs to schools or RSAs and USAs. A few joined the ranks of the first district MOHs.

In 1875 the school had its sanatorium on Stockerston Road, built and paid for by Thring and the housemasters six years earlier. There was no town hospital, but the workhouse had been envisaged as a complex and multi-purpose building which was a workhouse, orphanage, old peoples' home and even an unemployment centre.

Three doctors served Uppingham and its wider population: nearly twice the national average per head of population. Dr Augustus Walford was also the workhouse MO and the public vaccinator; Dr Frederick Brown was the brother of WH Brown, the RSA clerk, and Thomas Bell, the most recently trained of this trio, was also the school's MO.

The competition for custom from patients must have been intense between them.

Dr Thomas Bell, aged 39 and with a wife and four young children, lived in High Street West, close to several of the boarding houses which would be stricken with typhoid. His family had longstanding medical roots in Uppingham, his grandfather having settled there in 1780 as an apothecary and a pillar of the local congregational church. Bell's father had practised medicine in the town for many years and still lived there in retirement.

Bell also had a strong emotional attachment to the school as well as the town, as he was the fifth of seven brothers who had been day-boys there. On qualifying in London in 1861 he had returned to Uppingham with good references from his tutors. He was a man with a passion for natural history who knew 'every inch of the countryside around for miles', and he was calm, kind and conscientious but also shy. Possibly he was someone who would retreat into himself when under attack. He lived for his work, keeping abreast of the latest knowledge by spending his holidays visiting hospitals. However, he was not a high-flyer, relying more on hard graft than any gift for brilliant diagnosis. Housemasters were sometimes frustrated by how slow he was to form a view of a case, although they recognised that once he had done so he was rarely wrong.

By 1875 there was an additional new pressure on GPs: the supervisory power of Medical Officers of Health, especially in a crisis. These officials were part of the government's response to growing concerns about public health and the increased popular interest in health statistics: a response which would include the recruitment of sanitary engineers, food and drugs specialists, building and factory inspectors and town clerks.

Originally appointed for cities and large towns, the MOH system had recently been extended into rural areas. MOHs aroused

little enthusiasm amongst ratepayers, who feared the costs of their regular reports to the LGB. Some guardians delayed an MOH appointments as long as possible.

The LGB, which could provide expert back-up when needed, made little attempt to specify the type of person to be appointed as a MOH. Those selected had to be medically qualified, and local doctors were allowed to go on seeing their own patients, but rural communities faced two problems in finding good candidates. First, the work involved a level of statistical analysis and bureaucracy that was unattractive to many would-be applicants; secondly, the pay was relatively low.

Some MOHs were part-time and others were given only a short tenure. Smaller RSAs could not afford a full-time appointment or someone of high calibre. Struggling to fill vacancies, and hoping for a quiet life, many RSAs appointed a busy local GP or someone of relatively low ability. Other RSAs combined into districts, to pay a larger salary which would attract stronger candidates.

Once appointed, the first generation of MOHs did not have an easy time. A strong stigma about infectious disease coloured the public's perception of their work. Their powers were poorly defined. Local GPs, sensing a threat their own authority, resisted MOHs visiting individual patients. Householders who welcomed their GP were often hostile to the MOH - especially if he demanded the isolation or removal of a patient. Angry ratepayers resented the cost. RSAs paid miserly expenses, expecting MOHs to use their own transport. A few were even threatened with murder. Many were sustained only by a passionate belief in their work.

Given all this, the likelihood was that the MOH in a town like Uppingham would be someone upgraded from the post of inspector of nuisances, or maybe someone

timid and out of his depth. However, the Uppingham RSA was one of those which had joined forces with others in recruiting its MOH. As a result, when the 1875 crisis came, the town's leaders and the school found that in Dr Alfred Haviland they were dealing with a practitioner of substance and iron will, who was genuinely messianic about public health.

Like Thring, Haviland came from a Somerset family. His great-uncle and father were surgeons in Bridgwater. His father's first cousin was John Haviland, Regius Professor of Physic at Cambridge University and a Fellow of St John's College. He qualified from University College Hospital, London, in 1845 and became (like Bell, his near-contemporary in age) a partner in his father's practice. The 1849 Bridgwater cholera outbreak gave Haviland first-hand experience of epidemics and of the public's demand which followed it for better water supplies. He became a surgeon at the hospital, but his career was cruelly cut short when he poisoned his finger during an operation in 1867 and nearly lost his life.

He believed strongly that the health of a town was determined not only by its living conditions but also by climate, geology and natural history. He brought together meteorological data and cholera statistics in an influential book *Climate, Weather and Disease*, analysing ten years of death rates to show the geographical distribution of heart disease.

So began a lifetime's interest in medical mapping, which he subsequently took to new levels of sophistication in studies of cancer and other illnesses. He lectured on the comparative health levels in several leading holiday resorts, and he produced an influential essay entitled *Hurried to Death* about how rushing to catch trains provoked heart attacks.

He became an honorary lecturer at St Thomas's hospital, attracting favourable

comment in *The Lancet* and the *BMJ* - although some of those who admired his commitment suggested that, in his medical mapping, he fitted facts to theories rather than vice versa, and that his opinions were hasty, arbitrary and seriously flawed - as in his support for miasma theory.

Haviland was appointed in 1873 at an unusually high salary from a field of 63 candidates to be the first MOH for the Northampton districts. His territory was scattered over four counties and poorly served by railways. Undaunted he set to work, drawing heavily on his statistical and mapping skills. He worked fast, and with a good eye for detail which he used vividly for effect, because he courted, and thrived on, controversy. Thus he wrote an early report which described one town's 'magnificent supply of pure spring water which is in a most loathsome condition, contaminated with filthy ooze and drainings from slaughter-houses, wells converted into cesspools, obstructed drains, muck heaps and surface water...

Within a year he was disputing his new employers' refusal to pay the costs of publishing his lengthy annual report on his area as a whole. It was a manifesto which revealed a man with a mission - and it included his belief that typhoid was 'a national disgrace [and also] the best indicator that we have of the sanitary condition of any place'. He observed that the disease was generally contracted through infected water or sewer gases or by contagion, but he noticeably declined to commit himself as to which.

He strongly favoured ash closets over water-based sewage systems. He praised the impact of recent legislation but claimed that more progress could be made only if the powers of RSAs were strengthened.

This report also described the individual towns and villages in his area. In Uppingham's case, he declared that its

RSA still had much to do, but he also confirmed that it had been a lot more active than its neighbours. Its death rate for both adults and children (including those at the workhouse) was lower than in most other places he had visited. He saw no reason for the town to be singled out for urgent scrutiny by national inspectors.

He did, however, have two concerns: there was a high incidence of scarlet fever, and after two good decades its death rate from fevers in general was not falling as fast as in other places: it was 'too stationary to be satisfactory'.

This 1874 report confirms the impression of Haviland as having high ability, energy and forcefulness. He would not have found a kindred spirit in the steady, unostentatious Dr Bell whose priorities as a GP were very different. Bell was contented, doing a job he loved; Haviland was spurred on by a frustrated yearning for a surgical career that might have been.

Nor would Haviland have found that he had much in common with the Uppingham guardians, daunted by their increasing population and rising costs - and certainly not with the mercurial Thring, concerned to protect his school whilst maintaining his independence. Neither man took kindly to anyone who questioned his professional judgement. Each of them fiercely guarded his own area of expertise.

Neither Bell nor Haviland had, nor could have been expected to have, a clear idea about the causes of typhoid in 1875. However, the imprecision of their knowledge shaped their actions in contrasting directions. Haviland drove on hard for improvement, whereas Bell's *laissez faire* approach would come to haunt him. Along with the inability to carry out effective water analysis, it would also make any definitive assessment of the causes of an epidemic hard to achieve. The seeds of the bitter disputes to come had already been sown.



An early boarding house, before much larger ones were opened: the house next to the Old Post Office on High Street West in the 1860s.



Dr Thomas Bell: one of the three Uppingham GPs, and the school's Medical Officer.

Detail from a stained glass window in Thring's school room.



Brooklands, built in 1861: a 'country' house on the London Road, some distance from the centre of the school: its grand scale reflects the school's expanded ambitions as its numbers grew.



Dr Alfred Haviland:
MOH for the combined Northamptonshire Districts.

THE WANTS OF UPPINGHAM.

A PARISH COUNCIL of INDEPENDENT MEN who will endeavour to promote the prosperity of the Town in all ways, not a Council of Men who will only study the welfare of one portion of it.

A COUNCIL that will sanction a small loan (spread over 25 years) to purchase the Market Place (£300 will buy), also to alter the Shambles so as to make it a Parish Room and Offices, Corn Exchange, &c., for the use of the Town and also Farmers who patronize Uppingham Market.

A COUNCIL that will insist upon a full valuation of the School Property according to law, namely, cost of erection, value of land, &c, and also according to rent where rent is paid. *These buildings being erected for the purpose of making money* should be valued accordingly. The Clergymen and Gentlemen who enjoy the monopoly of the Uppingham Charity of over Eleven Hundred Pounds a year are scarcely justified in quibbling over this matter when their poorer neighbours have to pay full rates according to their rent.

A COUNCIL that will endeavour to get a Supplemental Scheme to the Uppingham Charity, namely a Lower School for Uppingham Town Boys. Also a larger Grant for the National School, say £100 a year instead of £10 as now given. Also the Bede Houses should be raised to £25 a year. Also a portion of the Funds of the Charity should be advanced for the purchase of the Lecture Hall Buildings for the National Schools to enable the Committee to carry out the new system of mixed education, which requires more room and a small Lecture Hall.

A COUNCIL that will protect the Ancient Charters of the Town.

A COUNCIL that will reduce the Sanitary Rate and keep less balances. The Town does not want another £280 Iron Box just yet.

A COUNCIL that will make suitable changes in their officers from time to time; 10 years is too long for an individual to hold unpaid offices.

A COUNCIL that will give more publicity to the Finance of the Town (both Rates and Charities),

A COUNCIL that will check the dictatorial power of the place monopoliser, which power is now used in an offensive manner towards the old inhabitants.

What money can ever compensate the present generation of Uppingham Boys for the loss of their classical education and their chance of a University exhibition and education.

Did the Founder of the Uppingham Charity, though allowing them to take a few boarders, ever expect the Clergymen and Gentlemen who draw from his estates, &c., Eleven Hundred Pounds a year to commence trading on their own account?

UPPINGHAM CHARITIES FOR UPPINGHAM.

No Politics.

No Sunday Canvassing.

CHAPTER 4: UP TO AUTUMN 1875

Uppingham suffered minor epidemics of fever at least five times between 1840 and 1855, prompting criticism about the state of its streets from churchwarden William Compton and the *Stamford Mercury*. This resulted in the new northern sewer being built in 1857-8: a first step, but a seriously flawed one because it was laid with narrow pipes at a depth of only four or five feet.

Even so, it was expensive. Its main pipe and branches covered parts of High Street West and School Lane (including several small boarding houses), High Street East, Orange Street, North Street, Queen Street and Adderley Street. It ran down Seaton Lane to a small sewage farm a mile away.

It was left incomplete and not all properties were linked up to it, partly because of opposition from house owners who feared that it would drain their wells as well as their cellars: a foretaste of bigger struggles to come.

Seven years later (1865) the decision was taken to pave the streets with York slabs, at a cost of £1,101. Improvements raised expectations, but also fed anxieties. By 1870 the housemasters were calling for a mains water supply, and an LGB inspector was summoned, whose visit came to nothing. However, after new demands a year later (whether from town, school or both is not clear) for better water and sewerage, a second LGB official produced a far-seeing and ambitious report. This pointed out all the existing deficiencies, and recommended ash closets instead of cesspits, proper rainfall channels and drains to divert water away from the wells, better drain ventilation, an extended sewage farm and a new reservoir to the north of the town.

The school welcomed this report, but after a meeting of ratepayers called by the RSA only a scaled-down sewerage scheme was approved, to be paid for by a PWLB loan

and a rate increase. An engineering company was commissioned to produce a specification for extensions along the southern side of the town, linking up with existing pipes from the rectory and the market square, and then running along Stockerston Road and past the Lower School, before heading south-east along South (i.e. Spring) Back Way and across the London Road to the sewage farm on Seaton Lane which would be extended.

The new south sewer would be deeper and larger than its northern counterpart, with frequent ventilators. Thanks to favourable gradients, little pumping would be needed. However, it too was far from cheap.

All this showed very clearly why sanitary law needed streamlining, because a dispute began between the Sewer Authority (headed by Wales) and the Nuisances Removal committee of the RSA (headed by Barnard Smith) over precisely how the extra sewage would be deodorized. Wales's group was responsible for the proposed improvements, but Barnard Smith believed it was illegal for the new sewer to be built before the problems of a polluted water supply had been remedied.

The engineers drew up further plans in March 1872, but despite outbreaks of smallpox in June and scarlet fever in November, action followed only slowly. Tenders came in unexpectedly high, resulting in prolonged correspondence with the PWLB about the loan.

With the 1872 Public Health Act, sewer powers passed to the new RSA, and Wales and Barnard Smith effectively joined forces. Both served on the new sanitary sub-committee - along with eight other ratepayers, including two housemasters. It soon faced significant local opposition to the size of the loan, the proposed rate rise and the costs to householders of abolishing their cesspits.

Sir Charles Adderley then objected to the siting and leasing arrangements for the sewage farm extension next to his land. In the process he became involved in a dispute with one of his neighbours, John Pateman (a solicitor-partner of William Sheild but unlike Sheild a strong supporter of the school), who favoured the proposal. This argument broadened out into one about how much the need for any improvements should be blamed on the growth of the school.

Adderley withdrew his objection only after LGB intervention to modify the plans because of its concern about the escalating budget. Even so the costs went on rising, and two other loan applications followed. After long delays these were granted at a relatively favourable interest rate of 3.5%, but over only thirty years instead of the fifty years that the RSA had asked for. Its members became increasingly nervous about escalating repayment costs.

Barnard Smith repeatedly asked the LGB for guidance about the extent of the RSA's powers under recent legislation. It sent him hugely detailed replies about levels of delegation to sub-committees, account-keeping, the appointment of officials and even the disinfection of workhouse clothing and bedding, but the RSA also demanded to be given the status of an Urban Sanitary Authority. It believed this would extend its existing powers over water supply, sewerage and drainage, nuisances, workhouses, cemeteries, street cleaning and markets, lighting, and the regulation of traffic. Above all it would enable the RSA to insist that recalcitrant householders linked their properties to the sewers rather than continuing to rely on cesspits, and it would permit the levying of an additional 'general district rate'.

However, the LGB felt that Uppingham was too small for such status. It agreed to the recruiting of an additional collector of rates, but simultaneously complained about the late submission of accounts and

inadequate account-keeping. The RSA and its clerk, WH Brown, were now feeling the heat.

All through 1874 the RSA (through its clerk) sent the LGB further questions and requests: for guidance on audits, about how far paupers' children could be made to travel to school, and whether payment could be made to a local doctor for attending a difficult birth at the workhouse.

It also wanted a further loan, for sewerage improvements at the workhouse which had run over budget. Only three ratepayers turned up to object about costs when the inspector came down to see things for himself, but it led to further requests from London for a breakdown of expenses.

Unabashed, the RSA pressed again for USA status, citing precedents elsewhere. Keen to lay the issue to rest, the LGB agreed to a local enquiry on the matter. Despite posters advertising this being attached to the doors of all churches and chapels, once again only a handful of ratepayers turned up. The Board rejected the RSA's case whilst granting it increased powers on a few specific issues.

The RSA countered by drafting bye-laws on such issues as the minimum space and construction standards required for new housing, the drainage of new streets and all waste water, and the upgrading of existing sewerage through improved ventilation, footings and damp courses.

The proposals were submitted to the LGB early in 1875, but no reply had been received by 21 October when typhoid broke out in the school, causing Haviland to call for the LGB to make an urgent response.

The seeds had been sown for future disputes between town and school, and events now assumed a momentum of their own.

1875 brought extremes of weather coupled with unusually large variations in temperature. Sharp frosts at the start of the year deepened existing cracks and added new ones in sewer drains and cesspits - damage which did not show up at once because the spring was one of the warmest and driest for half a century.

Dramatic rainfalls occurred in early June - over eight times the normal level - making the town a sea of mud. Temperatures plunged again on 11 June, ushering in an early summer cold snap which lasted through to August, when six weeks of very warm weather set in.

Mild and wet autumns were a notorious prelude to typhoid outbreaks. In September 1875 the rains and mud returned with a vengeance, causing a sharp jump in deaths amongst elderly people right across England. There were then bitterly cold winds for four weeks from 20 November. By the time the mild weather returned just before Christmas, the school had long since broken up.

The extremes would continue through the first three months of 1876. That period included the highest early-year rainfall for a decade, setting up the classic pattern of wet weather and re-emerging typhoid.

Back in early February 1875 Thring's diary had recorded 'much illness in the town - scarlet fever. I fear we shall not escape'. He had also heard rumours of measles locally, and he asked the guardians to have the water analysed with a view to getting 'a proper supply for the town', reminding them of an earlier diphtheria outbreak in 1861.

On meeting the local inspector, he expressed concern about the pollution of well-water by cesspits and animals. Quoting a professor from the Pharmacological Society of London who had analysed several samples (presumably on the school's initiative) and who had

found that water which was pure on entry into the town became quickly contaminated thereafter, Thring declared that a mains water supply was essential.

By 13 February there had been four scarlet fever deaths in the town in ten days. It worried but also energised him: 'God has given me back some of the old elastic work power. I can do ten times as much as I have been able to do for years'.

A fortnight later he was dejected again after receiving an anonymous letter denouncing the filthy state of the town, and 'sneeringly telling [me] that if [I] did nothing about it, no one else would - but I don't see how it can be done. The law helps us very little.'

The scarlet fever outbreak had also attracted attention from Haviland. Whether he visited Uppingham or (more likely) received a report from his local inspector, he decreed that the town's infants' school was the likely source, and he urged the closing of it for thorough disinfection.

Thring kept up the pressure, but little had been done before the summer term began on 5 April - other than the RSA sending twelve well water samples from points across the town to London for analysis. The report which came back a full three months later stated that all except one of them were heavily contaminated with sewage, and that the water was 'excessively hard and very unsuitable for domestic purposes'. A mains supply should be provided and nearly all the wells closed. The RSA made no response, afraid of ratepayer anger at yet more expense.

By then, on 7 June a pupil in the Lower School (Hawke junior, aged 9) had written home that he had a sore throat. His mother (nursing her sick husband) wrote to Mrs Hodgkinson, the housemaster's wife, who replied suggesting that it was only a cold, and that the boy was improving and playing with other boys again.

However, within days Mr Hodgkinson wrote to inform the Hawke parents about their young son's alarming gastric symptoms. Lady Hawke visited the boy on 21 June and, quickly realising how ill he was, she summoned a specialist from Peterborough.

Hawke rallied, but then suddenly collapsed and died on the evening of 24 June, the day after the school had broken up for the summer. His death was certified on 28 June by Dr Bell as caused by enteric (typhoid) fever. Bell was later accused of having failed to recognize this cause until he consulted a colleague, a charge which he fiercely rejected.

Although running legally separate institutions, Thring and Hodgkinson collaborated closely and it would be surprising if they did not discuss Hawke's case. However, they did not notify the RSA. They were under no obligation to do so, and they probably underestimated the danger, hoping that it was an isolated case and that the infection would vanish over the long summer holidays.

Hodgkinson himself was then ill for some weeks, possibly with typhoid symptoms, but he had never seen a case of it and knew little of its causes, later claiming: 'There was nothing to awaken [my] anxiety'. All this explains later criticisms that the school did nothing to investigate the origins of the outbreak, and allegations that Thring feared any unfavourable press coverage that might cause pupil numbers to reduce.

On 2 September just before the new term began a local plumber, Mr Chapman, was summoned by Hodgkinson to the Lower School. According to Haviland's later report, details of which were hotly disputed by Hodgkinson and Thring, Chapman was called in to clear an obstruction in the sewage-flow from the boys' trough closets into an unventilated cesspit:

'The corner [in] which the obstruction was supposed to exist being dark, a lighted candle was used, and almost immediately a tremendous explosion took place, the sewer gases igniting, passing up to the ceiling like a streak of lightning, and at the same time burning the whiskers, eyebrows and hair of Mr Chapman'.

The incident appeared to support the miasma-theorists. Coincidentally, only a week earlier the *Lancet* had carried a report of typhoid amongst 'men exposed to sewer gas'.

Three weeks later and with term well under way, thirteen year-old Kettlewell went down with fever on 21 September, again in the Lower School. Bell again confirmed typhoid as the cause: Hastings major followed on 28 September, with two more cases as the next month began. Thring wrote in his diary of 'that fatal fourth of October... two or three cases in the school. This begins to make me anxious'.

Richardson developed symptoms on 7 October: a serious case from the start and one which proved fatal. Over the next five days Dr Bell saw ten other Lower School boys, along with eight from other houses, and eleven other adults and children - mostly members of staff families or servants working in boarding houses. Some had indeterminate symptoms, but he was fairly sure that at least two were suffering from typhoid.

Only now - presumably on Bell's advice - were cases from the Lower School sent to the sanatorium rather than being cared for in-house. Lower School boys had no automatic right of access to the 'san', and it was thought better not to let them mix with older pupils from other houses who might pick up and spread the infection.

The school's deepening crisis was symbolised by the weather on Saturday 9 October, when a football match took place

between the pupils and a masters' invitation XV. For three days there had been torrential downpours and at lunchtime the clouds opened again, but the captain of football declared: 'We play [on] through thunder and lightning'.

A sizeable number of spectators braved 'pitiless rain' which afterwards became even heavier, continuing through the evening and much of the night. Awash with mud, the town became covered with 'the well-known malaria called the church-yard smell, which is almost as offensive as disinfecting powder, and must be a perpetual reproach to all anti-cremationists'.

We do not know whether Thring was on the touchline that afternoon. He would probably have known all the members of the visiting team, so he would surely have been there in normal times, but illness was now spreading through several boarding houses and other properties. Six boys were admitted to the sanatorium on the day of the match, joining seven others who had been admitted over the previous few days.

For days Thring had hoped that a dry spell might chase the sickness away, although he was deeply concerned about two ailing children of members of staff and he was worrying too about what might happen within his own family: 'The bell tolled [in the town], and I was in great fear, but a man had died in the workhouse. I very much fear that we shall not escape death'.

On the evening of the match-day a seventeen year-old who was to become a chance casualty arrived by coach at the Falcon Hotel. His name is unknown, but he had caught the train from Southampton to Manton to become a page-boy in the Lower School. The school later claimed to have offered to pay his fare home again but that he chose to stay. This was disputed by Haviland who alleged that the boy replied: 'If I had known, I would not have come; and if I had money in my

pocket, I would go back again'. Whatever the truth, just over three weeks later he would be dead.

On the day after the match, the Sunday chapel service raised Thring's spirits, but a steady stream of new cases emerged in the days that followed: a few in the town, but most of them in the school, where the cases were also more serious. Five of the 13-16 year olds were from West Deyne, two doors down from the Lower School, along with Cecil Mullins, the housemaster's four year-old son. The baby son of Paul David (the Director of Music who lived nearby) was also gravely ill. At the Lower School, Hastings' younger brother went down with the disease.

Most worrying was the case of Stephen Nash, who complained of feeling faint during singing practice. Aged 14, he was from Redgate - a 'hill' house' on London Road, nearly half a mile from the houses of boys previously affected. The cases were spreading geographically but there was no way of knowing the cause. Miasma could not be ruled out; boys travelling around the sodden town might have ingested foul water; contagion seemed a possibility as they rubbed up against each other in school; an outside carrier might be bringing new infection into the town.

Dr Bell saw Nash that evening and again two days later, and Thring met the boy's 'kind and sensible' parents when they came to visit him in the sanatorium.

Even the mildest cold symptoms produced fear amongst boys and staff. Local rumour suggested that there were now nearly 40 cases, and although Dr Bell insisted that the true figure was around a dozen, the wilder rumours started to reach parents. Some of them reacted with aggressive calls for action (mostly unspecified) or by calling their sons home. Others arrived unexpectedly at the school, including some who kept vigils at the bedsides of those most seriously ill.

On Monday 11 October Wensley Jacob, a school trustee, Birkenhead businessman and father of two pupils, contacted Thring. Six parents from nearby Liverpool, including two doctors, had been to see him, demanding that the school summon the MOH. The next day Thring received a letter from another Liverpool doctor-parent, 'speaking in the name of many parents in a kind spirit, but also in an imperious one'.

Thring now faced a very difficult decision. If he closed the school and dispersed pupils to their homes all over the country, he risked spreading the infection and accelerating the panic to a point at which the school might never reopen. However, if he kept it in session and the epidemic grew he would inevitably be accused of complacency, secrecy and selfishly putting his own interests ahead of those of his pupils. Reputationally, this might prove even more damaging in the longer term.

He saw his immediate priority as being to bolster morale and prevent a sense of deepening crisis. On balance he judged it was best to let school life continue as normally as possible, even if some staff faced personal family tragedies.

He also needed to summon up the right mix of assertiveness and tact in dealing with an RSA which he increasingly believed to be incompetent. However, backed by Mullins who was beset by cases in West Deyne and who was watching his own son deteriorate, Thring decided that he had no alternative but to ask for urgent help from Haviland.

He wrote asking the MOH to come over from Northampton to 'test and examine' the drainage system and water supply of all the houses. Either through courtesy or because it was tactically sensible to sound conciliatory, he added: 'If you cannot come yourself, perhaps you would kindly telegraph to me, as it is no use to us to have the inspection by any man whose

name will not carry respect and conviction amongst the parents of the boys.' He saw Haviland as the best-placed figure of authority to put pressure on the RSA, and if necessary even the LGB.

Bell's view of the invitation to Haviland is unknown, but he met regularly with Thring during that week over the latest developments. So did a relentless succession of concerned parents and housemasters.

Whilst out on brief walk with Grace, his youngest daughter, to relieve the intense pressure, Thring 'met Christian (housemaster of Redgate) who said Nash was [thought] to be dying; wrote part of another letter, went to dinner, lay down, but was sent for by poor Mullins who had already said there was no hope for his own little boy... I found him quite perplexed about his house, overdone both in body and mind'.

Thring was concerned too about the Lower School: 'I really fear it will send poor Hodgkinson into his grave...' He prayed. Briefly there was hope that Nash and Cecil Mullins might be rallying, but on Wednesday things were bad again - and now Hodgkinson needed support: 'driven out of his wits by the calamity and fuss. I very much fear that he will not stand it'.

Even so, Thring stuck to his earlier decision telling a staff meeting on Thursday that 'it [would be] a great wrong to many [parents] forcing them to have their boys home... when a house was got hold of by illness, I should have parents written to, but I strongly dissuade the removal of the boys; then if it spread I should make removal optional, and if it got very bad, I should throw the responsibility of keeping them here on the parents. We should always stay so long as there were any boys to teach and keep them'. He also declared that he would 'not permit the school to be overhauled (i.e. investigated) by any but a competent and true authority'.

In such a small community the RSA members must have known that the situation was bad and growing worse. Before their weekly Wednesday meeting they instructed their local inspector to investigate and he confirmed formally that there were typhoid cases in the school.

Keen to be seen as proactive, they too decided to approach Haviland. A telegram was sent: 'Fever in the school houses here; your immediate attendance is requested'. Haviland thus returned home from work elsewhere on the Thursday to find urgent communications from both school and town. He replied immediately that he would come over next morning.

Meanwhile there had been a meeting between the RSA's inspector and Thring at which accusations of secrecy and inertia were traded. Thring wrote with irony in his diary: 'Was not a little amused to hear from him that he [claimed to have] known nothing of fever in the town until today. So I may be excused for having known nothing [about illness in the school]'.

On Friday morning Haviland arrived by train to begin enquiries - just as young Cecil Mullins died at West Deyne. Another telegram came from Liverpool, demanding to know whether or not Haviland had started his investigations. 'When will it end?' wrote Thring in his diary. 'I am myself very tired and done up... all one's feelings of joy in doing one's best, and the happy sense of one's work is so utterly destroyed'. The achievements of twenty-five years might now 'melt like the snow of spring'.

Sunday brought the death of Richardson. Thring went for an afternoon walk and was fearful that there might have been a second death that day when he heard the church bell toll, but it was for a woman in the town. However, Nash died on 21 October and Oldham, another Lower School pupil who had been in the sanatorium for only 24 hours, two days later.

The list of school-connected cases of varying severity did indeed come eventually to over forty, including no fewer than seventeen from the Lower School and nine from West Deyne. Six different senior school houses were affected. The sanatorium list includes crosses against the names of four marked as 'an undoubted case of typhoid, although we cannot be sure when these crosses were included. In all, five boys died, together with Mullins' young son.

Bell also recorded that twelve of his town patients showed similar fever symptoms during September and October, including (mildly) the children of bookseller John Hawthorn and HH Stephenson, the school's cricket professional.

Thring attended Cecil Mullins' burial in the churchyard on Saturday 16 October, barely 150 yards from his own house, just as a group of angry parents gathered at the Falcon Hotel. Feelings were running high; one father arrived late for the meeting and was greeted by others asking whether he had come 'to take his boy out of the hands of these murderers'.

When Thring heard about this later, he commented ruefully: 'Nice for poor old Hodgkinson, whose whole life has been bound up in the house and boys; nice for me too, for I am murderer No. 1'. He then went straight off to meet Haviland, though (it seems) Bell was not included.

The MOH had evidently wasted no time in looking around both town and school. He was furious that the RSA had done nothing to improve the privies at the infants' school, eight months after he had first drawn attention to them. At this stage, convinced that the typhoid had originated in the Lower School, he declared that it was quite safe for the school as a whole to continue.

Thring, possibly experiencing public health officialdom for the first time, found

Haviland's imperious manner hard to take. Although glad that the MOH supported his own view that the school could remain in session, he was worried that Haviland was listening too much to alarmist rumours in making what appeared to be very rapid judgements: 'I confess that my blood rather boiled when I heard this man deliver an *ex cathedra* statement, as if all he said was gospel on a question where there was so much to be considered'.

A few days later Haviland carried out a thorough inspection of Thring's boarding house. Thring was relieved: 'I am glad to say there is not much of consequence. He also passed both my wells as perfectly pure' - an analysis which was confirmed a week later in water samples which Thring sent independently to London.

After that, however, Haviland's advice seemed erratic: he told Thring (22 October) that all boys in infected houses should be sent home, but he wrote to another housemaster (Christian) that he saw 'no danger whatsoever in allowing [your] pupils to remain' - despite Nash's death, but possibly because Redgate was a hill house, well way away from the centre of the school.

Unsurprisingly, Thring preferred to emphasise the second message. He wrote to every parent, re-emphasising that each house was geographically distinct and with its own catering arrangements. He reiterated all the reasons for not sending boys home - although he said that if parents insisted on it or the disease took real hold in any individual house, there would be no alternative.

Getting the right tone was far from easy - especially with the parental medical fraternity - and before sending it he consulted his two trustee allies on Merseyside. They queried whether the letter sounded too dictatorial, but he pressed ahead and later claimed that parents welcomed it.

At this point Dr Christopher Childs, a popular Old Boy sportsman who had gained an Oxford First and recently qualified from St George's Hospital, London, wrote offering Thring his services. Thring at once recruited Childs as science master and 'sanitary officer'. Taking on new staff would reassure parents that the school had a future and Childs would go down well with the Old Boys. Childs might also be able to relieve the pressures on Dr Bell, although Thring failed to realise how much it would cause Bell to fear for his own position.

The RSA gave the school little comfort in these testing weeks. Some of its members were at best lukewarm towards the school, and they may well have enjoyed Thring's discomfiture. It made sense for them to await Haviland's findings, and they lacked the expertise to ensure that any decisions that they made would be cost-effective, or indeed effective at all.

Gradually though, as the extent of the epidemic sank in, they saw the need to seem in control. They were quick to pronounce that wells at Redgate (on the edge of the town) were quite pure, only for Thring's independent analysis of the same supply to describe it as 'turbid' and over-heavy in carbon and nitrogen. On 27 October the RSA served notice on four of the housemasters to 'remove nuisances arising from their cesspits', in the wake of Haviland's initial visits to houses. Thring saw this move as prompted, not by a conviction that the cause of the epidemic had been found, but by the RSA's concern to place the blame for it firmly on the school.

He was equally irritated by the reaction of the school trustees to recent events when they met on 29 October. Declining to seek their own expert independent advice, they proposed a sub-committee to work with the RSA, urging it to give every assistance to Haviland and the housemasters, thereby

implying that they supported the recent order about the cesspits.

Much worse, they ordered Thring to close the school immediately. He thought them spineless: 'A most bitter disappointment. The trustees with all this great school handed over to them... [will work with] authorities here whom we mistrust and despise... it is very hard to keep down the bitter, sour feeling'.

Very reluctantly he announced that term would end on 2 November and that he hoped to reopen 'the week after Christmas Day'. He was deeply worried that parents might now consider alternative schools. He worked hard to keep his housemasters in line: the houses must be made faultless, costly though it would be to them. On the night before the school broke up, he described his feelings in his diary: 'The last evening, alas! of our maimed school-time. The strange childish relief I feel at not having to get up for school tomorrow [and] the lifting of that fearful weight of the possibility of fresh fever. For the first time for many days I have drawn something like free breath'.

Recriminations between school and town came fully into the open once the boys had gone. The RSA made public its enforcement notice about the cesspits, adding that 'serious blame attaches to the masters in whose homes enteric fever originated.' It criticised Bell for inadequate investigations, for failing to report the situation to the RSA, and for declining to attend a meeting of the town's doctors arranged by Haviland. It also commissioned a notable sanitary engineer based in London, Rogers Field, to report on the town and its properties.

Thring was deeply angry at this rush to judgement before the evidence had been gathered and assessed. He complained to Birley and Jacob that 'we were going to be made a scapegoat of... the most wonderful bit of Jack-in-officium', and he

emphasised the 'astonishing audacity' of the RSA, which had been so inadequate over the previous two decades and especially recently:

'It is the most insulting thing I ever knew... truly laughable, but noxious too, as they mean to send it to every parent whose boy has been ill. They think nothing can touch them. I shall have difficulty in keeping the masters quiet under the insult... Altogether this is a time of humiliation and sackcloth'. His worst suspicions were confirmed when the RSA's inspector told him that 'if we applied to the [LGB], they would only send down the complaint to him, and he (Thring) had better save himself the trouble'.

He was increasingly worried that Haviland's full report - due within weeks - might conclusively take the RSA's side against the school. A MOH's sympathies might lie instinctively with an RSA, and he was perhaps also aware that Haviland's responsibility was to the whole local community, not just the school. The school must therefore enlist influential support beyond the immediate locality to get the LGB to intervene. On 5 November he wrote to his brother, Sir Henry Thring, who had extensive networks within parliament, urging him to lobby the LGB:

'If it rested with us, all could be set in order, but it does not. I want nothing but fair play. My masters are hard-working, and ready to do anything that is judged right. The town is at fault...unless we can get the central authority turned on, it is ruin... The town is trying to make the school its scapegoat, [to] hide past mismanagement and prevent outlay and exposure. Uppingham may forget but cannot forgive that it exists mainly by the school... The row and panic amongst our parents is so great after the lies and exaggerations that have been set going...

... You government men have no conception of local tyranny'.



The Lower School in 1872 (now The Lodge): the house where the first two outbreaks of typhoid originated in June and October 1875.



The Falcon Hotel, 1860: scene of an angry gathering of parents in October 1875, accusing Thring of negligence and secrecy.

Lower School.			
Name	First seen	Declined	Length of illness
Nawke B. E. Nake	June 16th	June 17th or 18th	Died on the 24th June
McKewell	Sept. 21st	Sept. 22nd or 23rd	Able to go home on Oct. 19th.
Hastings ma	" 28th	Same day	Removed in invalid Carriage by Dr. Hastings on
Swainson	Oct. 4th	"	Convalescing Oct. 11th Sent home some days
Perera	" "	"	Weak but able to go home on Oct. 19th.
Marsh	" "	"	Able to go home Oct. 29th or 30th.
Bucknell	" 5th	"	" " Oct. 22nd.
Smee	" "	"	Convalescing Oct. 11th Sent home some
Harman	" 5th	"	Able to go home Oct. 22nd
Hillard	" "	"	Removed in invalid carriage Oct. 25th.
Bill ma.	" 7th	"	" " Oct. 23rd.
Richardson	" 7th	"	Died Oct. 17th.
Martineau ma	" 9th	"	Able to go home Oct. 20th
Smith ma	" 9th	"	" " " Oct. 30th went 10 days
Harcourt	" 9th	"	" " " Nov. 5th.
Hamilton	" 9th	"	" " " Nov. 10th
Hastings ma	" 11th	"	(Had been under Dr. Hastings 5 or 6 days & saw him, went home with his brother on Oct. 3)
Reham	" 18th	"	Died on Oct. 23rd.

18 Cases 10 Cases

By invalid Carriage is meant a Carriage with Couching up to Mrs. Rodkinson's house, the boys obliged to be removed there would be some weeks in getting well.

The remainder went in Cabs to the Station and then in 5 or 6 Carriages but all would be at least 10 days or fortnight before they could work and some a month or six weeks.

Extract from the Sanatorium Register, Autumn 1875.

Incomplete water analysis

The first page of an analysis of the 12 wells around the town in July 1875, a month after the first typhoid outbreak in the Lower School.

Requested by Thring and commissioned by the RSA, it was conducted by Dr Thudicum of the Medical Department of the LGB. Like many of those which followed over the next two years, it demonstrates that in the era before bacteriology had developed, analysis was confined to chemical impurities in water.

*Tabular Statement of the results of the Pure
Pathological Laboratory on behalf of the*

<i>Number of Water</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>Ammonia by Na_2CO_3</i>	<i>0.00145</i>	<i>0.000277</i>	<i>0.00277</i>	<i>0.0133</i>	<i>None</i>
<i>Nitrous Nitric acid as Nitric Acid</i>	<i>0.770</i>	<i>12.070</i>	<i>34.413</i>	<i>12.329</i>	<i>13.868</i>
<i>Chlorine</i>	<i>0.687</i>	<i>10.82</i>	<i>14.72</i>	<i>10.28</i>	<i>7.800</i>
<i>Sulphuric Acid</i>	<i>2.200</i>	<i>10.711</i>	<i>16.633</i>	<i>9.706</i>	<i>10.580</i>
<i>Potassium as Chloride</i>	<i>0.6606</i>	<i>7.93</i>	<i>40.37</i>	<i>16.152</i>	<i>13.11</i>
<i>Sodium as Chloride</i>	<i>1.6401</i>	<i>14.41</i>	<i>16.45</i>	<i>19.899</i>	<i>14.66</i>
<i>Temporary Hardness</i>	<i>14.00</i>	<i>14.70</i>	<i>33.00</i>	<i>14.00</i>	<i>20.80</i>
<i>Permanent Hardness</i>	<i>3.00</i>	<i>33.00</i>	<i>31.00</i>	<i>11.00</i>	<i>15.20</i>
<i>Total Hardness</i>	<i>17.00</i>	<i>47.70</i>	<i>64.00</i>	<i>25.00</i>	<i>36.00</i>
<i>Total Solid Residue</i>	<i>18.75</i>	<i>90.28</i>	<i>141.32</i>	<i>63.75</i>	<i>76.23</i>
<i>Loss by Evaporation</i>	<i>4.87</i>	<i>25.69</i>	<i>27.77</i>	<i>4.85</i>	<i>13.167</i>

The numbers indicate grains per gallon



Redgate: a house on the London Road (closed in 1940) and far from the houses previously affected. Its boys included one of the fatalities in the second typhoid outbreak, Stephen Nash.

In Memoriam.

Stephen Payne Nash,

Born March 3rd, 1861,

Came to this School in August, 1875,

Died at Fairfield on the 21st of October last,

Aged Fourteen.

Memorial notice announcing Nash's death in the sanatorium (Fairfield).



(Old) Constables, on the north side of High Street West: another of the early new houses which between them put so much pressure on the town's sanitation.

CHAPTER 5: WINTER 1875-6

Thring's readiness to use his powerful contacts fed the RSA's resentment and suspicion that he was resolved to divert all blame away from himself.

Sir Henry duly went to visit the LGB, which gave him a very sympathetic hearing. Landowner Sir Charles Adderley also lobbied it: he believed that relations between the RSA and the school had irretrievably broken down. He claimed that the earlier sewerage improvements in the town had been poorly thought out. There should be a government enquiry lest good ratepayers' money was poured after bad: it would be no point in adding to the sewerage system without improving what was already there. The RSA needed greater powers but it could make more use of those which it already had. For him, the water supply was a secondary issue.

Sir Henry and Adderley succeeded in their quest for a LGB enquiry. Thring was euphoric: 'A great day. The local tyranny is now shut up for a time... A great cloud rolled away, I begin to breathe freely'. Seeking to show the school as pro-active, he hired Alfred Tarbotton, a Nottingham engineer, to recommend improvements to the houses, urging housemasters not to resist the cost.

The two recent analyses of well-water across the town had highlighted its contamination, so he planned to finance trial borings for a new water supply. A private company might be the best provider, and legal advice was that an act of parliament should be sought for it.

The RSA quickly and predictably gave notice of opposition to what it saw as Thring's unilateral action, claiming that their riposte was 'merely to protect our own interests and those of the ratepayers', but just before Christmas a draft company prospectus went out to housemasters and trial borings began.

Meanwhile Haviland had given the LGB early warning that the epidemic was serious, but its senior officials differed amongst themselves over whether or not to become deeply involved. It was unwilling to take sides too soon, or simply to back the party which protested the loudest.

There were several reasons for this. First, demands for LGB intervention by *any* local authority fed on-going internal debate amongst officials about the merits of direct intervention compared with gradual persuasion and making local leaders stand on their own feet. Secondly, it was being lobbied with contradictory messages by the RSA and the school. Thirdly, the school's pressure was unremitting - even counter-productive.

An official annotated one of Thring's stronger letters as needing to be treated with caution. When Thring sent Childs to reinforce the school's case, the LGB expressed every confidence in Haviland and Field, who were likely to make far-reaching proposals: the problems in Uppingham were well-known and 'if the college' (sic) thought the town's drainage was inadequate, it could make a formal complaint... the LGB would no doubt send an engineer to assess things for himself'.

Thring could not have known that Field (perhaps conscious of being the RSA's client), had recently told an LGB official that some housemasters seemed 'less anxious about perfecting their sanitary arrangements than by doing the [minimum] work which would satisfy the sanitary authorities'. He greeted the LGB's response with deep gloom, sending Childs to London again but to no avail, and then firing off to the LGB a further complaint against the RSA: the school paid large sums in rates and it needed urgent help in the shape of an LGB inspector's visit.

Thring's previous letters had been sent to Sir John Simon, head of the LGB's medical department but this time he took his case direct to its President, George Sclater-Booth. Sclater-Booth's annotation suggests that he took a much more urgent view of the school's plight than Simon: 'Will you deal urgently with this? It is an exceptional case, and I think we ought to appoint [an] inspector'.

'JS' (presumably Simon) reluctantly suggested Robert Rawlinson, the LGB's chief engineering inspector, but with the caution that adding Rawlinson to the expertise of Haviland, Field and Tarbotton might be undiplomatic. Keen as ever to be even-handed, the LGB kept the RSA informed of its actions, and braced itself as yet another school deputation quickly arrived in London.

Throughout November the LGB's officials agonised over its degree of involvement, as Sclater-Booth insisted that Rawlinson go to Uppingham. Ironically, Rawlinson had always been a strong advocate of non-compulsion on local authorities and he argued that once his visit was over, the LGB should draw back: 'It is important that you repudiate the idea of responsibility for any future outbreak. The responsibility is, and must remain, local'.

There was a further, inconclusive, exchange of notes between the LGB and the RSA on the bye-laws question. After that, at various points up to Christmas, the LGB received updates from the school, the trustees, the RSA and water analysts about their respective activities.

However, the LGB now also risked being drawn into a private battle between Bell and Haviland. Bell wrote on 12 November protesting about the MOH's over-bearing conduct. He had already complained to the RSA about Haviland's demand for information about his patients. He resented the attempt to force him to come to a meeting between Haviland and all three

town GPs. The LGB wrote back supporting Haviland's actions but stating that the MOH had no *legal* right to make Bell appear. Beyond that, it could not express a view on what was a local matter.

Bell persisted through December with a string of detailed complaints. He had met the inspector of nuisances and had talked at least three times with Haviland himself. The doctors' meeting had been called at very short notice (at variance with Haviland's claim that Bell pleaded sudden illness). If he (Bell) was under fire for not having reported suspected typhoid cases to Haviland in June and October, were the other doctors being investigated over alleged cases in the town a year earlier? Haviland had visited his (Bell's) patients unreasonably and repeatedly, sometimes suggesting alternative treatments.

Bell's own campaign cannot have helped the school's cause with the LGB. It replied dutifully each time, asking Haviland for comment. The MOH stated that his forthcoming report would rebut all Bell's charges. The LGB noted in its files that even if he had breached medical etiquette, he had not exceeded his legal authority.

By then, Uppingham's battles were appearing in columns of the national press. Perhaps fed information by disaffected parents, *The Lancet's* editorial on 30 October stated that the town was apparently free from typhoid, but that there was plenty for Haviland to investigate in the school. It published an anonymous letter from *Medicus*, claiming to be a relative who had visited one of the stricken boys. *Medicus* said that he had received evasive responses from Hodgkinson and Thring, that Bell had tried to avoid meeting him; that the boy had been treated in the sanatorium, close to another who was 'in the second week of typhoid, with a temperature of over 105 degrees fahrenheit'.

Thring instructed his staff not to write to the press without consulting him first: a consistent response was necessary and he wanted to avoid a public slanging match - with reason, for Bell had just admitted to him that there were ventilation problems in the sanatorium and a shortage of beds, cooking facilities and storage space. Its superintendent had resigned (possibly under pressure to do so): it was an additional short-term problem but in retrospect fortuitous, because her successor soon reorganized the building, but giving credence to the criticisms which Haviland's report would shortly make.

The Times took up the attack on 5 November, quoting from the RSA's recently published self-defence. It lambasted the sanitary arrangements at 'isolated' Redgate: cesspits, water closets, sinks and water supplies were all inadequate and poorly sited:

'It would be impossible to find arrangements more directly fitted to engender and spread the special disease which has shown itself at Uppingham School... The Lower School is a splendid mansion, but the architect seems to have altogether forgotten to provide for the health of its inmates. Gigantic cesspools were in close relation to the water supply and every arrangement was made for the pollution of the air by regurgitation of gases from the water closets'. Quoting a report in the *Sanitary Record*, it too suggested that the school had been complacent and secretive.

The Lancet returned to the attack a week later, reporting the RSA resolution that 'serious blame' attached to the housemasters and criticising Bell. It wondered whether 'his reticence was due to pressure put on him by school authorities'. It challenged Thring's fitness to continue as headmaster, for allowing healthy boys to visit infected houses: actions of which the trustees and parents should be made aware. By way of contrast

it concluded: 'The Sanitary Authority have acted with spirit and determination'.

Similarly critical articles appeared that day in Uppingham's recruiting heartland. The *Liverpool Post* believed that 'the commonest precautions have been recklessly disregarded', while the *Liverpool Daily News* alleged that 'letters and telegrams sent by anxious parents had remained almost unanswered... Mothers, who fled in an agony of apprehension to Uppingham, had the greatest difficulty in obtaining access to their sick children'...

'...Even the autocratic will of the headmaster of an English public school is inefficient against the laws of nature; sewage gas will bring enteric fever, however sternly he may set his face against it'. As for the school's strong reputation for Latin and Greek: 'perhaps when the cesspools are cleared out, the water supply is beyond suspicion, and the boys are back, the Local Government Board will send a teacher of elementary physiology into Rutlandshire. It would be a good investment of time [for] both masters and boys, even if the [study of classics was] intermitted for a month or two'.

Another paper described Thring as 'a bigoted old-fashioned hater of pure air and water', but he stood firm, and he replied to a supportive letter from his opposite number at Rugby: 'I prize your letter. It is very cheering in these heavy days to have a little sunlight let in'.

The disputes in the press then moved on to whether it would be safe for the school to reassemble in January. Haviland and *The Lancet* urged caution, but Tarbotton, his survey of the houses now complete, wrote more reassuringly: the latest analysis of springs by London experts was 'most satisfactory'. In December *The Times* criticised the RSA's intention to make the forthcoming reports public before the trustees had seen them as 'a partial and

premature act'. Barnard Smith rebutted charges in the *Medical Examiner* that the RSA was antagonistic to the school.

It was not yet clear how much damage the publicity had dealt the school or what the experts' reports would bring. Thring was cheered by rumours of a London official stating that the RSA had much to do and that 'if work was not done quickly, [the LGB] would send down their own engineers, and charge it to the parish'. Much bleaker, however, was the letter he received from the parent of a boy in his own house, describing how he had run into Haviland in the street in Northampton. They had talked for about ten minutes:

'Mr Haviland did not say that it would be a year before the school could re-assemble... [but] it would be a long time; that the sanitary condition of the school was very bad; the boys did not get enough to eat and drink, that those who paid for extra meat did not get an equivalent for their money... he said quite enough to deter any father from sending his son to Uppingham [and] will deter many from returning. P.S. My boys are anxious to return and I shall be glad to send them there, provided I can be assured that the place is safe!'

Thring forwarded the letter to the LGB, adding: 'It is hard having Mr Haviland as our judge. Money has not been spared since 22 years ago I began life at Uppingham, with 25 boys... I venture to think that [his actions] and views of his duty are not such as would be approved by the Board'. He wanted all the background documents to be laid before Sclater-Booth, but an official merely noted that 'the papers are with Mr Rawlinson, and he cannot spare them today'. The LGB was watching its boxes fill up with a sense of foreboding: it had insufficient enforcement powers and manpower - and it had another 700 local authorities to oversee.

All the parties now awaited the publication of the four experts' reports. Tarbotton

(commissioned by the school) sent his findings to Thring, the trustees and Rawlinson just before Christmas 1875. Despite conceding that all the houses had been defective in various ways (with unsuitable drain and sewer layout, faulty joints, poor ventilation and inadequate flushing), he judged the shortcomings merely as those 'too often found in most modern houses and mansions'.

Criticising the RSA, he pointed out that the four 'hill' houses had no possibility of connecting to the sewer system unless it was radically extended. Prospects were not much better for 'town' houses because the sewer system was too shallow, poorly constructed and 'totally unventilated'. One house had been forced to build cesspits because the RSA had banned it from connecting to the sewer for fear of overloading the system.

He conceded that the Lower School (although only recently built) had been very defective, but extensive works had now taken place - including a new well for drinking water. He urged the RSA to seek a 'better source of [water] supply unless private enterprise be more active'. The masters had all been very co-operative.

If Thring hoped this report would persuade the trustees to agree to the school's reopening, he was quickly disappointed. They decided on 28 December to defer any decision, pending Rawlinson's LGB report whose timescale was still uncertain.

Rogers Field's report (commissioned by the RSA) came out on 6 January. Carefully researched, wide-ranging in scope and full of technical information, it charted the growth of the town and its sewerage improvements, and it detailed the sanitation in all 379 properties in the town.

Field was unsparing of his client (the RSA) in describing the town's sanitary state. The sewers had ventilators choked by dirt, faulty joints, inadequate gradients

causing flooding into cellars, and the lack of provision for flushing. These were deficiencies so serious that it would be better to re-lay the sewers than to repair them: a strategy which might also tempt more townspeople to join up to the system, as 'the greater portion of the town [is] still draining into cesspools, many of which are very badly situated and offensive'. At the sewage farm the tanks were too small, and emptied all too infrequently. Many private wells seemed contaminated, and there was no public water supply. Better water provision would provide healthier drinking and would also support comprehensive water-carriage arrangements for sewage disposal rather than dry-earth treatments.

Within the school Field had visited every house, noting engineering flaws in drains passing under them, poorly sited water-closets and deficiencies in sinks, baths and lavatories. He emphasised miasmatic problems caused by gases and foul air; he backed Tarbotton's recommendations, and he too praised the co-operative masters.

Rawlinson's findings (for the LGB) followed quickly on 12 January. His report was brief, reflecting his reluctance for the LGB to be drawn too far into the dispute. Noting the actions taken by RSA and school over two decades, including Thring's repeated requests for improvements as pupil numbers increased, he described working closely with Tarbotton and Field in visiting all the key sites. He believed that once Tarbotton's recommendations had been carried out, 'the school will be in as complete and satisfactory a state as the best modern sanitary science can put them'.

He praised Field's work and reiterated the dangers from contaminated wells, criticising the RSA's 'imperfect' past actions because 'after all this expenditure the main sewers have been practically useless' owing to inadequate maintenance. He also noted the 'local opposition by the ratepayers', who ignored the RSA's

notices requiring improvements, showing 'obstinacy in not draining their houses'. He too added a miasma reference: 'There is most unfortunately a strong prejudice in small rural towns and villages against sewer ventilation because, it is said, the openings permit bad smells to issue'.

Overall he was very supportive of the school and his report impressed the trustees. Six days later (18 January) they agreed that the new term could begin on the 28th, although Wales wanted the decision delayed until Haviland's report had been published. Wales - his interests conflicted by his other role in the RSA - had possibly received a preview of the MOH's report, unlike the other trustees.

Notwithstanding Wales's demand, Birley and Jacob persuaded the trustees that Thring should tell parents that the necessary measures had been carried out and that Dr Childs had 'been appointed science master and charged with all sanitary arrangements'. Thring believed the decision to re-open had been a close-run thing, and he reflected gloomily on the likely impact of the bad publicity.

He would have resigned if the trustees had gone against him: 'It would be ludicrous, if it was not so important, to see them... sitting in solemn conclave playing with other men's lives... Yet there they are, totally ignorant of the business of the school, also passing judgement on us and our work and our fortunes'.

Haviland was in no hurry to produce his report, as he wanted to give critical parents every chance to contact him. Originally called in by both town and school (for very different reasons), he had visited Uppingham several times between October and Christmas 1875, writing in *The Lancet* and the *Liverpool Daily Post* that as he had no evidence that structural improvements to the houses had been made, he could not recommend the return of the boys.

Having had early warning from his Northampton parent of what Haviland's report might contain, Thring's sense of foreboding grew, fed by knowing that its headlines were being disseminated elsewhere but had not been sent to him. Just before the new term was due to begin, he confided to his diary:

'Private copies of the indictment of the school going about. The masters are very troubled, [with] reason, for it is clever and scurrilous. I have heard from London that the report is going about there. Beale (a doctor, supportive of the school) is disgusted. Jacob and Birley have also seen it. I hear the Bishop of Peterborough says the trustees must notice it... fresh danger'.

Haviland's report ran to fifty foolscap sides: by far the longest of the four reports. It bore its author's trademark combative tone, opening with a graphic description of the preconditions for any typhoid epidemic, the need for speedy investigation of the first case, and the imperative need to keep young people away from any infected house. He included a long chronology of events from Hawke's death in June at the Lower School, via Chapman's explosive visit to its underground chambers, to the clutch of cases in October which had caused four more fatalities. He asserted that there had been thirty cases in the school by 12 October but 'not a single step had been taken towards investigating the cause of this lamentable outbreak'.

He rejected Thring's claim to have summoned Haviland before parents began to express their fears. Mrs Richardson's complaint that her son's condition had been kept from her until it was too late 'made a deep impression on me... I found indeed, that she had reason to complain and that she did not stand alone'.

He criticised Hodgkinson for allowing a Lower School cook to go back to her home in Caldecott, probably causing the death of

an 18 year-old who lived next door. He censured Dr Bell for failing to attend the doctors' meeting - in contrast to Dr Walford who had come despite 'serious illness' - and he implied that Thring had ordered Bell to stay away. He condemned Bell's complaints to the LGB and rejected a charge made by 23 town residents that he (Haviland) had made 'various unofficial statements'.

He was particularly incensed that the infected houses had not been closed to other boys at an early stage. He was convinced that the epidemic originated in the Lower School, citing yet another expert water analysis (whose author would claim later to have been misrepresented). He believed that Nash from Redgate had contracted the disease by swimming in infected water. This led him to paint a graphic picture of the course taken by the stream flowing out of Hodgkinson's garden and through the town:

'Pure at first; then progressively contaminated by sewage mixed with excess rain and well-water, 'oozings from the site of the old gas works... drainings from manure heaps, a cowshed, a pigstye, a stable, and other accumulation of filth... before [being] still further polluted by the overflow of a cesspit and drainage from the cemetery. It then flows on beyond the town and becomes the feeder of the bathing place and swimming pond!' There the water became so filthy, that local adults avoided it, but 'poor Nash had bathed in this filthy pond as late as the 14th September. It then passes to the south of Bisbrook (sic), where I am informed it is used for brewing purposes'.

Four pages described drainage deficiencies in the Lower School and in shared pipes between West Deyne and Paul David's neighbouring house, where water discharged down one drain resulted in foul air being forced up the other. Thus he too introduced a miasma speculation. Neither of the two wells at West Deyne was fit for

drinking, yet boys had used them despite their housemaster's instruction not to. He referred more briefly to deficiencies in the other houses and then turned to the sanatorium. Visiting it with Field, he had found major cesspit deficiencies. There was 'a great want of nurses [and] the matron complained that all authority over them was denied her'. He condemned the practice of waking boys up for feeding, when what they really needed was sleep.

He was especially critical of the treatment of John Millington Sing from the Lower School. Bell had allegedly advised that Sing be fed at thirty-minute intervals without fail. However the nurses had found that it took fifteen minutes to wake the exhausted boy, and once he had been fed and had gone back to sleep, it was time to wake him again. Haviland had told one of the sanatorium nurses that sleep was the paramount need. 'The advice was followed, and the boy then slept soundly for several hours and eventually recovered. I could not see a boy struggling for life, and not give him... advice which I knew to be sound' - yet Bell had later complained about Haviland's interference.

Haviland also attacked some arguably less relevant aspects of the school. Studies and dormitories were small and overcrowded: he alleged that there was less cubic space per pupil than prisoners received in the Daventry lock-up, from which he concluded that 'it is absurd to suppose that a boy can study in an unventilated box'. The food was sparse and un-nutritious. The late breakfast (after early-morning lessons) was a possible cause of disease because it weakened boys' resistance.

There was no discussion of disease theory questions as such. Suggestions of both infection and contagion were interspersed with frequent references to poor ventilation, sewer gases and 'how the poison is generated in the excreta of an affected person after they are voided, [through] a process of putrefactive

fermentation undergone when massed in cesspits etc'. He asserted that 'the poison is liable to gain access either to the air or the water': another indication that he did not rule out miasma causes, particularly in the case of Kettlewell from the Lower School who (he believed) had contracted the illness 'by being exposed to the influence of sewer-gases, emanating from the unventilated cesspool' there.

He had also considered possible sources of contaminated drinking material, but while a better supply would be beneficial, this was a less pressing issue. On the other hand, 'only by such a means can you guard against the present and future influence of the disease'. He had pondered - and rejected - the idea that milk from cows in Ridlington might be to blame.

Haviland re-used some of the statistics from his earlier report on the combined districts, but he drew noticeably more favourable conclusions about the general state of health in the town than in that earlier report, claiming that the other two GPs had reported only three typhoid cases between them in the previous two years: all of them in one property. Scribbles by Thring on his own copy of the report suggest that Bell disputed this.

Finally Haviland thanked RSA members for their support 'throughout this tedious investigation', implying that they alone had invited him to intervene and making no mention of the school's own request. Barnard Smith added insult to injury by distributing the report with his own long memorandum of events. He too emphasised Bell's un-cooperativeness, and he too rejected the complaint of the 23 townsmen about Haviland's conduct.

Hodgkinson felt bound to respond to criticism of his actions. In a short pamphlet he admitted his previous ignorance of typhoid but disputed details about the Southampton pageboy and the Caldecott cook. He claimed that

Chapman's gas explosion had been greatly exaggerated. The town's cesspit system was one 'which the local authority did not raise their little finger to alter or improve'.

He sent a copy of his letter to Wales, who responded in conciliatory terms to his longstanding friend, appreciating Hodgkinson's distress but claiming that the RSA had been forced to publish Haviland's report in full or, like Thring, it would have been accused of secrecy. Wales claimed that Haviland's was an independent voice. No-one was blaming Hodgkinson personally for the state of the Lower School cesspits, but the first case of illness should have led to an investigation. The RSA really was doing all it could to improve the town, but it was inevitable that ventilators would sometimes become blocked, and the LGB had been unyielding over new bye-laws. The two men exchanged courteous letters again but it had become a dialogue of the deaf.

Haviland's responsibility was indeed to the whole community, not to the school alone. Even so, his report was much more critical of the school than the other three. He must have had some inkling of the reputational damage that the report would cause, and it is not clear why he turned so decisively against the school after his early, relatively civil meetings with Thring.

He showed no empathy for the practical difficulties which housemasters faced - at a time of year of shortening daylight and deteriorating weather - in countering their pupils' demoralising fear about the disease and the prospect of an early death. He ignored the fact that they taught classes and therefore could not watch their boys all the time: that many lessons took place in house dining halls and that boys needed to move around the town, making it hard to restrict their movement and to separate them from friends in other houses.

Thring inevitably felt that Haviland concentrated too much on the immediate

causes of the epidemic whilst saying little about the RSA's longer-term inactivity. The MOH may also have been incensed by what he perceived as Thring's high-handedness in repeatedly lobbying the LGB himself, and through third parties. He was outraged by Bell's complaints to the LGB about his actions; he had a low opinion of Bell's skills, and anger at what he saw as the local doctor's complacency.

Although Haviland made criticisms of the town, they were moderate compared with those of Field and Rawlinson and they contrasted starkly with the blame that he heaped on the school. Maybe he decided that the school should bear nearly all the blame because it had experienced over twice as many cases as the town, in which there were eight times as many people and where there was little evidence of illness amongst those of school age. While he concentrated on problems of infected water, his bombastic style reveals a scatter-gun approach to criticism, mixing together all the contemporary theories about typhoid's causes. This creates the impression that his zeal for public health went far beyond his precise knowledge about epidemiology.

Haviland would make only occasional appearances in Uppingham during the next year - usually to advise on cases of low-level illness or how to prevent them. He did not create the antipathy between Thring and the RSA, but he certainly sustained it. He had developed a strong personal dislike of Thring, yet neither was wholly to blame: they were temperamentally too similar in some ways.

But the manner and method by which Haviland promoted his public health crusade ensured that any chance of cooperation between town and school rapidly disappeared. It also created lasting and bitter enmity with Dr Bell, who would pursue it relentlessly through the year to come. In that sense, Haviland was the catalyst for the events which lay ahead.

Extract of Haviland's criticisms

of wider aspects of the school in his report, which the MOH claimed had been raised by parents. Thring annotated it, using florid question marks and words such as 'rambling', 'tautological' and 'irrelevant':

School Regimen and Routine

'A growing boy, like any other growing animal, must be judiciously fed and exercised if it be desired to make the most of his physical and mental powers, especially when both are often several taxed as at school.

There must not only be abundant good wholesome food, but there must also be great judgment exercised in distributing the supply during the hours of activity.

At an age especially prone to succumb to certain forms of disease, such as *Enteric Fever*, the stomach is the one organ that needs the most watchful care, In youth the stomach must be *naturally satisfied, not artificially appeased*. If a well-distributed, wholesome supply of nutritious food be within the reach of a boy, as a rule you will not find that boy gorging himself at all times, whenever he has a chance, with indigestible stuff, simply for the sake of eating. Cases there are, we well know, of morbid appetites; these are, however, to be treated medically, and even in many of these the most sure cure is a well-distributed nutritious diet.

[My] first complaint is that the boys frequently go early to their form-masters, sometimes at a long distance, to take their lessons, with empty stomachs; returning to the master's house with whom they reside, to breakfast at 8.30 or 9 a.m., this meal consisting merely of bread and butter and tea.

The effect of this is to tempt the boys on their way to their lessons to expend their pocket-money in buying all kinds of stuff at the pastry-cook's on the road.

They dine at 1.30 p.m., and from all I can hear are provided with a good substantial meal of meat, pudding, vegetables and beer. At 6 p.m. they have a bread and butter tea; after which, until the next morning at breakfast, they get nothing, unless they take bread and water or their parents pay something extra for a modicum of cheese.

Such a system requires no comment. A boy's empty stomach has neither conscience nor discretion; and surely if the present fees for board and lodging are not sufficient to keep this organ out of temptation, and to preserve it from being too open a portal for the entrance of *miasm* in some form or other, the parents should be informed of the fact, and not allowed to remain under the impression that they are expending enough on their boys to insure them plenty of wholesome and well-distributed food, whilst their boys are expending their pocket-money incontinently in filling up gaps in their stomachs caused by a "regulation" fast of 12 or 14 hours' duration.

It is impossible to estimate how often the empty stomach in the morning might have favoured, during the late outbreak, the invasion of the disease, the poison of which had been so long lingering about the different centres of infection. A boy should always start in the day with a good substantial breakfast, and after the fatigues of play and study should end it with a hearty supper of good, wholesome and easily-digested food. Nothing predisposes to disease more than indigestible food, especially when the bowels are the seat of the disorder, as in *Enteric Fever*; and the only rational mode of keeping the stomach out of temptation is to supply it with wholesome food at proper intervals, recollecting that young stomachs should never be allowed to be empty, for when they are, their temptation begins.'

