

INTRODUCTION

The small market town of Uppingham is situated about 100 miles north of London, in the East Midlands of England. In 1875 it was unusual – although not unique – in having right at its geographical heart one of the new private, residential boarding boys' schools¹ which were springing up all over England in the wake of new-found Victorian economic prosperity.

Uppingham School consisted of just over 300 boarding pupils, aged about 13 to 18, together with a wider community of teaching and other staff and their families, who lived in a dozen or so boarding (residential) houses spread around its streets. It had an increasingly strong national reputation, and drew its pupils from newly-affluent middle-class families all over the country.

The rise of these fee-paying schools created a complex set of relationships between the schools themselves and their local communities, as the schools tended to become increasingly separated from their historical origins – as Chapter 1 will show. Uppingham's town's traders had seen what had once been their local free school become less accessible – and ultimately unaffordable – to most of them as their children reached school age. This had caused underlying tensions between the leaders of school and town which would explode when their community was struck by epidemic disease.

The typhoid outbreak of 1875–7 which ravaged Uppingham School has long been recognized as a significant event by historians of education. Although it aroused widespread interest at the time, it has attracted little detailed historical attention since the death of its central character, headmaster Edward Thring, a decade later.

After three outbreaks of typhoid within nine months in 1875–6, and despite the school having carried out expensive improvements, Thring became convinced that the town authorities would never start a programme of major sanitary upgrading or install a mains water supply unless he forced their hand. Despite the opposition of most of the school's trustees,² he took a desperate gamble in March 1876 in ordering the removal of staff, pupils and much of their equipment to a temporary base 200 miles away on the Welsh coast at Borth, a straggling coastal village just north of Aberystwyth. There, in a feat of remark-

able improvisation, largely funded by himself and his leading staff, he set up temporary arrangements in less than three weeks. He ran the 300-strong school in one hotel, 28 cottages and a temporary wooden assembly hall for an entire year, which included an exceptionally stormy Atlantic winter. Parents supported him to a remarkable degree; fewer than 6 pupils failed to turn up for the new term there, although most parents would never visit Borth themselves.

The epidemic has a significance which extends well beyond the school and its local area. Typhoid, and other diseases, had existed locally for many years, but only amongst the townspeople rather than in the school. However, once it began to affect the sons of the rising middle classes, it provoked a crisis of confidence amongst Uppingham School parents, who were drawn from right across the country. As a result, a dramatic chain of events was unleashed. Through these events the historian is presented with a rare case study of how a small, close-knit country community of town and school could be torn apart by politico-economic, professional and personal conflicts and rivalries at a time of crisis.

In many ways Uppingham was a typical small market town in a very traditional rural county (Rutland). It was conservative in outlook, run by tight local networks. It was an economically precarious community. In depth study of its experience in 1875–7 sheds much light on some key issues of relationships within the local community, its local government, and its local medical provision.³ Within the town a number of powerful personalities, including Uppingham School's headmaster, were vying for leadership – especially once Thring had to face the prospect of his life's work being destroyed before his eyes. These local leaders in both town and school commanded significant powers of patronage, and their rivalries impeded sanitary progress at a time when the town authorities were already unable to satisfy rapidly rising popular expectations about public health. This stemmed in part from a lack of resources and expertise, but also from shortcomings in the relationship between government in the provinces and government at the centre – the latter symbolized by the ineffective department known as the Local Government Board (LGB).

Christopher Hamlin believes that the obstacles to radical health reform in medium-sized towns were extraordinarily complex in this period, and 'more difficult to bring about than has generally been believed'.⁴ He cites reasons for this as including the need for town authorities to rely on permissive (rather than obligatory) legislation, strict treasury control from London, a lack of local technical expertise, conflicting advice from experts and a fear of making mistakes – which itself provoked the fear of legal action and writs of sequestration when errors were made. There were also inadequate enforcement mechanisms, a theme taken up by the *British Medical Journal* (BMJ).⁵

Much of the political and economic conflict in cities and towns centred around popular support for sanitary reform in theory, but deep resistance to

raising funds to pay for it in practice – mostly via local taxes known as rates, levied on the value of properties under commercial and private ownership. Hamlin emphasizes the widespread perception amongst historians that the boards of guardians – unpaid volunteers drawn from the leading figures within local communities, and responsible for a variety of local government arrangements including public health – faced the resistance of ‘a shopocracy of small businessmen, too self-interested and narrow-minded to see the long-term benefits of sewer systems and water supplies and unwilling to accept (or pay for) the expertise of engineers, chemists, or medical professionals.’⁶ Other writers emphasize the narrow-minded, self-interested power and influence of landowners, the farmers’ dominance on boards of guardians,⁷ and the existence of a parallel and powerful middle-class elite, made up of ‘medicine, veterinary science, land agency and the auctioning of property, as well as commercial services like banking and insurance.’⁸

The acute unwillingness within the members of the local governing class to pay high rates on their properties did not derive purely from economic selfishness. House-building and ownership, and the mortgage finance which backed it, could be more than a mere search for profits and rents; it was also designed to provide income for old age, for a widow or an unmarried daughter. It constituted a careful long-term savings plan.⁹ Local lawyers made the arrangements and thus gained intimate knowledge of the sometimes precarious financial situation of their clients. This knowledge could make them cautious when they came to the weekly guardians’ meeting and found themselves facing major spending decisions.

Yet Hamlin shows that municipal, as opposed to privately initiated, reform could be pushed through, if the guardians who made up the local urban and rural sanitary authorities (USAs/RSAs) showed determination and vision.¹⁰ E. P. Hennock confirms this view: but it was not enough to have ‘good intentions or even sound plans. Only a council which devised means wherewith to ward off a rate-payers’ reaction would survive to carry out effective improvements over a long period.’ This demanded careful financial administration, political skill and imagination and the possession of a substantial revenue independent of the rates.¹¹

Uppingham, however, did not have men with the qualities and skills listed by Hennock, nor the other preconditions identified by Hamlin as favourable for reform: sizeable local industry, large-scale civic pride, and fear of losing out in competitive terms to rival neighbouring towns. There would be little prospect of big trading profits accruing to its guardians which could then be put towards the relief of rates. Moreover, lightly populated rural areas attracted little municipal interest in electricity, gas and tramways; the rural areas were mostly served by privately-owned businesses, and there were formidable recurrent operational costs and load repayment charges once any ambitious projects had been completed.¹²

Overall, the obstacles to improvements in Uppingham were formidable – justifying another of Hennock’s assertions: that the local rating system ‘could not but act as a check to any imaginative approach to the problems of urban life’.¹³ This view has echoes of a much earlier one by Sidney and Beatrice Webb (some decades after 1875), who argued that there was an important role for central government in collective protection of its population in all communities: rural as well as urban.¹⁴ They believed passionately in the benefits and virtues of municipal ownership of public services and utilities – but this belief stemmed in part from a conviction that the system of local guardians was quite inadequate to deliver those services, because of a combination of ratepayer opposition and repressive, unimaginative local leaders, inadequate to the task.¹⁵ They were too often more oligarchic than their urban counterparts – and inexperienced, too. This in turn made them afraid of placing too much reliance on their paid local officials.¹⁶

Most of the professional work carried out so far in the history of public health has centred around cities and large towns – notably London, Birmingham and Leeds – sometimes focusing on an individual working in an area over a long period; sometimes around civic rivalries between individual towns.¹⁷ Even studies of the wider national picture tend to concentrate on larger communities – for example, the work of Hennock and Anthony Wohl.¹⁸ We know comparatively remarkably little about health and mortality in the rural areas and market towns of nineteenth-century England.¹⁹ However, while they have not generally received much attention from English historians, there were more than 400 such towns, with an average population of perhaps some 10,000 each, and two or three times that number of people in the satellite villages in surrounding areas. Their customs and attitudes shaped the minds of many millions of rural people.²⁰ Not only that, but such towns ‘created the ethos of a French *pays*, a social and community focus which had a clear meaning for its inhabitants of “my area”, as cottage industries gave way to factory production and the growth of shopping centres ...’²¹

Meanwhile there were significant local trading effects from the foundation or expansion of private boarding schools based in small towns. Many of these grew up in the wake of economic growth stemming from the Great Exhibition in London in 1851. Their development led initially to big cash and employment benefits for their local communities. T. W. Bamford shows how the market town shopocracy might be driven to overcome its low-spending instincts, if its collective livelihood were threatened by a school’s hostility towards it, by a school’s declining reputation or (as in Uppingham School’s extreme case) a sudden misfortune threatening its very existence:

The traders were the most vitally concerned of all local groups, and were naturally sensitive ... to anything that threatened their welfare and profits. A shop out of bounds, alterations in the boarding-house tradition, the establishment of an internal tuck-shop, bulk-buying – all these were resisted by aggrieved individuals, but never by

joint action, for that smacked too much of trade-unionism, and those who were still dependent on school trade, or hopeful of it, feared reprisal and ruin. The same fear kept the traders quiet, not only over wholesale and retail matters, but over the wider questions of health and education ... Indeed, the silence of the traders at times of crisis made up a neutral block in town affairs concerning the school, which effectively split the most worthy causes.²²

After the 1870s – with the growth of the railways and of a more sophisticated retail network – this close economic relationship between schools and towns would begin to change: schools would rely less on local tradesmen and more on cut-price stores distributing goods from the big cities.²³ But for the time being Uppingham's townspeople faced a whole range of conflicting economic, social and political local pressures – a theme developed in detail in Chapters 1 and 2. They had to steer a delicate course between protecting their own financial situations and being loyal to their local leaders, (some of whom were their landlords), yet also being seen to support the school, which employed many of them. As in many small, enclosed (and essentially claustrophobic) communities, these pressures were exacerbated by powerful local personalities with personal prestige and territory to protect.

Popular expectations about sanitation and water supply in all areas of England were rising much faster in this period than the taxpayers' acceptance of rate increases to pay for improvements. There was so much to be done, but such inadequate governmental machinery to carry it through. In cities throughout the land, work began on radically cleansing streets following the Great Stink of London in 1858 and the pioneering work of men such as Edwin Chadwick and Joseph Bazalgette.²⁴ Successive governments of both parties passed radical legislation to accelerate such improvements – passing the Public Health Acts of 1848, 1872 and 1875 and setting up the Royal Sanitary Commission in 1866. Inspectorates were set up to control many areas of economic life. New medical officers of health (MOHs) such as John Simon²⁵ and William Henry Duncan began work, firstly in London and Liverpool, later in all large cities and finally in country areas. Meanwhile there were sweeping reforms in the registration and training of doctors. Popular expectations about better public health grew rapidly, but the means to satisfy them amounted to a sustained challenge to previous assumptions about the limits of government centralization and state interference.²⁶

The rich provision of archival material about Uppingham allows us to explore all these themes in unexpected and varied detail – and to investigate the effects of new provisions for health at a significant time of legal and practical innovation. Within the span of the nineteenth century – as a whole, a time of great governmental and sanitary change – lies an interesting sub-era of less than twenty years. At its start (1871) the LGB was set up in 1871 in an attempt to ensure that public health authorities in every area carried out government's

wishes.²⁷ Yet until the Local Government Act of 1888 set up county councils to bring a more systematic approach to local government, rural reform was far more haphazard, and local administration depended upon what Sir Edward Goschen called 'a chaos as regards authorities, a chaos as regards rates, and a worse chaos than all as regards areas'.²⁸

This 'chaos' existed in the form of Justices of the Peace (JPs) responsible for local law enforcement and (by virtue of their office) also members of the boards of guardians.²⁹ As Justices, they too were volunteers: self-appointed and often local landowners with no directly relevant qualifications.³⁰ They could call on far fewer material and fiscal resources than the professional administrators who would replace them in much of local government administration after 1888,³¹ and they were answerable to governments which had far fewer technological, communications and other means than nowadays to ensure that Parliament's will was carried out.

There was a central-local tension, too. Whatever London politicians might have sought to dictate from the centre, they relied on people in the localities to drive policy and its enforcement on the periphery. In retrospect, it is highly significant that it was during the two decades which spanned the first Public Health Act and the Local Government Act that Uppingham's typhoid outbreak occurred, because it illustrates the extent to which that period saw hugely increased responsibilities placed on local authorities before they were given the professional backup needed to carry them out. The difficult task of implementing central government decisions in the localities fell to the LGB, which has not enjoyed a positive reputation with historians,³² who have emphasized its slowness and bureaucracy. However, it should not be judged purely in the light of modern expectations about the wide-ranging role of government from the centre.³³

The dilemma over the future extent of centralization of government had been a major theme in national politics for some time, stretching right back to the Chadwick report of 1834 on the old Poor Law. Chadwick portrayed local government as ignorant, narrow-minded and corrupt, and believed that the way to progress lay through large-scale national initiative. He saw, however, that a national Poor Law organization would be expensive, and thus politically difficult to achieve – yet national legislation without local enforcement would be useless.³⁴ Forty years after Chadwick's report the essential conflict between effectiveness and cost had not been resolved: the LGB was under constant pressure from the Treasury, which faced hugely rising local government expenditure, and which sought to control it through requiring high interest rates to be charged on loans from the Public Works Loans Board (PWLB).³⁵

As a result of this dichotomy, the LGB was faced with an impossible task. It had been 'forced to become a "Treasury" for local government, mediating the demands of the local government system on ratepayers, the money markets and

the Exchequer ... an agent of boundary maintenance between local and central government ...'. It was 'obliged to control the national effects of local administrative growth, as well as to stimulate it'.³⁶ Elizabeth Hurren's recent work on nearby Northamptonshire³⁷ points to a further complication in the LGB's role: the essential confusion created in the minds of local guardians by the fact that it had two distinct departments: medical and administrative. These had combined somewhat uneasily to create an ambiguous culture which encouraged increased spending on sanitary reform on the one hand, while conducting a crusade against rising costs of outdoor relief on the other. Uppingham's experience of the LGB – as seen in the latter's dealings both with the school and the town – would reflect many of these tensions.

Uppingham's epidemic also provides us with a snapshot of the extent to which contemporary knowledge about disease in rural areas was extremely limited. The disease posed an ever-present threat to groups of people who lived in close proximity to each other in essentially closed communities such as boarding schools. They faced conflicting priorities in their everyday lives, too; for example, could the housemasters who ran the boarding houses enforce proper precautions against infection without making the lives of their boys intolerable? The dilemma about how to steer a course between what was medically sensible and what was practical day-to-day became personalized in the bitter rivalry between two doctors. On the one hand there was a traditionally-minded *laissez-faire* general practitioner, himself a former pupil of the school who must have had some sensitivity to the everyday needs of growing boys and hard-pressed staff for freedom, exercise and meeting friends; on the other, an intelligent, newly-appointed and messianic medical officer of health whose single-minded aim was to stamp out as much risk of epidemic disease as he could, with little regard for the human or economic consequences of his concern – much of it only with the benefit of hindsight – for isolation and restriction of movement.

It is hard to exaggerate the demoralizing effect which the onset of disease and the prospect of youthful death would have had on a school such as Uppingham – especially if it occurred (as typhoid usually did) at a time of year of shortening hours of daylight and increasingly wintry weather. Keeping up spirits, discipline and precautionary measures would have taxed even the ablest housemaster – who would have simultaneously been worried about the impact of disease on his livelihood. It would have produced a sharp conflict in his mind similar to that facing the school's medical officer: prudence would dictate confining pupils to houses and not letting them out to go to lessons or to visit friends. Ending term early and allowing them to go home risked spreading the infection far and wide. Yet for how long could he and his fellow housemasters enforce draconian rules on their boys?

How widespread were epidemics in the boarding schools of the time? Uppingham School suffered no major epidemic in Thring's time before 1875,

although Chapter 4 will show that he had expressed a growing concern about scarlet fever and its possible causes. It had, however, experienced one recent outbreak of potentially serious disease: diphtheria, in May 1861. This was small in scale, but had resulted in the deaths of two pupils who had been nursed at school, while others who had been sent home survived.³⁸

Other boarding schools had suffered far more.³⁹ Measures to counter disease in schools were generally reactive rather than proactive, as concentrations of young people were at risk from a variety of epidemic diseases. These included scarlet fever, diphtheria, measles, whooping cough and tuberculosis. Infections now known to be waterborne, such as cholera and typhoid, could also spread rapidly.⁴⁰ An editorial in the *Medical Officer* in 1938 referred to Rugby's experience under Arnold:

Readers of Tom Brown's School Days will remember the description of the illness of Tom's friend, which was clearly enteric. Dr Arnold's published letters show how constantly there was present before him the spectre of sickness and death of his pupils and his great anxiety when cholera made its appearance in the Midlands.⁴¹

Arnold had regularly invited sixth-form reading parties to his house in the Lake District in north-west England in the holidays to refresh their health even before cholera struck, believing that the mountains and dales were 'a great point in education'.⁴² He did so in the knowledge that cholera in Rugby had already caused one dispersal of his pupils back in 1832.⁴³

The nineteenth century brought a major growth in boarding school numbers; living conditions were often overcrowded and spartan. Each night in the 1830s, seventy boys were locked in Long Chamber at Eton College between 8 p.m. and the following morning, as Thring himself could testify from his own schooldays there; there were no basins and no piped water; washing was done under a pump in the yard. Complaints about colds and sore throats abounded.⁴⁴ Partly as a consequence of this, Eton built a sanatorium (hospital) for its pupils in 1844. Rugby School followed suit in the early 1850s – with reason, as unhygienic piggeries, kennels and stables were part of everyday life in the town of which it formed a part. After the annual fair, the accumulated filth in the streets took over a week to remove:

Each fetid court of beaten earth ... contained a pump for drinking water, a drain which often took the overflow from a cesspool, and a small enclosure surrounded by a low brick wall for more solid filth ... the value of the eight wide roads that radiated from the town in providing constant through winds was lessened by the ditches that ran alongside them. In these ditches the sewage from the town was collected and spread as manure upon the un-drained fields 'little better than a morass'. From ditches and cesspools the sewage of the town seeped into the drift gravels ... Held in this gravel subsoil, 'the receptacle for the chief fluid filth of the town', the water was drawn up from wells about twelve feet deep. This the inhabitants drank.⁴⁵

Conditions inside many similar schools were little better. Westminster School's reputation had already suffered over a long period after Dean Buckland opened the drains for examination in the late 1840s;⁴⁶ cubicles were put up in the 1860s in the 'dormitory', but the rats were so numerous that they ate items of the boys' clothing as well as the food. At Winchester College in 1875 privies were still extremely basic, with their contents 'passing into a stream, called "Little Brook", which passes as a sewer in front of the college gate and receives half the town sewerage, which is abominable.'⁴⁷ Epsom College was criticized in the *Lancet* in the same year for having 'drainage until recently into large cesspits, found to be very unsatisfactory. Present system improperly ventilated. Water supply inadequate; not a constant supply.'⁴⁸

Many years later, a committee of the Medical Research Council (1929–38) enquired into the prevalence and mode of spread of epidemics in residential schools spanning several centuries, and the growth in numbers of medical officers and sanatoria which they had recently acquired. Not surprisingly, it concluded that the illnesses had been many and varied, and it chronicled them and the temporary closures of better-known schools which had resulted from them. Typhoid was by no means the most prevalent, although Lancing was another school struck by it, in 1886.⁴⁹ The most frequent diseases included smallpox (especially before 1850) and influenza, but there were others too. Christ's Hospital suffered major bouts of ringworm in the 1830s; even sending the boys home failed to effect a cure, resulting in a vigorous campaign in the *Lancet* for better food and medical facilities. Charterhouse suffered a mumps epidemic in the 1860s. There was measles at Marlborough in 1846 and 1848 which led to the college being closed, and in addition between 1852 and 1870 it suffered twenty-six deaths, of which eight were from pneumonia, three from meningitis, four from acute rheumatism and two from appendicitis. At Radley College (a few miles south of Oxford) influenza and fever caused occasional fatalities.⁵⁰

Haileybury, founded in 1862, built its sanatorium only four years after the college opened; and early in-patients included victims of smallpox, typhoid and scarlet fever (23 cases in 1871 and 16 in 1873).⁵¹ In suffering from scarlet fever, it had experienced one of the two particular epidemic scourges of boarding schools. The illness was nationally prevalent in this period; the average annual death rate in England and Wales from it (per thousand persons living) rose from 0.83 in the decade 1851–60 to a peak of 0.97 in 1861–70, before falling back to 0.16 by 1900. The worst years were 1864, 1870 and 1874.⁵² Creighton's *History of Epidemics in Britain* (1891–4) describes 'the enormous number of deaths [from the disease] during some 30 or 40 years in the middle of the nineteenth century [as] one of the most remarkable things in our epidemiology'.⁵³

The schools could not escape scarlet fever. It was rife in Eton in the 1840s, and at Winchester, where boys had been dispersed because of it in 1843. 'Terrible

illness' struck the school again a year later, and 'half the inmates were prostrated' in 1846.⁵⁴ Two sons of headmaster Moberley died there in 1858 and 1871.⁵⁵ Harrow boys were sent home twice in the 1860s after it broke out (along with other mysterious rashes which the doctors could not account for.⁵⁶ Cranleigh was hit in 1863 within a year of its opening.⁵⁷ Radley boys were sent home in 1865, and Marlborough suffered nine fatalities between 1858 and 1870⁵⁸ – the last being an epidemic which left only 150 boys at school during its peak. Wellington suffered three fatalities in the same year, and more in 1872 (as well as periodic septicaemia). Rossall, founded in 1844, suffered three deaths only six months after it opened.⁵⁹ The coming of autumn each year posed a special threat: the Rugby School doctor reported in the educational press in November 1888 that 'during the last three weeks no fewer than eleven southern schools have broken up ... owing to epidemics of scarlet fever.'⁶⁰ Even in 1896 it was a formidable disease, with a minimum of six weeks' confinement, with isolation in a room with a sheet steeped in carbolic over the door, and almost no visitors.⁶¹

Diphtheria was the other major threat. Again Haileybury was a victim, suffering two deaths in 1888, and many similar symptoms appeared between 1896 and 1906, resulting in seventeen boys leaving the school in one year.⁶² Charterhouse suffered nine cases in 1886, after a housemaster not only ignored the advice of the school doctor to send infected pupils to the sanatorium, but also housed them on the same floor as healthy boys, and then allowed plans for a general exeat (short holiday) to go ahead.⁶³ Compared with these schools, Uppingham's 1861 experience of diphtheria had been comparatively minor. Fettes suffered too, and was temporarily evacuated to Windermere in the Lake District in 1883.⁶⁴ Radley suffered one fatality in 1894.⁶⁵ But diphtheria problems were at their most acute at Wellington College. Its 1883 outbreak resulted in complete drainage modernization, but this failed to prevent 'the cataclysm of 1891' – an outbreak which led to forty-one boys being admitted to the sanatorium in November, two fatalities, a crisis of confidence amongst parents and (following Thring's example in moving to Borth) temporary migration to the Imperial Hotel at Malvern, a town near the Welsh border, for a term.⁶⁶ Only with better drainage did the problem disappear.

Many preparatory boarding schools, catering for younger boys not yet old enough to go to schools such as Uppingham, had been set up in healthy areas by private owners who realized the vulnerability of boys to infectious disease. These institutions were similarly afflicted. Eagle House School suffered both scarlet fever and diphtheria in the 1850s, and Twyford suffered two deaths from the latter in 1896 before the school was evacuated to Winchester. Summer Fields in Oxford was hit by severe influenza in 1898 and the nearby Dragon School by measles in the same year.⁶⁷ The Public Schools Commission, appointed in 1864 to investigate the impact and administration of these private schools,⁶⁸ had made little reference to health, although it concluded that most schools had kept up

with the domestic and sanitary advances of recent decades and that ‘hardy exercise’ helped to keep sickness at bay. At St Paul’s School in London, however, it noted ‘a great decline in the boys’ health, due to overwork, fatigue, London born and bred, i.e. a delicate stock, and insufficient games and exercise.’⁶⁹

In the Public Schools Act of 1868 there was only a single paragraph about the need for governing bodies to make regulations about the sanitation of schools. The *Lancet*, the well-known campaigning medical journal, continued its century-long fight for better conditions in such schools, forming commissions of enquiry in 1861 and again in 1875 on its own initiative.⁷⁰ These called for better hygiene and food in schools, for more comprehensive record-keeping, for parents to give notification of diseases suffered at home, and for medical examination of pupils on their return to school. The second commission, on the eve of the Uppingham typhoid outbreak, praised the new sanatoria and new water closets in some schools, but criticized poor ventilation and lighting, trapped drains and the leakage of sewer gas from town mains. It urged the appointment of medical officers in all boarding schools.

As the Uppingham crisis developed, Thring observed that although Rugby had indeed once dispersed itself into reading parties in houses all over the Lake District, no similar school had ever considered migrating en masse to a single place.⁷¹ We do not know whether, as he said this, he was aware that the governors of Rugby, who had been considering increasing the boarding numbers at the start of Jex-Blake’s headmastership in 1874, had recently commissioned the local MOH to recommend major improvements to boarding house sanitation and water supply. The housemasters at Rugby had to be persuaded to comply, but it is likely that within months events in Uppingham forced them to recognize the wisdom of the instruction.⁷²

Throughout this period, some headmasters were concerned about sanitary reform, and many were intent on getting potential sources of infection removed as far from their school as possible. Could others have been more proactive? When a school’s popularity waned, attacking the local authorities over faulty drainage could be a convenient diversionary tactic (as practised by Moberly at Winchester). But some were as reluctant as the local ratepayers to become involved. They ignored the problem as long as they could.⁷³

Significantly, the Wellington College medical officer, Dr Barford, had complained for twenty years before the 1891 diphtheria crisis about the state of its drains, but had been dismissed by the governing body for suggesting that £20,000 was needed to put things right – following which he carried on an independent campaign in the newspapers and the *Lancet*.⁷⁴ The 1930s Medical Research Council report may have had Dr Barford in mind when it concluded that the role of the school doctor had become one of critical importance, and praised the

role of the medical press in highlighting neglect or complacency.⁷⁵ Meanwhile, back in 1887, Clement Dukes, the medical officer at Rugby School⁷⁶ wrote:

I have seen cesspools at one of the most popular and expensive schools in the kingdom in such a state of repletion that it would be impossible for the boys to use them without defiling themselves with the decomposing ordure. I may add that I saw this condition, on the occasion I refer to, on the last day of the vacation, and the state of things had existed probably since the end of the previous term.⁷⁷

Despite the fact that the ideas of contagion and (to a lesser extent) infection circulated widely among the parent clientele of such schools,⁷⁸ large numbers of them were prepared to accept the increased risks of sending their sons away to school rather than keeping them at home, despite the knowledge that the schools had limited facilities, if any, for dealing with serious and epidemic illness. Indeed, in the middle of the century, the reaction of headmasters tended to be to send sick boys home.⁷⁹ Glenalmond's headmaster stated in 1858: 'I will *not* have boys die here'.⁸⁰

What of our knowledge of typhoid itself? Since that date, our medical knowledge has increased a great deal. Unlike the Victorian headmasters, who knew little beyond the fact that it was acute and highly infectious, we now know that it is a systemic infection caused by the bacterium *salmonella typhi*. Untreated, it lasts between three and four weeks, killing about 10 per cent of its victims and leaving 2 per cent as permanent carriers. It is progressive – marked by the gradual onset of a sustained fever with headaches, cough, severe digestive discomfort and generalized weakness. It can also cause spleen and liver enlargement, and 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 – i.e. contracted through drinking water contaminated with the bacterium *salmonella typhi*. It is 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 both in water and in ice. Rivers, ponds and wells are all infected by carriers, either directly or via excreta washed down by rains or faulty sanitary systems. Thus control depends on separating sewage and drinking water.⁸¹ It can also be spread through contaminated food (especially by carriers handling milk, ice cream, fruit and salads, or as a result of shellfish growing in contaminated water), infected vomit and typhoid pus.⁸²

The typhoid patient usually ceases to excrete the bacillus within a month of contracting the illness, but convalescent carriers may carry on doing so for up to about six months, and it can remain in chronic carriers for some years. There are also symptomless carriers – especially dangerous because their existence is often picked up only during the investigation of an epidemic, if at all. Some 3 per cent

of persons 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, for example, handling foods, if hygienic precautions are not scrupulously followed.

However, 130 years ago knowledge of the disease and its causes was much more uncertain. Nineteenth-century civil servants and doctors had a broad understanding of its water-borne and milk-borne nature, but little insight into precisely how this occurred.⁸³ One leading nineteenth-century MOH declared in 1889: 'If there is one fact more certain than another in sanitary science, it is that enteric fever occurs chiefly and almost solely when there is an excrement-sodden condition of the soil.'⁸⁴ The nineteenth century saw 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). Achievements came piecemeal: Gerhard in the USA and Jenner in London published their descriptions of the different features of typhoid and typhus in the 1830s and 1840s. A decade later William Budd noted the connection between typhoid outbreaks and faecally contaminated food and water – confirmed by John Snow's medical mapping of the Broad Street pump's effects during the 1864–5 London cholera outbreak. However, it was only in the years just after the Uppingham epidemic that the key discoveries in bacteriology began to emerge. Eberth and Klebs identified the cholera and typhoid bacilli in 1880; Gaffky succeeded in culturing it four years later, and in the 1890s H. E. Durham and others devised the Widal test to diagnose it. By 1900–2 the first vaccines were available, and Robert Koch had pointed out the significance of the healthy carrier. 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.⁸⁵ Even though the germ theory gathered momentum in the years that followed, there was continuing disagreement about its precise nature, and a reluctance to abandon the miasma theory altogether. Moreover, medical knowledge gained in London and elsewhere filtered down only slowly to rural areas. This explains why throughout the Uppingham epidemic several theories about its cause were pursued simultaneously.

In the 1870s, in cases of water-borne typhoid (as opposed to outbreaks caused by contaminated milk or other 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, ongoing series of single cases or small groups appearing over quite a period of time, resulting from low-level pollution.⁸⁶ 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.⁸⁷ Methods of treatment were at best haphazard: depletion of blood and low diet,

pouring cold water over the surface of the body, 'shaving the scalp and applying cold embrocations', or ordering that all the windows be kept open. There were herbal treatments based on hellebore root and alcohol (especially champagne) for the wealthy; elm or holly bark concoctions for the less so.⁸⁸

In 1876 the *BMJ* estimated that about 100,000 people contracted typhoid each year – with perhaps another 40,000 undiagnosed cases. Because the average case lasted up to five weeks, it estimated that nearly 14,000 were ill at any one time, costing the country over £1m per year.⁸⁹ Estimates of deaths per year varied; the *Times* suggested 10,000–12,000, although one contemporary study of waterborne typhoid put the figure at under 9,000.⁹⁰ Optimists noted that the disease was in numerical decline. Fatalities had markedly reduced from the 21,000 of 1866, and the *BMJ* of May 1876 declared that deaths from fever in that year – 7,500 – were at their lowest annual total since 1837.⁹¹ But the rate of decline then slowed, and the threat remained real. One 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.'⁹²

Typhoid was no respecter of classes or persons. Whereas louse-borne typhus, and to a lesser extent water-borne cholera, 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, when he contracted the disease whilst staying at a country house in Yorkshire.⁹³ There was a major outbreak amongst undergraduates at Gonville and Caius College, Cambridge, in 1873, and another claimed the lives of three Oxford undergraduates in January 1875.⁹⁴

The extent to which knowledge about typhoid was only partial can be gauged from a leading article in *The Times* on 13 January 1876, in which the paper declined to choose between the miasma and germ theories. After describing how it attacked the intestines, it described it as 'a sort of smallpox, which affects the bowels instead of the skin ...'. In the absence of bacteriological knowledge it then stated:

It is spread abroad chiefly by discharges from the ... intestine. These, in the natural course of things, find their way into cesspools and sewers and when they do so, they render poisonous the solid and liquid contents of these receptacles 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 ...

This was an age which associated odours very closely with disease.⁹⁵ William Budd declared in 1873 that ‘the poison by which this fever spreads is almost entirely contained in the discharges from the bowels’, but he listed as a subsequent source of infection ‘the air of the sick-room’, followed by ‘the bed and body linen of the patient’ before he came to ‘the privy and the cesspool or the drains proceeding from them.’⁹⁶ 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.⁹⁷ The *Lancet* seems to have been similarly uncertain. It reported several cases among men exposed to sewer gas,⁹⁸ in one of a dozen or so editorials and papers on typhoid which it printed during a sixth-month period in 1875.

Perhaps the most revealing glimpse of the still uncertain contemporary state of knowledge can be found in the first edition of Dukes’s book, a decade later. While he stated that ‘in this school [Rugby], “filth diseases” such as diphtheria and typhoid, depending mostly upon unsanitary conditions of life, such as impure water have been all but exterminated’, he raised ‘a wider question ... whether all infectious diseases are the result of bacteria.’⁹⁹ He also cited three views on the origins of infection or contagion current at the time: first, particles of animal origin, born and growing in the body; second, particles of fungoid nature, growing in the body but induced from without; and third,

Particles of contagia [which] are of the nature of the Schizomyceles – i.e. the members of the lowest stratum at present known in the animate world. They are commonly called bacteria, bacilli, microzymes, vibrios, spirilla, monads ...¹⁰⁰

This uncertainty about precise diagnosis cause and remedy underlay the bitter animosity which developed between GP and MOH in Uppingham. Long-standing GPs were often respected (even loved) in their local communities¹⁰¹ – in contrast to the newly-appointed MOHs in rural areas, who were often seen as interlopers and busybodies in the 1870s.¹⁰² In Dr Thomas Bell, Uppingham School possessed a medical officer who was, in many ways, an archetypal rural GP in the immediate era after national qualifications were standardized.¹⁰³ But he faced pressures of his own: Chapter 3 will show that he found himself in a fierce medical market, in a town probably over-provided with GPs.¹⁰⁴ He was driven on by a mixture of status and self-interest, an awareness of the threat to his economic livelihood and personal animosities towards his opponents. His determined support for the school and his inveterate letter-writing and lobbying of local and national authorities once the epidemic took hold played a significant part in influencing its outcome.

Bell may also have been motivated by a desire to make up for his initial errors and inactivity. His actions – and inactions – teach us much about the state of medical and epidemiological knowledge amongst GPs in this period on the ground, as opposed to in the medical schools and consulting rooms of the big cities.¹⁰⁵ He can be accused of carrying out too little proactive management of the initial crisis, and of having too little curiosity about its possible causes: of adopting a purely defensive posture in the face of parental and other criticism. But he was not alone: neither the town, school nor public health authorities addressing Uppingham's problems engaged in much speculation about the epidemiological questions. Their approach to their problems was (like many of their day) essentially pragmatic, un-dogmatic and intellectually un-enquiring.¹⁰⁶

Dr Bell's key opponent in Uppingham, Dr Alfred Haviland, was a passionate MOH in his war against disease – about as far from the over-promoted former inspectors of nuisances who gained such posts in many rural areas at this time as it was possible to be.¹⁰⁷ It is likely that he was much influenced by past events in his life, and some accused him of overreacting against the school. It could be argued that he was not especially knowledgeable about typhoid, and that he used bombast and invective to cover up for his deficiencies, both in knowledge and procedure. Why he was so splenetic is not entirely clear, but he had probably come to view Bell's more relaxed demeanour as contemptible and negligent. He may have been frustrated too by the obstructiveness which he believed he found in so many quarters – and by impatience with the overwork of covering a huge and unwieldy rural territory spanning parts of four counties. In addition, he personified the role of the MOH as interferer in the private affairs of the rural establishment, in the minds of those who crossed him – from whose ranks Thring became his principal antagonist.

There are also questions of sanitary comparability about Uppingham. How well advanced was sanitary reform in the East Midlands of England as an area? As a town, was Uppingham lagging behind its immediate neighbours? What does its experience tell us about contemporary assumptions of the best organization to provide water to a local community?

The dominance of key individuals and their personal rivalries and animosities in a local community could be a significant factor in polarizing attitudes and making both compromise and reform programmes hard to achieve. Uppingham's local leaders, two civic-minded and well-meaning clergymen, neither of whom lacked ability, were no match for Thring's dynamism (born of desperation), extremes of mood and nervous energy. The town was too small for its future to be determined by all three of these men, all forceful in their way – with a fourth, if one includes Dr Haviland.

The Uppingham epidemic also sheds important light on the career and organizational abilities of Thring himself. In the eyes of many students of nine-

teenth-century education in England, he has long played second fiddle to a figure from the preceding generation of school builders: the famous Dr Thomas Arnold, headmaster of Rugby School from 1828 to 1842. Thanks to the high-minded portrayal of him in Thomas Hughes's famous novel *Tom Brown's Schooldays*, published in 1857, and a string of highly laudatory biographies in the century after his death, Arnold is widely remembered as the key figure in the development of the Victorian public schools and the founder of the modern system: a reformer noted for adding mathematics, modern languages and modern history to the traditional classical curriculum,¹⁰⁸ and his monitorial (prefect) system which was adopted by most English secondary schools. A number of Arnold's staff went on to be headmasters elsewhere, spreading his fame and influence as they went.

By contrast, the greatest headmaster of the generation *after* Arnold has never been the subject of a full-scale biography. Edward Thring was headmaster of Uppingham School (one of Rugby's great rivals, only a short distance away) from 1853 until 1887. He too was portrayed in a novel by one of his old boys – as Jerry Thrale, in E. W. Hornung's *Fathers of Men* (1912) – but it was a story less celebrated than *Tom Brown*. In contrast to Arnold's staff, Thring's colleagues generally stayed in Uppingham rather than seeking promotion elsewhere.

Yet, for some writers, Thring is every bit as great an educationalist as Arnold. E. B. Castle held that Thring

was a better schoolmaster than Arnold, and allowing for the fact that Arnold inherited a large school with all its problems ready-made while Thring started with the advantages of a clean slate, his capacity for translating principles into the fabric of school life and organization far exceeded [Arnold's].¹⁰⁹

Alicia Percival, who chronicled the foundation of the Headmasters' Conference, believed that 'Arnold may well be said to have changed the heart of English education, but it was Thring who changed its face.'¹¹⁰ David Newsome describes Thring as 'the headmaster who most determined the shape of things to come ... his special genius lay in his realization that a school exists to educate all its pupils ...'¹¹¹ – a reference to Thring's introduction of a curriculum which ranged well beyond the purely academic, innovative specialist buildings to allow it to be delivered effectively and his passionate belief in the need to provide pupils with a safe and secure environment through a system of small, geographically distinct houses.

While any direct comparison between the two men and their reputations must wait for a future biographer of Thring, they had at least one common concern: the threat of epidemic disease in their schools. In 1841 (as we have seen), Rugby pupils had to be dispersed into reading parties in houses all over the Lake District, with others being housed in various Midland locations.¹¹² Three decades later, Uppingham's flight and Thring's desperate attempt to save the school which represented his life's work are the events whose background this book describes.

Existing historiography describes the Uppingham epidemic almost entirely from the viewpoint of the school – depicting the town authorities as vindictive, supine and incompetent. In the words of one writer, Geoffrey Hoyland, ‘The townsfolk, though they owed their prosperity entirely to the school, were jealous of Thring’s predominating influence and grudging spending a penny on improvements if they could avoid it.’¹¹³ This view is unsurprising, given that there is no shortage of contemporary sources extolling the achievements of Thring’s thirty-four year period as headmaster. These are dominated by his own writings, and especially by extracts from his diaries and letters, as well as a continuous run of volumes of the *Uppingham School Magazine (USM)*.¹¹⁴ The pro-school view which they give was reinforced by his disciples, who produced a corpus of secondary literature in the years after his death. The specific events of 1875–7 were written up in both the diaries and the *USM*, and they became enshrined in folklore shortly after the school’s return, thanks to J. H. Skrine’s short, romanticized account *Uppingham by the Sea*, the carefully chosen extracts which appear in Parkin’s selection of documents and the other works on Thring written after 1887.¹¹⁵ This folklore was reflected in a number of works over the next century, including books about Uppingham School by Bryan Matthews and Donald Leinster-Mackay at the time of the school’s quatercentenary (1984) and the centenary of Thring’s death (1987) respectively.¹¹⁶ The latter in particular describes the Borth adventure in terms which reflect Thring’s lyrical views about it.¹¹⁷ Thring frequently likened the school’s upheaval to the wanderings of the Israelites in the Old Testament, and referred to it as the school’s ‘Great Deliverance’.¹¹⁸

Other writers about Victorian boarding schools as a whole described it in similarly graphic terms: T. W. Bamford gives a racy account of Thring arriving in Borth for the first time ‘on the day of a hurricane’, and describes Rugby’s earlier dispersal as ‘a Sunday-afternoon picnic compared with the moonlight treks of the old dissenting academies, or even with Thring’s epic flight from Uppingham to Borth’.¹¹⁹ Alicia Percival wrote in her 1973 study of Victorian public school heads that Borth was a pivotal moment in Thring’s notable career: she believed that his educational philosophy was reinforced, his critics were confounded and, as a result of the exodus to Borth, ‘the headmaster’s position was entirely altered’.¹²⁰

The Victorian private school headmasters have long been known for their moral uprightness and the creative determination which the shaping of their own particular schools represented. Rather less has been written about them as organizers – and as managers of men and resources in an age before modern technology and communication systems. While the evacuation to Borth remains an act of heroic imagination, unique in its scale in the history of schools at that time, the concentration on the Welsh dimension has diverted too much of the attention of historians away from events in Uppingham itself. The tradi-

tional, hostile view of the town's RSA is too simplistic: this was acknowledged by one of Thring's successors, Martin Lloyd (headmaster of Uppingham School, 1944–65) after reading Geoffrey Hoyland's draft manuscript: 'We agreed that your account of the typhoid epidemic lets the school down rather too lightly. Not all the blame rested with the board of guardians.'¹²¹

This study will show the truth of that statement – although exactly how the blame should be apportioned between town and school will remain a matter of opinion. The fact that this remains the case, 125 years after the events that shook Uppingham to its foundations, exemplifies the complexity of the struggles which took place in town and school during those two momentous years.

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