

**ENTREPRENEURS, MANUFACTORIES AND SMALL INDUSTRIAL
COMMUNITIES, 1850-1914**

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ABSTRACT

The continuous industrialisation of Britain following the so called industrial revolution affected both large urban towns as well as small semi-urban communities. The financial advantages of mass production, during the second half of the nineteenth century, caused many manufacturing companies to be formed and various existing businesses grew to extensive sized firms.

The main purpose of this thesis is a comparative study into the development of four industrial company communities in four rural towns. Samuel Courtauld and Company at Halstead, and R. Hunt and Company at Earls Colne, both in north west Essex, D. Gurteen and Sons at Haverhill, south West Suffolk and Richard Garrett and Company at Leiston, East Suffolk. A holistic approach is taken, not only in the way the communities evolved into urbanised towns dominated by the companies' entrepreneurs, but also how, by sheer entrepreneurial skills, these businessmen created extensive industrial international companies. Without the prosperity brought about by the success of their businesses, no company community could have been created. Thus the entrepreneurial skills of these family businessmen were critical to running their businesses and dominating their towns. The 'family firm' was the crucial element that drove the four case study entrepreneurs and the one that dictated many of their successful strategies and policies.

A thorough synthesis of the literature of company communities, nationwide, allowed these four study towns to be compared and contrasted to the mass of differing communities in size and character. One key research question, thrown up by this thesis, is whether small to medium sized company communities were distinctive or simply mimicked the characteristics of the larger and better known examples of Saltaire, Port Sunlight or Bourneville. Underlying this is the view that smaller companies have been neglected by historians and as a result may have been more common than is generally recognised.

Patrick Crouch

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CHAPTER ONE

FRAMEWORK OF THE COMMUNITIES

Introduction

One of the driving forces behind industrialisation was the diversity of companies and the individuals who established them. It was the dynamism and enterprise of these like-minded people, sometimes partnerships but very often individuals, who created what is called the Industrial Revolution. A feature of some of these entrepreneurs was the need they perceived for building houses for their workforce, ranging from a few dwellings for key staff to complete self-contained towns. These companies also changed the fortunes of the four case study towns of this thesis, making them buck the trend of de-industrialisation which had affected the rest of their region from the first few decades of the nineteenth century to the period just up to the First World War.¹

As well as providing houses, companies frequently took a direct interest and sought a close association with the towns in which they were involved. This often took the form of providing a mixture of such buildings as churches or chapels (rarely both), shops, schools, hospitals and mechanics institutes, or providing public baths and recreation grounds, as well as being involved with sporting or other social activities. The owners sometimes provided the towns with water, gas and electricity and commonly became leaders of the civic authority. Many of these ‘captains of industry’,

¹ This is reflected in A.J.F. Brown, *Essex at Work 1700-1815* (Chelmsford, 1969), Chapter one.

therefore, became not only powerful heads of their companies, but also important influential individuals in their communities.

The extent of company community involvement, nationwide, and their geographical extent is given in chapter two. Here it is only necessary to comment generally on the industries concerned and the number of companies that were prepared to create communities.

The national issues that effected growing companies and communities were mainly economic and social. The three periods that have exercised the minds of economic historians for 40 years, were the buoyant market conditions of what R.A. Church called ‘The great Victorian boom, 1850-73’,² the period from the 1870s to 1900s summarised by S.B. Saul in another book,³ and the recovery from 1900-14. However, historians are far from being clear about these periods. That there were good market conditions in the third quarter of the nineteenth century is borne out by the numbers of successful companies that were founded in the period⁴ and the expansion of existing businesses. But the depression and the failure of British entrepreneurs to form extensive companies to challenge the dominance of the Germans and Americans, not only in export markets, but also in Britain’s home trade, is one that has been argued over for decades.⁵ By the 1960s, Aldcroft and his authors, while admitting that there were serious problems, put up a convincing case that there were many instances where

² R.A. Church, *The Great Victorian Boom, 1850-1873* (London, 1975).

³ S.B. Saul, *The Myth of the Great Depression 1873-1896* (London, 1969).

⁴ P. Dewey, ‘Iron Harvests of the Field’: *the making of farm machinery in Britain since 1800* (Lancaster, 2008), p. 51.

⁵ P.L. Payne, *British entrepreneurship in the nineteenth century* (London, 1974); C. Knick Harley, ‘Trade, 1870-1939: from globalisation to fragmentation’, in R.C. Floud and Paul Johnson (eds), *The Cambridge Economic History of Modern Britain*, 2 (Cambridge, 2003), pp. 168-76.

certain sections of British industry was challenging and beating the Americans and Germans.⁶ By 1981 these issues became more clear cut.⁷ Floud concluded that ‘The so-called great depression from 1873-1896, which aroused so much interest among contemporaries and later historians, is a myth’⁸ Among their authors was L.G. Sandberg, who in conclusion to his chapter, asked the question was there entrepreneurial failure, and did ‘Technological backwardness play a significant role in Britain’s relative economic decline? His answer was ‘probably not’⁹. Floud and McCloskey considered that the data should be interpreted in a much more optimistic way. In other words the interpretation of these statistics was too pessimistic. However, one of the latest works on the subject, is Floud and Johnson, ‘*The Cambridge Economic History of Modern Britain*.’¹⁰ This takes into account current thinking and relates to modern concepts such as ‘total factor productivity’ and although it is much more equivocal, the overview is still optimistic.¹¹

The three sectors of industrial businesses that built company communities were extraction, manufacturing and transport. Collieries formed the major part of extraction

⁶ D.H. Aldcroft (ed.), *The Development of British Industry and Foreign Competition 1875-1914 Studies in Industrial Enterprise* (University of Glasgow Social and Economic Studies number 12, 1968); R.E. Tyson, ‘The cotton Industry’, in Aldcroft, *Development of British Industry*, pp. 100-27; E.M. Sigsworth and J.M. Blackman, ‘The woollen and worsted industries’, in Aldcroft, *Development of British Industry*, pp. 128-57; S.B. Saul, ‘The engineering industries’, in Aldcroft, *Development of British Industry*, pp. 186-237.

⁷ R.C. Floud and D. McCloskey (eds), *The Cambridge Economic History of Britain since 1700*, 2 (Cambridge, 1981).

⁸ R.C. Floud, ‘Britain between 1860-1914 a survey’ in Floud and McCloskey, *Cambridge Economic History of Britain since 1700*, p. 7.

⁹ L.G. Sandberg, ‘The entrepreneur and technological change’, in Floud and McCloskey, *Cambridge Economic History of Britain since 1700*.

¹⁰ Floud and Johnson, *Cambridge Economic History of Modern Britain*.

¹¹ See, N. Crafts, ‘Long run growth’, in Floud and Johnson, *Cambridge Economic History of Modern Britain*, pp2-17; G.B. Magee, ‘Manufacturing and technological change’, in Floud and Johnson, *Cambridge Economic History of Modern Britain*, pp. 79-98.

companies, but this sector also included the mining of such raw materials as lead, iron ore, granite and china clay. The mines had to be located on the site of the raw material, therefore were often in places remote from habitation, creating the need for communities in which businesses needed to house their workers. In the early years of the industrialisation of the manufacturing sector, the only power source for powering machinery, particularly the early spinning mills, was provided by water and these factories were sited on fast running rivers.¹² Again, they often needed extra housing to supplement the existing meagre number on the sites. However, after the introduction of the steam engine, manufacturing companies had more scope to site their manufactories closer to existing towns where speculators could, and did, independently provide housing for their workers. Towns gave the companies a number of advantages, of which the major one was usually an abundance of cheap labour.¹³ Railways were the main providers of company housing in the transport sector, although there were a limited number of dwellings provided by ports and canal companies. The extensive area of their territories and the need to have workers available from early in the morning to late at night caused the railways to build considerable numbers of houses all over the country. This was in addition to the large numbers employed in railway works.¹⁴

A feature of company communities was the variety of their size. Some were small and the businesses only built a few houses and therefore their scope for influencing their communities was limited. While other firms were employing hundreds of workers and constructed complete self-contained towns, with everything provided by

¹² See pp. 39-40.

¹³ See pp. 139-40 .

¹⁴ See Table. 2.2 p. 56.

the company. Between these extremes were extensive numbers of company towns of all manner of magnitude.

Large companies have, however, dominated previous thinking on the location, creation and development of business communities and their towns. It is the purpose of this thesis to redress the balance and concentrate on the smaller and neglected firms and their communities. It will explore issues such as the motivation of their creators, the importance of the towns locally and nationally regarding housing, garden city ideals, and amenities in the communities, the provision of sports and social institutions and the welfare of their employees. The core of the study therefore is research into four case study towns and companies in south Suffolk and north Essex, which started out on a relatively small scale, becoming national and international businesses, with a variety of housing and facilities provided. The study will also be extended to other medium to small company towns over the country and will explore those qualities that are common to them all and contrast and compare those properties which are not. The conclusions derived from the research will formulate theories about the creation of small company owned communities which can be used as a yardstick by future researchers into similar businesses and towns. Did the smaller towns mimic large towns in the amenities provided, or were there some facilities only suitable for larger towns?

Recent researchers have argued about looking at towns in different ways from the conventional outlook. Barrie Trinder, an industrial archaeologist, has suggested that a useful exercise would be to subject the towns to archaeological analyses, in the same way that industrial archaeologists examine the development of technologies to increase

understanding of the past.¹⁵ He suggests looking at the archaeological evidence that made up a town's environment, from its inheritance before 1750, and from factors provided in 1750-1900. By studying these with such historical evidence as census returns, trade directories, rate books, maps, memoirs and photographs, frameworks of eighteenth century and nineteenth century towns can be established and used for comparison. This is similar to archaeologists using known types of pottery or metalwork as a means of analysing the technologies used in their manufacture and using this knowledge for assessment with other similar materials. Industrial archaeologists have also reached something of a watershed into the research and study of their discipline. A series of articles in a recent journal has challenged them about the accepted wisdom of their subject. Marilyn Palmer, the co-editor, believes that their discipline should be about social factors as well as economic and technological ones, that they should 'read' the society behind the material culture and this applies to the culture of the working past as much as it does to that of the prehistoric age. The sub-title of this volume includes the word 'workplace' which '...implies not only a building in which work takes place, but also the people operating within that workplace to carry out the processes.'¹⁶ Thus their knowledge of towns would be broadened to take in other fields.¹⁷ These new issues have not been tried and tested in the study of companies and their communities, so will

¹⁵ B. Trinder, 'Eighteenth and nineteenth century market town industry: an analytical model', *Industrial Archaeology Review*, 24, no.2 (2002), pp. 75-89.

¹⁶ M. Palmer, 'Understanding the workplace: a research framework for industrial archaeology In Britain', *Industrial Archaeology Review*, 27, no. 1 (2005), p. 10.

¹⁷ Industrial archaeologists have always studied housing as part of their remit into looking at the development of industries. For example see, T. Crosby, A. Garwood and A. Corder-Birch, 'Workers' housing in Essex', *Industrial Archaeology Review*, 30, no. 2, (2008); S. Hughes, 'Institutional buildings in workers settlements', *Industrial Archaeology Review*, 22 (2005); G. Timmins, 'Housing quality in rural textile colonies c1800-50: the Ashworth settlements revisited', *Industrial Archaeology Review*, 22 (2005); J. Lowe and J. Gross, 'The triangle, Pentre, Merthyr Tydfil', *Industrial Archaeology*, 15, no. 2 (1980), p. 154; M. Wynn and I. Haywood, 'The buildings, Eastwood', *Industrial Archaeology*, 13, no. 4 (1978); J.N. Merrill, 'Arkwright of Cromford', *Industrial Archaeology*, 10, no. 3 (1973), pp. 49, 193-97, 270-82.

form little part in this thesis. However, it should endeavour to enliven research into the subject in the future.

Four case study companies and communities.

The four case study family companies and towns were: Samuel Courtauld and Company of Halstead, R. Hunt and Company of Earls Colne (both in north Essex), D. Gurteen and Sons of Haverhill and Richard Garrett of Leiston (in the south of Suffolk). Gurteen and Courtauld were textile businesses, Hunt and Garrett engineering ones. These businesses and their entrepreneurs had become powerful and influential by the middle of the nineteenth century, developed into prosperous industrialised companies and provided, to a varying degree, housing and amenities for their workforces in a continuing urbanised environment. The geographical area was chosen because, as far as the textile companies were concerned, it had once been the powerhouse of medieval and early modern textile production. There were other similar prosperous towns in the region of south Suffolk and north Essex.¹⁸ Even after the failure of the heavy woollen industry, the area, particularly north Essex and Sudbury in Suffolk, became the centre of the lighter worsted cloth trade. However, by the eighteenth century the textile trade in East Anglia was in terminal decline which was in part a result of extensive growth of the industry in the northern counties. By the beginning of the nineteenth century the region had deteriorated to become a de-industrialised backward, mainly agricultural, part of the country. Nevertheless, textile workers had survived in sufficient numbers to

¹⁸ For example Clare, Cavendish, Long Melford and Sudbury on the Suffolk side of the river Stour, with Coggeshall, Braintree and Bocking in North Essex. Their prosperity is indicated by their large medieval churches. See N. Raven, 'Manufacturing and Trade: the Urban Economies of the north Essex Cloth Towns c1770-1851', PhD thesis (University of Leicester, 1998).

form the nucleus of the new workforce of the two textile case study towns.¹⁹ The engineering companies did not have the same early history, but there were examples of iron foundries and engineering works, mainly in the agricultural sector, being set up in the region, despite the lack of iron ore and coal locally. Some like Ransome, Garrett and Hunt developed into long lived businesses; others quietly faded away.²⁰

Another aspect of the four case study companies was their longevity; they were small handicraft concerns that evolved into industrialised businesses of national and international importance. The entrepreneurs who energised the industrial activity and therefore the prosperity of these companies, were not always those who had to weather the storms of difficult market conditions in the late nineteenth and early twentieth centuries. The creation and evolution of these companies was not due to a single individual, but more a family concern, even a dynasty, son taking over from a father or a nephew from an uncle. These businesses, therefore, were solid concerns with a strong will to survive and keep the company within the family. This tradition was a major factor which ensured their long life and cannot be emphasised too much.²¹

The textile entrepreneurs (Daniel Gurteen and Samuel Courtauld) did not try to compete with the northern cotton and woollen industries, but specialised in other materials, Gurteen in drabnet, hair cloth, mat weaving and, more importantly, into ready made clothes and Courtaulds in funeral crape and viscose. Both had seen gaps in the market and exploited them. The two engineering companies, Garrett and Hunt, first

¹⁹ P. Clark, 'Small towns in England 1550-1850: national and regional population trends', in P. Clark (ed.), *Small Towns in Early Modern Europe* (Cambridge, 1995), pp. 113-18; P. Clark, 'Introduction: English country towns 1500-1800,' in P. Clark (ed.), *Country Towns in Pre-Industrial England* (Leicester, 1981).

²⁰ See chapter three for a much fuller analysis and description.

²¹ J.F. Wilson and A. Popp (eds.), *Industrial Clusters and Regional Business Networks in England 1750-1970* (Aldershot, 2003), p. 63; M.B. Rose, 'The family firm in British business, 1780-1914', in M.W. Kirby and M.B. Rose (eds) *Business Enterprise in Modern Britain from the Eighteenth to the Twentieth century* (London, 1994).

concentrated on the construction of implements and machinery for the agricultural industry, which certainly gave them a regional and national market, before the onslaught of the agricultural depression after the 1870s. Reuben Hunt diversified firstly into animal food preparation machinery and then, in the 1880s, started the manufacturing of power transmission components (line shafting, pulleys and gear wheels). Richard Garrett, although continuing with the manufacture of seed drills and threshing machinery, started to build the steam engines for which his firm was to become famous.²²

Sources.

The sources that were used to research into the four case study towns are set out below. There were no major sources that clearly showed the creation, progress and development of the four companies and their towns. Neither was there any primary biographical document able to show the character and calibre of the original entrepreneurs who led the companies into expansion, industrialisation and prosperity, nor those who had to nurse the company over the period of difficult trading conditions from the 1880s to the 1900s. The research was built up using fragments of many sources and there were sizeable gaps in the knowledge of each individual entrepreneur, company and community.

The records for the four companies were variable in quality and quantity, none of them had complete or even extensive archives and the preservation of their records was an accident of fate. Also, these records tend to survive, in reasonable numbers, only from the end of the nineteenth and beginning of the twentieth centuries. Gurteen and

²² This is set out more fully in chapter four.

Garrett have museums on the site of their works and, in the case of the former, it forms part of a company still very much in business, the only one of the four. The preservation of Gurteen's business archive has been haphazard with many gaps in the long history of the company. Nevertheless, Gillian Holman was able to research these records and write a Master of Arts dissertation.²³ Recent articles in 'Textile History' has thrown more light on the development of the ready made clothing industry and the importance of London and Leeds in this history.²⁴ In the case of Garrett, a reasonable number of company records were deposited in the Suffolk Record Office at Ipswich, although many of these reflect the interest and enthusiasm of transport historians for the company's products, especially steam engines. A considerable number of the Hunt records were saved for posterity and deposited at the Museum of Rural Life, University of Reading. Courtaulds was extensively researched by D.C. Coleman, and his history of the company, in three volumes, although 50 years old, still stands as an outstanding contribution to the economic and social history at local and national level.²⁵ Coleman was given full access to the company's archives, but since 1969, when he published its early history, the company has ceased to exist as a major textile business and some of its records are in private hands or have limited access. The other companies have no such luxuries. Certain members of the Garrett family are listed in the dictionary of National Biography, but as for Daniel Gurteen and his sons Daniel IV, William and Jabez, and Reuben Hunt, their characters had to be gleaned from snippets of information in newspaper articles, obituaries and a few published sources.

²³ G. Holman, 'The Survival of a Suffolk Manufacturer', Master of Arts dissertation (University of Southampton, 1995).

²⁴ See chapters three and four.

²⁵ D.C. Coleman, *Courtaulds an Economic and Social History*, vol. 1 and 2 (Oxford, 1969), vol.3 (Oxford, 1980).

For the study of local communities there were the official records, the most important being the census, where the use of the extensive raw material of the enumerators' returns and more general abstracts were used. Rate books were useful in showing how much housing was owned by the company or a member of the business family. 'Cottages' of the working classes were identified in the rate books by those dwellings where the rates were paid by the owners not the occupiers, which allowed the comparison of company housing with the total working class housing within the community. Trade directories were used to analyse the physical make-up of each community, the extent of its commercial and industrial businesses in relation to the case study companies.

The ruling elite was researched using the collections of archives held by the various Records Offices. Local boards, urban district councils, and, to a certain extent parochial and rural district council records, with their relevant committees, proved useful. Again, their survival has been mixed. The Leiston and Haverhill records are extensive. Halstead has less, a number of them being preserved in the Halstead and District Local History Society's archives, but for Earls Colne, perhaps because it never developed into a local board or urban district council, the survival rate of its official records was poor.

Finally there is the cartographic, photographic and archaeological evidence. Sometimes the urban historian has to get out and study his town from the ground. Often there are physical indications that survive from the period being researched. The use of maps and photographs as an aid to pinpoint the actual evidence of what really was there is useful as it also helps to show the character of the past environment.²⁶

²⁶ A good example of this was the extent of Hunt's housing. By exploring Earls Colne on foot over 100 houses were identified, each with a date stone and 'R.H.' carved on them.

Extent of company communities: general characteristics.

This thesis will also study the issues that confronted the creators of not only the case study towns, but also other company communities. Businesses created an extensive amount of housing stock within the period of this study. The collieries and railway sector alone had constructed 160,000 houses prior to the First World War.²⁷ The extent of company owned dwellings in the manufacturing sector is unknown but a rough figure of around 80,000 homes would be a reasonable estimate, thus giving a total of a quarter of a million houses that companies built for their workers. It was not possible to compare this with the number of working class housing (cottages) throughout the country, but it does represent a conservative figure of about 3 per cent²⁸ of the entire housing stock of the nation and shows the importance of company towns in the provision of working class housing. This, coupled with repair and maintenance, was particularly significant for the local building industry which would have constructed not only the housing, but also the other built amenities the companies provided. A company community consisted of families (in the main, fully employed workers) and these generated income for the local economy.²⁹ The cost of this housing came from the capital expenditure of each individual company, which wanted the houses to last, thus

²⁷ See tables 2.1.1, 2.1.2 and 2.2 pp. 30-31 and 56.

²⁸ This figure is projected from the census statistics. In 1901 the number of inhabited houses for England, Wales and Scotland was 7,187,766 with a population of 36,999,946 (a ratio of 5.15 persons per house). Unfortunately the England and Wales census did not record inhabited houses in 1911, but the ratio of persons per house in the proceeding five decades is constant at between 5.1 and 5.4 and thus at a combined population of 40,831,396 (the 1911 tally) the number of inhabited houses can be postulated at 7,928,426.

²⁹ Household budgets have been studied by B.S. Rowntree, *Poverty a Study of Town Life* (London, 1910); C. Booth (ed.), *Life and Labour of the People of London*, (London, 1892-97); and Lady Florence Bell, *At the Works* (London, 1907). These show the extensive amount the poor and not so poor families, and hence the communities, spent on food, clothing and other household incidentals in the local area.

most were well built. The accommodation was modest compared to family sizes at the time, but was reasonable when compared to other speculatively built housing of the period.³⁰

The rationale governing the creation of these communities changed and developed over time, particularly in the later nineteenth and early twentieth centuries. In the early years of industrial expansion, businesses tended to provide dwellings built in long rows of monotonously identical housing which characterised many company communities, with little in the way of greenery, gardens or open spaces. Later, in the nineteenth century, companies began to pay more attention to their communities and to provide more attractive settings for their housing. Thus the provision of gardens, open spaces, shrubs and trees were provided in new communities, in keeping with the Garden City ideals that were becoming fashionable. Manufacturing companies were more inclined to take on these considerations and built notable 'Garden City' towns.³¹ The number of communities built by the extraction and railway industries was limited in this period as fewer houses were being built. After the turn of the century, the welfare of workers became an important factor in the managing of companies. Institutions such as reading rooms, mechanics institutions, social clubs and sports grounds provided by companies became much more common.³² This, the companies hoped, would not only increase the fitness of their workers and make them loyal employees with a pride in

³⁰ Enid Gauldie, *Cruel Habitations: a History of Working-Class Housing 1780-1918* (London, 1974), pp. 29-30.

³¹ See pp. 48-52.

³² Lady Bell has shown that in her study of Middlesborough, a quarter of the community could not read, half regularly read books and newspapers and a quarter just books. Thus there was a need for libraries and reading rooms. Bell, *At the Works*, p. 144.

their town, but would help also to keep them out of public houses and the possibility of intoxication which reduced their productivity through absence of work.³³

The motivation of companies, or more likely of the entrepreneurs who ran them, to construct communities, was varied and often difficult to interpret. Some certainly looked at their communities in a paternalistic fashion, while others even had philanthropic motives. However, there was also self interest. Providing healthy homes near the workplace cut down absenteeism that was due to ill health, or long journeys in bad weather. Rent could be deducted from wages and was therefore easy to collect. Above all the employer had more control over his employees by their fear of eviction if they became troublesome. Some companies used the provision of housing in a political fashion by rewarding the lower supervisory staff with better accommodation or even allowing them to buy their own homes.³⁴ The businesses wanted these staff to distance themselves from their fellow workmates, whom they had to discipline.

There were other factors that had an effect on company communities. The environment did not just contain housing and built amenities. There was also 'character' built into these towns. Some were distinguished and made famous by their architectural style, unity or 'Garden City' character. Others had generously supplied public spaces, with gardens well tended and looked after. However, factories or works often polluted the community.³⁵ Pollution from smoking chimneys and railway engines, dust, smells and noise from the industrial processes could penetrate every corner of the town thus giving the community a bad name.³⁶ Within the community there were also internal and

³³ Although the motivation may be of a socialistic character or a philanthropic desire towards improving the community.

³⁴ For an example of this see pp. 48-52.

³⁵ B. Luckin, 'Pollution in the city', in M. Daunton, (ed.), *The Cambridge Urban History of Britain*, III (Cambridge, 2000), pp. 208-09, 223-25 .

³⁶ Bell, *At the Works*, p. 15.

external forces at work. The latter often involved the companies, their markets, the sale of their products and hence the prosperity of their business and environs. The former were often political and religious forces at work, for example, Tory and the Anglican church versus the Liberal and Nonconformists, or local factory owners at odds with the land owning elite. Thus the continuous urbanisation coupled with industrialisation created growing stresses within the towns, particularly small rural ones. The growing power and influence of the newly prosperous businessman, but who was also ‘in trade’, challenged the existing, tradition and probably long lived authority of landed gentry, squire, rector and resident large farmers and landowners.³⁷

Local government, public and private initiatives.

During the period covered by this thesis, urbanisation dominated a number of small company towns besides the four case study ones. The laissez-faire attitude of the earlier landowning elite was challenged by public and private initiatives put forward by companies and businessmen who wished to extend their control and influence. It was the creation of bodies such as burial boards, school boards, local boards of health and urban district councils, which caused radical changes by public intervention into the affairs of many towns.³⁸ Most of these boards were administered by government departments which offered loans for approved projects at advantageous interest rates, but who also interfered in the local running of the community. The most important of these, in the context of small towns, were the Local Boards of Health (normally

³⁷ J. Light “...mere seekers of fame”? Personalities, power and politics in a small town: Pontypool and Bridgend’, in *Urban History*, 32. No.1 (2005).

³⁸ B.M. Doyle, ‘The changing functions of urban government: councillors, officials and pressure groups,’ in Dauntton, *Cambridge Urban History*, pp. 287 and 312.

shortened to 'Local Boards') and Urban District Councils. Their members' duty was to improve the health of towns, abate the excesses of public nuisances, insist that new buildings complied with the new model bylaws and the provision of wholesome water supplies and safe disposal of human sewage.³⁹ The Local Boards could also appropriate the duty of lighting and paving the streets and took on other miscellaneous duties, thus becoming the main body administering the town's affairs. Their chairmen were regarded as the civic leaders of these communities. Local boards were not mandatory; in the case of the four case study towns only the two most nonconformist and radical towns opted for the venture.

Compulsory education was another public provision that all towns were obliged to provide by the provision of the 1870 Education Act.⁴⁰ In the four case study towns it tended to be adopted on a political basis. Only Haverhill adopted the more expensive option of building a large board school; the other towns took the cheaper alternative of enlarging the existing National Schools (an established church institution) and British Schools (mainly a nonconformist organisation).

The 'burial boards' were less tightly regulated, having no government department overseeing their organisation and again their provision was often political. Of the four study towns the two largest had Burial Boards, probably insisted on by the radical nonconformists who did not want their community's burial places to be monopolised by the Church of England.⁴¹

Another interference into the lives of the inhabitants of company towns was the provision of a professional police force. The Essex force was created in 1839, East

³⁹ Luckin, 'Pollution in the city' in Dauntton, *Cambridge Urban History*, pp. 213-17.

⁴⁰ Doyle, 'The changing functions of urban government', Dauntton, *Cambridge Urban history*, p. 292.

⁴¹ These local governance organisations are set out in chapter five.

Suffolk in 1840 and West Suffolk in 1856. This was to have an impact not only on the more effective apprehension of miscreants, but it also set standards of behaviour, particularly in public spaces such as streets, for the rest of the inhabitants.⁴² This was an urban problem. It was only serious in the crowded towns where sheer numbers of the lower classes roaming the public streets made the middle classes feel threatened and the use of regulation and social conditioning was used and controlled by the local police.

Other initiatives tended to be private, as they were created by individuals in the town for their own advantage. The most important was the connection of the town to the railway system. This was essential to the extraction and manufacturing businesses and their entrepreneurs were in the forefront of promoting railway companies. Of the four case study companies, two were instrumental in getting the lines to their respective towns, one provided capital for the erection of a station for the use of his factory and the fourth constructed a private line to his works. The provision of gas was another example of private enterprise. The gas companies tended to be limited liability businesses with a board of directors and were established to light the streets of the town and the homes of the wealthy inhabitants, but the companies made use of the gas for the lighting of their factories. All four of the case study towns had gas making plants dating from 1835 to 1865. One such plant was built by Garrett and supplied Leiston with its gas.

Public Amenities.

Halstead and Haverhill, important market towns, supported corn exchanges, the former in 1865 and the latter in 1887, which replaced earlier buildings. This reflected

⁴² A. Croll, *Civilizing the Urban Popular Culture and Public Space in Merthyr c1870-1914* (Cardiff, 2000), pp. 3-22.

the relative importance of agriculture even during the depression years and was reproduced in rural market towns throughout the country.

In the field of social amenities, private initiatives complemented public ones. Thus public halls were popular places for social gatherings and some had a variety of functions. Halstead had two, seating a total of 650 people, Haverhill's Town Hall seated 800 and Leiston had a multipurpose building which doubled as a dining hall for the works but was also used as a drill hall, whilst its upper floor housed the Mechanics Institute. Hunt at Earls Colne built a dining hall in 1853 primarily for its employees but which was also used as public hall seating 200. A reading room was added in 1890 and in 1904 it was utilised as a social club.⁴³ Part of the Utopian vision of improving the environment and adding 'green' areas into towns in the spirit of the 'garden city movement' was the provision of parks and recreation grounds. It also reinforced the perceived urbanisation of towns by copying the best practice of larger towns and cities. In the case Haverhill the initiative came from the desire to commemorate Queen Victoria's Diamond Jubilee in a tangible way. Although it was W.B. Gurteen who brought the land and presented it to the town, it was at the instigation of the local Liberal Member of Parliament, Cuthbert Quilter.⁴⁴ The provision of these open spaces increased the prestige, power and influence over the towns by the entrepreneurs, but it was also paternalistic.

It was the building and rebuilding of mainly non-conformist chapels which directly involved the majority of the population. Not only were the extensive congregations given a new environment in which to worship, but, in providing finance,

⁴³ *Kelly's Directory of Essex* (London, 1912) p. 243; *Kelly's Directory of Suffolk* (1888), p. 992; *Kelly's Directory of Norfolk and Suffolk* (1908), p. 287; *Kelly's Directory of Essex* (London, 1910), p.197.

⁴⁴ *South West Suffolk Echo*, (27th February 1897), p. 3; (1st May 1897), p. 3; (5th June 1897), p. 3.

help and time in fund raising activities, they were actively involved with the projects. This heavy involvement from all sectors of the community was repeated up and down the country in large towns and cities as well as in small rural towns and large villages, helping to make these settlements close knit communities.

Conclusion.

Thus the variety of these habitations and the close association of companies to communities were a phenomena of these towns, the one relying on the other. The business needed a well motivated, healthy and contented workforce and the inhabitants required employment in a prosperous company and, to a certain extent, the ability to enjoy the advantages of being associated with employers who provided amenities not necessarily provided in non-company towns. The downside for the employees and their families was often the strict, stifling rules that were enforced.⁴⁵ The next chapter will give an account of the number and geographical range of company towns throughout the length and breadth of mainland Britain.

⁴⁵ See appendix 5.

CHAPTER FOUR

ENTREPRENEURS AND THE CASE STUDY COMPANIES 1850 - 1918

Introduction

The creation and development of the four case study companies up to the 1850s, was considered in the previous chapter. This chapter will look at how these businesses expanded over the next seventy years, the strategies and policies adopted by the entrepreneurs who ran them, and how successful these initiatives were in the challenging and difficult trading climate towards the end of the nineteenth and beginning of the twentieth centuries. To be a thriving entrepreneur required motivation, drive, confidence and often a single minded persistence with successful policies and strategies. It also required a certain amount of luck with timing as well as the necessary assets such as leadership and an ability to obtain sound financial backing.⁴⁶

The four case study companies were family businesses and over the many years they developed into dynasties.⁴⁷ The importance of the family cannot be overstated: it was the *raison d'être* for the company's existence. It gave the entrepreneurs the all enveloping incentive to succeed at all costs, not only in financial terms, but also in social status. A successful wealthy industrialist rose in power and influence in his community, and his wife, daughters and sons found themselves on the higher rungs of

⁴⁶ Tom Nicholas, 'Enterprise and management', R. Floud and P. Johnson (eds), *The Cambridge Economic History of Modern Britain*, II (Cambridge, 2004), pp. 249-52; S. Broadberry, 'Technological leadership in manufacturing since the industrial revolution: implications for the convergence debate,' *Economic Journal*, 104, pp. 291-302; J. Mokyr, *The Levers of Riches: Technological Creativity and Economic Progress* (Oxford, 1990), p. 266; D.N. McCloskey, 'Bourgeois virtue and the history of P. and S.,' in, *Journal of Economic History*, 58, p. 300; L.G. Sandberg, 'The entrepreneur and technological change', R. Floud and D. McCloskey (eds), *The Economic History of Britain Since 1700*, II (Cambridge, 1981), p. 100.

⁴⁷ The exception to this is R. Hunt & Company. Reuben Hunt who virtually ran the company throughout the time span of this thesis.

the ladder of social status in a class conscious age.⁴⁸ Economic historians have observed that entrepreneurs, by sticking faithfully to the tradition of keeping the business within the family, lost momentum and market share. They did not face up to overseas competition, and thereby failed to create the vibrant, dynamic and much larger businesses generated by take-overs and mergers necessary to face up to the fierce competition from Germany and America.⁴⁹ Modern scholarship, however, considers that the difficult market conditions prevalent at the end of the nineteenth and beginning of the twentieth centuries were more complex.⁵⁰ Takeovers and mergers tended to oust the original family, with sentiment and local commitment being secondary to larger companies' higher profits. It is no wonder that few family businesses would want to go down that road. Entrepreneurs were in business for themselves, not for the good of their country. It has also been claimed that an extensive number of these family firms had a poor survival rate and that many failed after a few years. However, Owens has shown from his research into family businesses in Stockport, that many of these firms were not bankrupt or closed through financial difficulties, but were liquidated to provide the money for the beneficiaries of the testator's family. The future of the family was important, not the business.⁵¹

⁴⁸ P. L. Payne, *British Entrepreneurship in the Nineteenth century* (London, 1974), p. 25.

⁴⁹ N. Crafts, 'Long-run growth,' in, Floud and Johnson, *Cambridge Economic History*, pp. 14-15; G.B. Magee, 'Manufacturing and technological change,' in, Floud and Johnson *Cambridge Economic History*, p. 89; Alastair Owens, 'Inheritance and the life-cycle of family firms in the early industrial revolution', in, *Business History*, 44, no. 1(2002), pp. 21-22; M.A. Upton, 'Some early features of the early merger movement in British manufacturing industry', *Business History*, 14, no. 1 (Jan. 1972), pp. 52-5; P.L. Payne, 'The emergence of the large-scale company in Great Britain, 1870-1914', *Economic History Review* (1967).

⁵⁰ Magee, 'Manufacturing and technological change', pp. 78-9.

⁵¹ However his researches into Stockport was from the early part of the nineteenth century and involved small businesses such as textiles, public houses, maltings and tailors. He made the comment that it was more cost effective to keep larger companies in business. Owens, 'Inheritance and the life-cycle of firms, pp. 22-41.

Another reason for the difficult trading conditions was the inherent differences in the British and American manufacturing systems. America was short of labour but had plentiful supplies of raw materials. Its manufacturing industry tended to cut costs by developing labour saving machinery which produced cheap standardised products, but which depended on greater capital investment. Britain, on the other hand, had a surfeit of cheap labour, used less capital and its products were relatively more expensive. It made more use of its labour and less of plant. The American worker, with the increasing use of machinery was more productive than his British counterpart. Nevertheless the British manufacturers were more flexible and had the ability to make high quality, often, hand-crafted and customised products.⁵² Even small handicraft businesses were able to use what Daunton called 'Flexible Specialisation'.⁵³ This is where the traditional handmade industries obtained higher productivity by breaking down production into separate tasks with individual workers specialising in particular activities.⁵⁴ This speeded up production without significantly increasing capital expenditure and overheads. These methods had the advantage of being able to react quickly to changing markets and fashions. The products were of higher quality and this method encouraged innovation. However, textile manufacturers had, to a certain extent, been using this method for several centuries. Weaving and spinners had always carried their craft in their own homes, but the innovation of 'flexible-specialisation' meant that these hand workers and processes were accommodated in a factory and the skilled workers became employees rather than small masters.

⁵² Crafts, 'Long-run growth' p. 16.

⁵³ M. Daunton, *Progress and Poverty an Economic and Social History of Britain 1700-1850* (Oxford, 1995), p. 13.

⁵⁴ S. Broadberry, 'Human capitals and skills,' Floud and Johnson, *The Cambridge Economic History*, pp. 63-64.

With the home market under pressure in the trading conditions of the late 1890s and early 1900s, entrepreneurs relied increasingly on exports to keep up production and profitability. Exporting was not an easy option: companies found it difficult and expensive to have agents overseas and often combined with larger companies for this purpose. The agricultural engineering companies had little option but to export to obtain orders and keep profits high. There was also variability in local conditions that affected export prices, especially the use of tariffs to restrict importation of products in direct competition with that country's own industries. Most British exporters diversified into a variety of countries to operate effectively and keep order books full.⁵⁵ Thompson and Magee have argued that to sell to the countries of the British Empire was far from being a 'soft touch' as these markets also created problems. Pilkington, for instance, found that they had to build warehouses all over Canada in order to compete with local firms on delivery times and several companies set up subsidiary businesses in South Africa, Canada and Australia. Most of the imperial railway builders tended to be trained in Britain and ordered from British companies with whom they were acquainted. But the British suppliers to imperial markets were often upset by local circumstances where trade in primary commodities was susceptible to market fluctuations. Locally poor harvests in Australia in 1897 and 1917 and the Boer War in South Africa meant imperial purchasing power was often weak.⁵⁶ Even so, successful exporting kept many companies afloat, especially those engineering ones which form the part of this research.

⁵⁵ P. Dewey, 'Iron Harvests of the Field' *the Making of Farm Machinery in Britain since 1800* (Lancaster, 2007), pp. 94-97.

⁵⁶ A. Thompson and G. Magee, 'A soft touch? British industry, Empire markets and the self-governing dominions, c 1870-1914', *Economic History Review*, LVI, No. 4 (2003), pp. 694-710; P. Dewey, 'Iron Harvests of the Field' pp. 87-91.

One of the developments of late nineteenth and early twentieth century industry, was the creation of an increasing number of large businesses with the need for more elaborate management systems. In Britain, the pioneers were the railway firms whose businesses were nearly always limited liability companies.⁵⁷ As the railway system evolved with mergers and take-overs, extensive companies were created towards the end of the nineteenth century, not only in size and number of employees but also in the amount of capital invested. To be able to control them effectively, professional managers were recruited, often using progressive American management systems. A managerial class evolved, both for top and middle administrators who knew less about the products but whose skills lay in the effective control of large and often complex concerns. This class of professional people could also be recruited into other industries, although the manufacturing sector was slow to emulate this approach. However, in response to the challenge of foreign competition, extensive companies were formed throughout the latter half of the nineteenth century, mainly by mergers, so that the era 1895 to 1902 witnessed the creation of the greatest number of mergers in the period leading up to the Second World War.⁵⁸ Apart from Courtauld, which needed a complex management structure, none of the other case study companies had the need for sophisticated management systems, though all needed to keep a watching brief on their production and marketing.

The problems that faced the four case study companies and most of the rest of industrial Britain during the late nineteenth century revolved around the loss of business due to a downturn in competitiveness. Cheaper foreign products prompted new methods of management and marketing to counter these conditions. But, as with the rest of the

⁵⁷ Christopher J. Schmitz, *The Growth of Big Business in the United States and Western Europe 1850-1939* (London, 1993), pp. 18-21.

⁵⁸ Upton, Some features of the early merger movement, p. 52.

manufacturing sector, the four case study companies used a variety of solutions to solve their particular problems, as will be seen in the following sections.

Samuel Courtauld and Company

At the start of the 1850s, Samuel Courtauld III's main business was still the making of soft and hard silks, silk throwing and building textile machinery. But he soon changed the policy to concentrate on a single product - funeral crape. With the doubling of the population between 1801 and 1851 and the corresponding increase of those rich enough to observe the strict mourning code, with its lavish use of crape, there was a steady increase in sales and profits. The lower classes also sought to imitate the middle classes and the formal and complex etiquette of mourning became fashionable, particularly after the death of Prince Albert. Samuel Courtauld, with uncanny ability, had foreseen these markets and the business strategy was able to grow and generate high profits.⁵⁹ As the company increased production, so Samuel acquired moneyed partners to finance the venture. These he obtained through his extended family - the Taylor, Bromley, Warren and Nettlefold relations.⁶⁰ See Appendix 3 for details of the family tree. Most were Unitarians who followed a creed believing in a rational explanation of the scriptures, a humanist approach to truth through scholarship, reason and individual responsibility.⁶¹ Scientists and businessmen tended to be Unitarians and

⁵⁹ Expansion was taking place in the 1860s. In 1866 a mill was brought at Chelmsford and out of work weavers migrated to Braintree, Bocking and Halstead for work. C.H. Ward-Jackson, *A History of Courtaulds, an Account of the Origin and Rise of the Industrial Enterprise of Courtaulds Limited and of its Associate American Viscose Corporation* (London, 1941), p. 51.

⁶⁰ D.C. Colman, *Courtaulds an Economic and Social History*, 1 (Oxford, 1969), pp. 112-6 & 178-81.

⁶¹ G. Hague, *The Unitarian Heritage: an Architectural Survey of Chapels and Churches in the*

they bonded together and looked to each other for influence and support. In Samuel III it formed a strong part of his character. He firmly held the view that he had not only to support his immediate family, but also his extended relations. Accordingly the company had to remain strong and prosperous.

Samuel III died in 1881 and the leadership of the company passed to his nephew, George Courtauld III who Samuel detested, but, despite this, made him his successor. Between 1886 to 1898, George had to face challenging trading conditions. Coleman explained this crisis in four parts.⁶² Firstly, the general manufacturing downturn in the British economy and secondly, the special difficulties that the silk industry and especially crape manufacturers encountered, as ritual mourning began to take on different forms, which exposed the vulnerability of Courtauld's concentration on one fabric. Thirdly, the plant designed and built by George's father, George Courtauld II, was 'state of the art' 50 years before, but much of it, in the 1890s, was obsolete. Finally, there was the questionable calibre of the partners of the business and their ability to turn round its fortunes. It is not surprising therefore, that the partners decided in 1891 to form the business into a private limited liability company - it would have been too hazardous to continue as a partnership and be saddled with the debts of the business if, as it looked likely, the business failed. In 1892 the Chelmsford factory was closed and the value of the company's capital had to be halved to £200,000.⁶³ The combination of a lower selling price and the increase in raw silk prices reduced profit margins. The entire industry was in crisis. The well known silk centres of Coventry and

Unitarian Tradition in the British Isles (Unitarian Heritage, 1986), pp. 9-11.

⁶² Coleman, *Courtaulds an Economic and Social History*, p. 163.

⁶³ C.H. Ward-Jackson, *A History of Courtaulds...*, p. 66.

Spitalfields ceased production and most of the scattered throwing mills in the counties of Buckinghamshire, Hertfordshire, Suffolk and Somerset vanished.⁶⁴

The most critical component of the crisis was falling sales. Funeral fashions had evolved; the etiquette of mourning was less strict. No longer were people expected to mourn for such long periods or to wear only mourning clothing. This severely reduced Courtauld's sales, but it was also coupled with a reaction against stiffness and rigidity in ladies fashions and a move to the use of chiffon and lighter materials.⁶⁵ George Courtauld III had inherited a business which was centred on the manufacture of hard silks; it was no solution merely to change production to more colourful crapes. A complete overhaul was needed to bring the business back to its former profitability.

George Courtauld III was the classic indictment of British industry. A reluctant businessman who was more at home on his rural estate as a country gentleman, conducting his work as a Justice of the Peace and as the Member of Parliament for Maldon. He had been brought up as a Unitarian, but, soon after he married, he attended the local Anglican church and his political views shifted from a liberal to that of a moderate conservative and unionist. He had attended a Unitarian school, whereas his sons went to public school and some to Cambridge University.⁶⁶ His was the stereotyped case of a businessman taking over a highly profitable company, but lacking the dynamism, energy or interest to improve its standing. His answer to the financial crisis was to withdraw himself from the business and his attendance at board meetings

⁶⁴ Coleman, *Courtaulds an Economic and Social History*, p. 163.

⁶⁵ Ibid., pp. 165-171.

⁶⁶ At this period, children of wealthy Unitarians went to public school and Oxbridge, mixed with the aristocracy and local gentry and, as Hague has pointed out, their status 'had little time for doctrinal niceties'. However in George III's case he neglected to attend the local Unitarian Chapel. Hague, *Unitarian Heritage*, p. 71.

became sporadic.⁶⁷ Coleman criticised the calibre of the other senior partners and maintained they too were out of touch with the latest textile developments and market conditions. However, they had been brought in not only as family members but also as successful businessmen. Although the management system Courtauld adopted was unclear, these senior men had proven track records as directors of other businesses and so had management experience and expertise, if little knowledge of silk.⁶⁸ These were the new men of top professional management.⁶⁹ They may not have known the type of textile products that were needed to bring the firm out of recession, but they knew, in management terms, the need to recruit someone who did. Their appointment of Henry Tetley in 1893, who was made a director two years later, was inspirational.⁷⁰ It was he who not only brought Courtaulds out of the recession, but created profits unheard of even in Samuel Courtauld III's day.

Henry Tetley was a complete outsider to the family, the Courtauld business and the area. He was 42 years old when he joined the business and had been head of the silk manufacturing section of Lister and Company, an extensive Yorkshire textile business, where he had worked for 22 years. He brought into Courtaulds, as the sales manager, Thomas Latham, who was four years younger and had been Lister's representative in Manchester and New York.⁷¹ Tetley, as a new broom, brought to the business the sense

⁶⁷ Coleman, *Courtaulds, an Economic and Social History*, pp. 174-6

⁶⁸ For example, Frederick Nettlefold was the son of John Sutton Nettlefold who had an ironmongery business in London and who set up a successful screw manufactory with Joseph Chamberlain in Birmingham. Frederick became a partner and then chairman of this Company. Henry Browne held directorships in a number of railway and mining companies in Britain and abroad. He was also chairman of the London, Tilbury and Southend Railway and as such had much experience of the management of a variety of businesses. Coleman, *Courtauld, an Economic and Social History*, pp. 179-180.

⁶⁹ Schmitz, 'The growth of big business'.

⁷⁰ See D.C. Coleman 'Henry Greenwood Tetley' in, *Dictionary of National Biography*, 54 (Oxford, 2004).

⁷¹ Tetley and Latham made an ideal partnership. The imagination, enthusiasm and driving

of urgency, vigour and dynamism that it had had during the era of Samuel III, but which it lacked under George III. His business strategy was to concentrate on the manufacturing of coloured hard silks and of lighter gauzes, much in vogue in the new Edwardian fashion world and which Latham was having success in selling. Tetley started immediately to change the atmosphere of indecision and gave direction to the firm. New plant and buildings were sanctioned and the old obsolete machines built by George Courtauld were replaced.⁷² In 1900 Tetley instigated an important policy change, the purchase of a factory at Leigh in Lancashire, for the increased production of these coloured fabrics.⁷³ Special looms were needed, with more skilled weavers to operate them. There was no longer an abundance of skilled labour in North Essex.⁷⁴

In 1904 the business was converted into a public limited liability company. The make up of the directors showed that, although still in the hands of the Courtauld family, more experienced businessmen were involved.⁷⁵ Tetley persuaded the board of directors in 1904 to purchase the English rights to the patents for the manufacture of artificial silk by the viscose process. This was to be the most important decision the company was to make in its endeavours to climb out of recession. However, at the time, Tetley's fellow directors felt it to be an annoying sideline to their major business, particularly as the operation of converting wood pulp into usable yarn was far from

power of Tetley was balanced by the critical coolness, financial wisdom and pertinacity of Latham. Ward-Jackson, *History of Courtaulds...* p. 68.

⁷² In 1895 there was expansion at Halstead with extra space provided for 500 looms, which in a few years had increased to 1,000. *Ibid.*, p. 69.

⁷³ C. Fell and Miller Christy, 'Silk industry' in, William Page (ed.), *The Victoria History of the Counties of England, Essex*, 2 (London, 1907), p. 467.

⁷⁴ Perhaps of more importance to Tetley was moving the business away from the dominance of The Courtauld family in north West Essex. Bocking was the headquarters of the company.

⁷⁵ The chairman was John Warren and the other directors were his brother T.P. Warren, George Courtauld III (now retired from running the business), H.D. Browne and Frederick Nettlefold. The latter two were experienced businessmen (see footnote 23 above). The Newer generation consisted of H.G. Tetley, T.P. Latham who were joint managing directors and Samuel August Courtauld II, son of George Courtauld III.

perfected and needed extensive work by the company's chemists and engineers to turn it into a practicable process.⁷⁶ Their first effort was unsuccessful as it infringed a German patent.⁷⁷ Tetley's character was revealed by this episode. He knew that his power and influence within the company rested on his ability to produce significant profits. Consequently he was highly motivated and proceeded to do all in his power, including pressurising and bullying the company's chemists and engineers, to resolve the fundamental issues.⁷⁸ With a successful conclusion, he moved production to a new plant in Coventry solely for the manufacture of artificial silk. The company's centre of operation was moving away from North West Essex.

Table 4.1. Courtauld gross trading profits. Yearly percentage changes, Bocking operation and Coventry 1903-1912.

	Bocking	Coventry
1903-04	-11	
1904-05	10.4	
1905-06	10.6	
1906-07	-22.7	
1907-08	-4.1	
1908-09	56	504.6
1909-10	-3.7	23.8
1910-11	7.8	236.9
1911-12	-11.1	21.7

Source: Coleman, *Courtaulds an economic and social history*, Vol. II, table 2, p. 40.

Table 4.1 shows the critical time when falling sales at Bocking was overtaken by the rise in profits at Coventry. Once Courtauld had perfected the process of producing yarn from wood pulp, Tetley and Latham wasted no time in manufacturing and marketing it. The Coventry business almost exclusively produced viscose yarn and what

⁷⁶ Ward-Jackson, *History of Courtaulds...* p. 85.

⁷⁷ Coleman goes into extensive detail about this patent and the subsequent court case, but Ward-Jackson does not mention it. It is probable that the whole chemical procedures, which also involved two other different processes, were so complex that it was difficult to unravel. Both Coleman and Ward-Jackson appear unclear about this complicated issue. D.C. Coleman, *Courtaulds, an Economic and Social History*, Vol. II (Oxford, 1969), pp. 9-23; Ward-Jackson, *History of Courtaulds...*, pp. 73-81.

⁷⁸ Coleman, 'Henry Greenwood Tetley' p. 179.

became known as the ‘Bocking’ operation⁷⁹ was used for experimental work in showing prospective customers new ways that this viscose yarn could be used.⁸⁰ This was critical since, despite the efforts of Latham, mourning crape sales continued to decline, even if coloured crapes and the lighter gauzes sold in reasonable amounts. But it was the profits made at Coventry that dominated Courtauld’s balance sheets, after 1908 (see table 4.1).

To increase sales and profits, Courtaulds exported to America with its large scale potential.⁸¹ However, America increasingly imposed high import tariffs to protect its own manufacturers. To get round this, Tetley set up a separate American business in 1911, called the ‘American Viscose Company’ and built a factory in Marcus Hooke, Pennsylvania. By 1916 the American plant employed 2,500 workers, producing 5,741,000 lbs of yarn a year.⁸² Despite the American law that prohibited foreign nationals from owning companies in the USA, Courtauld was able to receive the considerable profits accrued by this Company. Thus the acquisition of the viscose process and its development was one of the most successful policies adopted by the business.

Henry Tetley was totally devoted to running and developing Samuel Courtauld and Company into a highly profitable business. The contrast with Samuel III could hardly be more marked, with Samuel’s religious background and commitment to his family contrasting strongly with Tetley’s lack of political ambitions and strong religious convictions. But Tetley’s ability to appoint men of judgement, who were able to solve

⁷⁹ That is the manufacturing taking place at the Bocking, Braintree and Halstead plants.

⁸⁰ ‘Bocking’ not only showed the practical way of winding, weaving and dyeing viscose fabrics, but also pioneered the use of mixed fabrics and hosiery. Ward-Jackson, *A History of Courtaulds...*, pp. 91-109.

⁸¹ In 1893 Courtauld crape sales were 65 per cent in the home market, 24 per cent to France and only 5 per cent to America. The other 6 per cent was mainly to European countries. However, the company held only the English rights to the viscose process and was denied exporting viscose yarn to other European countries. *Ibid.*, p. 140.

⁸² Ward-Jackson, *History of Courtaulds...*, pp. 94-195.

the technical problems of the viscose process and the issues concerning the legality of the American Viscose Company, matched Samuel's ability to find moneyed partners. Tetley shunned self publicity and refused honours, unlike Thomas Latham who received a baronetcy in 1919.⁸³

With the exceptional profits that Courtauld were making from the end of the nineteenth century, they were able to expand horizontally by buying up various businesses, thus increasing their market share and influence. This was part of their business strategy. In 1898 they bought the weaving business of Samuel Brown of Leigh, Lancashire, to increase the production of coloured crapes and gauzes. They acquired an interest in the Belgian Viscose Company in 1907 which provided access to a European market. During the First World War, Courtauld took over the British Glanzstoff Company, a German business which had lost its key German workers and which also produced artificial silk by using a different process. They also built a sulphuric acid plant in Manchester, used mainly for the manufacture of munitions, but which they were also able to use for their viscose production. Despite wartime conditions, demand for viscose remained buoyant; it was used extensively in women's clothing and women war workers were reasonably paid and had money to buy clothes. In another example of horizontal amalgamation, Ward's company in Halifax was purchased in 1917. As this company specialised in tapestries, Courtauld were able to slot it into their business by using the material, mixed with viscose yarn, for furnishing fabrics.⁸⁴

The British side of the Courtauld business suffered interference in its markets during the First World War. However, the American arm had no such problems and production and profits increased. This left the Courtauld company with a highly

⁸³ Colman, *Courtaulds an Economic and Social History*, p. 207.

⁸⁴ *Ibid.*, pp. 57-119.

profitable business in 1918 and in the years that followed. Courtauld continued to acquire businesses and became a complex world-wide organisation, branching out into other sectors besides viscose and silk, capable of competing with large American and European companies. This was the legacy left by Henry Tetley who died in 1921.

D. Gurteen and Sons

The other textile case study company was D. Gurteen and Sons. See Appendix 3 for the Gurteen family tree. The firm was founded in 1784 and manufactured at the other end of the textile trade to Courtauld, making cloth and clothing for the working classes. In 1856, Daniel Gurteen II died and his son, Daniel III, took charge, immediately sanctioned the building of a weaving factory that housed 32 power driven drabbit looms.⁸⁵ The construction of this plant was critical for the future of the business, and was undertaken during a period of recession in the company during the 1840s and 1850s.⁸⁶ There are few records that survived from this period and none on which to base any business statistics, but the rate of growth of the company can be inferred from the growth of the population of Haverhill, where it was sited. Chapter three described this growth when the population of Haverhill rose 87 per cent between 1801-41.⁸⁷ There were other textile businesses in the town in this period, so it is probable that they all enjoyed the prosperous decades and contributed to a rapidly increasing population. After 1841, in contrast, the population growth declined substantially, to just 3 per cent

⁸⁵ Correspondence from T.L. Scott of P.W. Smith & Brothers, Sun Iron Works, Heywood, 6th June 1857 to 16th November 1857. Gurteen archive.

⁸⁶ Daniel Gurteen IV remembers Haverhill in the early 1850s as being in the ‘...most miserable condition, being looked upon as one of the most godforsaken places in the world.’ He also claimed to have seen 500 unemployed men standing idle on the Market Hill, Haverhill during this period. *The Story of a Family Firm* (Published by D. Gurteen & Sons, 1973), p. 9.

⁸⁷ See page 87.

in the 1840s and a decline of 6 per cent in the 1850s. None of the other textile businesses seemed to have imitated Gurteen's example of reinvestment and all had closed down.⁸⁸

Daniel III was not the eldest son, his brother Stephen was a year older and both worked for the company, but it was only Daniel III who was made a partner in 1833. His capabilities must have been recognised from an early age.⁸⁹ By 1856, the company had changed from weaving fustian to the manufacture of drab and production of smock frocks. Gurteen sold the textile and clothes wholesale, the marketing being a part of the business that was undertaken by both Stephen and Daniel III.

Whether constrained by an overbearing father, who died in the critical year of 1856, or by under capitalisation and cash flow limitations, Daniel III waited until he was in his forties before he took the necessary steps to get the new mechanisation project underway. Despite the recession of the 1840s and 1850s both partners were conscious of the need for radical change. Daniel Gurteen III had been a partner since 1833, and had 25 years experience of the company and the textile trade. He had seen the impact the large northern textile businesses' pricing policy had on Gurteen's profits. With entrepreneurial zeal Daniel III built the factory and installed the power plant.⁹⁰ Although trained as a salesman with limited knowledge of steam driven plants, nevertheless he had the confidence to organise the project himself, with help from the

⁸⁸ *Pigot and Company's Royal... and Commercial Directory...* (London, 1839), pp. 552-3; William White, *History, Gazetteer and Directory of Suffolk...* (Sheffield, 1844), pp. 732-5; William White, *History, Gazetteer and Directory of Suffolk...* (Sheffield, 1855), pp. 798-801.

⁸⁹ It could have been that Stephen suffered ill health and was not physically fit to run the business. He died the year that the factory was built, 1856, at the age of 54.

⁹⁰ This building was state of the art for its time and region. The traditional industrial buildings of this period were multi-floored like wind and water mills. Gurteen's factory was a single storey structure, lit from the roof using north light trusses. Single storied structures cut down on the double handling of taking the raw material upstairs and bringing the finished product down again.

loom manufacturers, W. Scott and Brothers of the Sun Iron Works at Heywood near Manchester and the steam engine builders and boiler makers, Headly and Manning of Cambridge. The venture was probably financed from accrued business profits and partners' private funds.⁹¹

Further expansion took place six years later when the Colne Valley and Halstead railway reached Haverhill and trade picked up. From the mid 1860s and for the next twenty years, Daniel III conducted an almost continuous programme of expansion, which was matched by a rise in population of 25 per cent in the 1860s, 22 per cent in the 1870s and 24 per cent in the 1880s. There were additions to the number of drabbit looms in 1867 and 1871. In 1868, to increase smock manufacturing productivity, Daniel III installed hand powered sewing machines, although the smocking and embroidery still had to be produced by outworkers.⁹² The factory was enlarged in 1872 to make room for even more looms, which brought the number up to 150 and further capacity was added for yarn preparation and cloth finishing.

All these developments indicated that Daniel III built up the firm into an extensive industrial business with the considerable profits being ploughed back into the company.⁹³ By the 1880s smock frocks were going out of fashion, since only older workers were wearing them, but Daniel III found other uses for drabbit. It was used for

⁹¹ Gillian Holman, *The Survival of a Suffolk Manufacturer Gurteens, 1850-1900*, M.A. thesis (University of Southampton, 1995), p. 45; Schmitz, *The Growth of Big Business in the United States & Western Europe*, p. 50.

⁹² This is an example of Dauntton's 'flexible specialisation'. See above page 83. These machines were housed in a factory built in the garden of the family home in the High Street, Opposite Chantry Mill.

⁹³ In contrast to the Gurteen example is the experience of Francis Henry Crittall of the metal window company Crittall, whose works were in Braintree. Francis, although running the company in the 1880s, was the junior partner to his brother Richard and a grocer, Arthur Dyer. The senior partners insisted on taking the extensive profits that Francis was making for themselves and this left little resources for Francis to plough back into the firm and the business stagnated. David J. Blake, *Window Vision* (Crittall Windows, Braintree, 1989), p. 12.

military uniforms, pockets and ‘motor cloths’.⁹⁴ Production of ready made clothes was also expanded. Power driven sewing machines introduced in 1876 were so successful that in 1881 they were housed in a specially constructed building,⁹⁵ reputed to be the second largest in the country.⁹⁶ Holman believes that Gurteen were originally going to enlarge the loom shops, but the cotton famine due to the American civil war, changed their policy and they put the money into building the machine shop.⁹⁷ Another machine Gurteen adopted was the band knife. This piece of equipment, which was developed by Barran of Leeds, was able to cut many layers of cloth at the same time, thus increasing productivity of the cutting out process.⁹⁸ A new and more powerful steam engine was installed in 1880 to power all the additional looms and sewing machines.⁹⁹ Holman has pointed out that by concentrating on the middle classes’ need for cheap clothing, the business was able to exploit an expanding market.¹⁰⁰ In addition, the real wages of most workers increased due to a decline in commodity prices, thus the lower classes enjoyed improved purchasing power, having money to spend on items such as clothing.¹⁰¹

⁹⁴ G. Unwin, ‘Mixed textiles, drabbett, horsehair, coconut fibre and ready made clothing’, in, W. Page (ed.), *The Victoria History of the Counties of England, Suffolk* (London, 1902), p. 275. Drabbitt had a long term future, as a similar textile was woven for the manufacture of overalls, in which the company was to specialise.

⁹⁵ F.D. Unwin, ‘Haverhill’s industrial history’, in, *South West Suffolk Echo* (1st April 1922). Unwin had been one of the managers at Gurteen so had inside knowledge about the company.

⁹⁶ George Unwin, ‘Mixed textiles, drabbitt, horsehair, coconut fibre and ready made clothing’, p. 276.

⁹⁷ G. Holman, *Survival in Suffolk, a History of East Anglia’s Textile and Clothing Industries* (unpublished manuscript, 2006), p. 107.

⁹⁸ D. Busfield, ‘Tailoring the millions’: the women workers of the Leeds clothing industry, 1880-1914’, in, *Textile History*, 16, no. 1 (1985), p. 79.

⁹⁹ Sara Payne, *The Gurteens of Haverhill, two Hundred Years of Suffolk Textiles* (Cambridge, 1984), pp. 38-9.

¹⁰⁰ Holman, *The survival of a Suffolk manufacturer*, p. 59.

¹⁰¹ In the 1890s bread prices dropped by a half and tea, sugar and meat costs declined significantly. Because of this, the buying power of wages between 1875 and 1900 rose about a third. M. Pugh, *State and Society a Political History of Britain 1870-1997* (London, 1999), pp. 45-6.

Like Samuel Courtauld III, Daniel Gurteen III¹⁰² showed considerable entrepreneurial skill and boldness in pursuing expansionist policies. He built the business up into a large successful company. He was fortunate with timing as the period between the 1850s and mid 1870s was a reasonably buoyant one in the British economy. Also, the location of the business in a low wage area, with good transport connections were positive factors. It was, however, undoubtedly his leadership, sound policies and ability to obtain financial resources from within the company and the family that were the deciding factors. Daniel Gurteen III, unlike Samuel Courtauld III, instigated a policy of product diversification. He was an opportunist entrepreneur, finding and exploiting gaps in the market.¹⁰³ The two new major areas of textiles were hair cloth, introduced in 1880 and mat weaving, started in 1885. Hair cloth, a mixture of cotton and horse tail hair, was ideal for stiffening garments and, when crinolines came back into fashion, Gurteen was asked to provide considerable quantities. Because it could only be woven on hand looms, Daniel III used every available space in the factory and set up looms in sheds in the weavers' back gardens to increase production. He was desperately using 'flexible specialisation' and the 'outputting' systems to produce the considerable amount required. So much was produced in Haverhill that the town was called the 'crinoline metropolis'.¹⁰⁴ Mat weaving started after a request by weavers from Sudbury who were out of work due to a strike and from this the weaving of mats from coconut fibres was developed. These could only be woven on hand looms and, reputedly, needed the strength of men. In 1892 a special three storied factory was built,

¹⁰² Daniel Gurteen III and Samuel Courtauld III were acquainted.

¹⁰³ In 1908, for example, Kelly's directory for Suffolk, records such obscure fabrics as cheesecloth, huckaback, crash (coarse linen with a rough surface used for towels) and scrym (an open weave fabric used by gardeners and paper hangers). *Kelly's Directory of Norfolk and Suffolk* (1908), p. 169.

¹⁰⁴ 'The crinoline metropolis, horsehair weaving in Haverhill', in, *Morning Leader*, quoted in *South West Suffolk Echo* (Haverhill, 5 February 1893).

to house the hand looms. Hand weaving of mats continued till the 1990s which showed Gurteen using outmoded practices, but they were a commercial business and would have only continued the process if it was profitable. It was a specialised product and there was still a market for the genuine coconut mat rather than the more usual plastic one. An example of the late working of 'flexible specialisation'.¹⁰⁵

Not all of Daniel Gurteen III's policies were successful. He did not foresee the decline of the smock, having set up his factory for the mass production of drabbet, the cloth from which it was manufactured. However, he was able to find other markets for the textile, which allowed the company to make reasonable profits. While Samuel Courtauld III was making an extensive income over a single product, Daniel Gurteen III was spreading his resources thinly over a number of moderately profitable lines. It is perhaps no coincidence that the two textile products started in the 1880s, hair cloth and coconut matting, could only be manufactured on the less capital intensive hand looms. Nevertheless, both these types of looms were housed within the factory and continued the 'flexible specialisation' method of manufacturing, although business strategy was influenced by financial constraints. There were limits to the finance forthcoming from family sources and Gurteen did not venture into raising capital from external sources. Consequently the company remained as a tightly run family business.

Daniel Gurteen III died in 1893, his son Daniel IV a year later. From 1894 to 1918 the extent of the business and its responses to market conditions are difficult to analyse due to lack of primary sources. After Daniel IV's death his successors were his brothers William Gurteen (1839-1913), Jabez Gurteen (1843-1924) and later Daniel IV's son Daniel Maynard Gurteen (1872-1952). It can only be surmised that the

¹⁰⁵ F.D. Unwin 'Haverhill's industrial history'; George Unwin, 'Mixed textiles', p. 274. They also made mats for circus rings and horseboxes, Payne, *The Gurteens of Haverhill, Two Hundred Years of Suffolk Textiles*, p. 90.

difficult trading conditions of the 1890s and 1900s affected the business. The population figures for Haverhill showed a slowing down from 24 per cent growth in the 1880s to just 6 per cent in the 1890s and a decline of 2 per cent in the 1900s. However, there is one set of statistics which show an increase in turnover. The annual amount of stock in the Gurteen's warehouse and mill from 1882 to 1901 is shown in Table 4.2. These are not ideal figures as the amount of stock fluctuated as the textiles were used, and they did not take into account any inflation, but they do give an indication of growth in the long term. The cost of the total stock expanded in the course of twenty years, 1882 to 1901, rose by 38 per cent overall. Not outstanding, but lacking any other statistical evidence, it does indicate a modest average increase in growth.

Table 4.2. Stock from Gurteen warehouse and mill 1882-1901 (£)

	1882	1887	1891	1896	1901*
Warehouse	129,948	132,935	140,928	121,745	123,751
Mill	10,924	18,233	28,822	53,443	70,407
Total	140,872	151,168	169,750	175,188	194,158
Percentage rise		7.3%	12.3%	3.2%	10.8%

Source: Gurteen company archive. Not numbered.

* The 1901 figure was for eleven months. An estimated figure was reached by dividing the eleven months period by eleven and adding this to the total.

Although not of the same dynamic calibre of Daniel Gurteen III, William and Jabez kept the business ticking over, (see appendix 3 for Gurteen family tree). The period from 1894 to 1914 showed little growth or expansion of the plant and no new product was manufactured. Electricity began to be installed in 1896 and a gas engine fixed in the matting department a year later. In 1909 Gurteen had obtained the rights of the patented power driven Henderson hair looms and thus increased productivity of hair cloth which was exported and won gold medals in exhibitions in Belgium, Holland,

France and North America.¹⁰⁶ Ready made clothing was becoming more acceptable and Gurteen concentrated more of their resources on its manufacture.¹⁰⁷ From 1910 to 1912 Gurteen listed the average number of workers in the ready made clothing department, see Table 4.3. This was not a complete list of all Gurteen workers since drabbit and hair cloth weavers, mat makers, workers from other parts of the factory or other outworkers were not enumerated. Not knowing the numbers of these workers it is impossible to verify the figure of 3,000 workers given in the Victoria County History,¹⁰⁸ which would make Gurteen one of the largest textile employers in the country. Although not as large as some of the London or Leeds ready made clothing businesses, the firm, nevertheless, was substantial when compared with its rural location.¹⁰⁹

Table 4.3. Number of Gurteen's workers in the ready made clothing department 1910 to 1912 (average per annum).

Women factory workers	Women outworkers	Men	Total	Percentage of women compared to men
532	300	240	1,072	78 per cent women 22 per cent men

¹⁰⁶ Payne, *The Story of a Family Firm*, p. 12.

¹⁰⁷ A subtle change had taken place in the trade directories entries. In Kelly's Directory for 1888, ready made clothing is just tagged on the end of the entry – '*...They also manufacture clothing for home trade and exportation...*', but by 1908, clothing heads the list – '*Makers of all classes of clothing for wholesale, home trade and export. Woollen in juvenile and men corduroys and moles[moleskins], white drill and leggings...*' The 1916 edition also mentions mechanics and engineers overalls, skirt gloves [gauntlets?] and motor mats. *Kelly's Directory of Suffolk* (1888), p. 992; *Kelly's Directory of Suffolk* (1908), p. 169; *Kelly's Directory of Suffolk* (1916).

¹⁰⁸ George Unwin records 2,000 working in the factory and 1,000 as outworkers. His main source was F.D. Unwin a manager at Gurteen. George Unwin, 'Mixed textiles', p. 276. However, a perusal of the enumerators' returns indicated that this figure may be exaggerated. The numbers counted from these returns do not indicate a number as high as 3,000, even after taking into account outworkers in the surrounding parishes. The percentages of the ages of women working in the readymade clothing department under the age of 29, was 60.5%, compared to women outworkers over the age of 40 at 57 per cent and thus the outworkers were much older than the average in the factory and could have been part time and not recorded in the census. See Busfield, 'Tailoring the millions'; the women workers of the Leeds clothing industry, 1880-1914,' p. 76.

¹⁰⁹ H. Frazer, *The coming of the mass market* (London, 1981), pp. 175-77. Quoted by Holman, *The Survival of a Suffolk Manufacturer...*, pp. 61-62.

Source: Gurteen company archive 20/91.

George Unwin described the factory as being ‘organised on a thoroughly modern basis’.¹¹⁰ It was divided into sections, each supervised by a manager and foreman. George Unwin also maintained that 20,000 garments were made per week and that there was a large export trade. In 1905 the government ordered khaki uniforms and in the First World War placed large contracts for uniforms with the company.¹¹¹

A complete overhaul was made of the partnership in 1917, no doubt as the company faced the prospect of the post war years without the lucrative government contracts. Though new blood was brought in, Gurteen remained a tight knit family company. Jabez Gurteen and his nephew Daniel Maynard Gurteen were the senior partners with the addition of four new members, the sons of Jabez, Frank (1873-1952), Horace (1882-1960) and Conrad (1884-1960), the fourth member being another of Jabez’s nephews, Arthur Smart (1867-1956).¹¹² The company was not as profitable as Courtauld, but managed to remain a prosperous business up to the present time.

Richard Garrett and Sons

By the middle of the nineteenth century, Richard Garrett III was well into his stride, making Richard Garrett and Sons a substantial international company. The engineering firm employed 500 people, an increase of about 12 per cent from the time

¹¹⁰ George Unwin, ‘Mixed textiles’, p. 276.

¹¹¹ *The story of a Family Firm*, p. 12. In the company’s museum is a First World War army Battle dress sample with a sealed label attached to it, stating it to be passed for manufacturing.

¹¹² William Gurteen had died in 1913. ‘Obituary of Jabez Gurteen’, *South West Suffolk Echo*, (28 June 1924).

his father had died, and this expanding workforce indicated a developing business.¹¹³ By 1850, agriculture in Eastern England had emerged from the days of high grain prices caused by wartime conditions and the protectionism of the corn laws.¹¹⁴ Progressive farmers and land owners started to look for ways of increasing production and profits in the new machine age.¹¹⁵ The seed drill speeded sowing, the thresher hastened the threshing process, and Richard III concentrated on these two pieces of machinery in order to develop the firm. Garrett remained a company selling almost exclusively to the agricultural sector.

Richard Garrett III also sought growth through diversification into steam engines. It was during the latter half of the nineteenth century that industrialisation in the manufacturing sector had increased at such a pace that there was an extensive demand for all kinds of steam power units. In the 1830s, Richard III developed the expertise and capability of the engineering side of his business and was building complete steam engines. Not only did this expand his business and increased his profits and influence, but it was an extensive venture to master the engineering skills and to muster manufacturing techniques. In keeping with the agricultural emphasis of the company, most of the engines were used in stationary positions, often in barns, to power the fixed threshers, but they could also drive other machinery.¹¹⁶ Later, steam engine manufacturers found that they could manufacture cheaper models by specialising in the production of a standard pattern for particular industries and by using parts common to

¹¹³ R.A. Whitehead, *Garretts of Leiston* (London, 1964), p. 11.

¹¹⁴ The price of grain reached 119.5 shillings a bushel in 1801 and 126.5 shillings in 1812, when the usual price during the first decade of the nineteenth century was 83.9 shillings. Dewey, *Iron Harvests of the Field*, p. 3.

¹¹⁵ Ibid., pp. 29-91.

¹¹⁶ R.A. Whitehead, *Garrett 200, a Bicentenary History of Garretts of Leiston 1778-1978* (London, 1978), pp. 76-90.

the different types of engines. By concentrating on mass production techniques they could secure substantial markets.¹¹⁷ From 1849, Richard III concentrated on producing a portable engine mounted on wheels with shafts, so that it could be towed by horses. It was primarily intended for powering the moveable threshers.

Unlike Samuel Courtauld III and Daniel Gurteen III, Richard Garrett III did not spend all his time on wealth-making and running his business. Like his father and grandfather, he was keenly interested in agriculture and in 1837 assisted the Duke of Richmond and William Shaw in creating the Royal Agricultural Society of England. Besides making influential friends, he was able to use the 'Royal Shows' to showcase his company's wares.¹¹⁸ Another influential friend and customer was the railway contractor and promoter, Samuel Morton Peto. Peto became the major guarantor of the 1851 Great Exhibition and persuaded Richard III to take on a similar role. This gave Richard even more influential friends and acquaintances¹¹⁹ and he became a nationally known entrepreneur and engineer.

Richard Garrett III had five sons of whom Richard IV (1829-84), John (born 1831), Henry (born 1841), and Frank (1845-1918) entered the business (see Appendix 3 for Garrett's family tree). In 1855 he retired from the company and went to live in London, leaving his two eldest sons, Richard IV and his brother John, to run the firm. Richard IV, like his father, had responsibility thrust upon him from an early age. At 21 years of age in 1850, he was made works manager. However, left on their own, the two elder brothers could not agree and the relationship deteriorated sufficiently that Richard III felt compelled to return. Eventually John left to start a similar business in

¹¹⁷ It was during this period that Richard III built the 'Long Shop', a building dedicated to the manufacture of portable steam engines using an assembly line process. As such it is one of the earliest examples and because of this is a listed building.

¹¹⁸ Whitehead, *Garrett 200*, p. 18.

¹¹⁹ *Ibid.*, P. 24.

Germany.¹²⁰ Richard III died in 1866 aged fifty nine and Richard IV became head of the company with his brothers Henry and Frank as his partners, although Henry left the company in 1878. Despite these problems within the Garrett business, the agricultural machinery industry was buoyant during the 1840s to the 1860s and most companies were prospering from extensive growth.

It is not surprising that the years between 1855 and 1866, fuelled by family problems, was a troubled time for the company. From the 1870s Richard IV also had to contend with the serious agricultural depression. This was mainly due to increasing imports of corn which caused grain prices to fall and arable farmers and landowners had fewer resources to spend on expensive machinery.¹²¹ Company sales slumped. The trend was also reflected in the slowing down in the growth of Leiston, where Garrett was by far the largest employer.¹²² The two fast growing decades of the 1840s and 1850s (42 per cent and 41 per cent) were followed by near stagnation in the 1860s (1 per cent), the 1870s (8 per cent) and the 1880s (7 per cent).¹²³ It was in these decades that Garrett was to face its worst trading conditions in the period 1850-1914 and, although they continued to make agricultural machinery, exports, mainly to central and

¹²⁰ The arguments were mainly about John not liking to play second fiddle to his elder brother who was just two years older. They both agreed that Germany was a major customer, but disagreed in the way to supply it. John advocated a daughter company set up in that country as away round the high tariffs the Germans were demanding. Richard disagreed and refused to sanction the project. Whitehead, *Garrett 200*, p. 19.

¹²¹ Dewey, *'Iron Harvests of the Fields,'* pp. 79, 92.

¹²² The use of census statistics as mirroring the growth of companies can be justified in Leiston's case by the mention in the 1861 census, that the increase in population from 1851 was due to an '...extensive agriculture machine and implement manufactory'. B.P.P. *Census of England and Wales... 1861* (London, 1862), p. 122.

¹²³ B.P.P. *Census of England and Wales... 1861*, p. 122; *Irish University Press series of B.P.P. Population 16. 1871* (Shannon, 1970), p. 566; *Accounts and Papers. Population Census of England and Wales 1881*, 48 (1883), p. 362; *Irish University Press Series of B.P.P. Population 21, 1891* (Shannon, 1970).

eastern Europe, became increasingly critical to Garrett's balance sheet.¹²⁴ In the export market there was competition not only from the Americans and the Germans, but also from home grown agricultural machinery manufacturers, all desperately needing export trade. The export trade peaked 1873-74 and by late 1870s was depressed, especially when Germany in 1879 and France in 1881 raised high import tariffs. Ransome's trade cycles peaked in the early 1870s and 1880s when they exported three quarters of their production, but this fell back to half in the trading troughs. In the export boom of the early 1890s they also experienced a buoyant home market. Garrett exported 65 per cent of their main class of agricultural engine, 1858-1913 and up to 90 per cent when the export market was buoyant. Savage of King's Lyne exported 50 per cent and Burrell of Thetford 30 per cent.¹²⁵

One obvious development was to develop a self propelled portable steam engine and Garrett built a prototype, but Richard IV found a better proposition was to build, under licence, a traction engine, designed by Aveling of Kent. Aveling had the demand for their engine but not the manufacturing capacity. However, by 1881 the market for self propelled engines was slow and Garrett ceased to build these engines for fifteen years.¹²⁶

Although not as successful as his father, Richard IV nevertheless was an able engineer and instigated various improvements in the design of the threshers and steam engines. In 1859 he and James Kerridge, the head of the thresher department, greatly improved this machine, making it the most efficient in the market and were able to increase sales. Thresher and portable steam engine were often sold as a pair and thus

¹²⁴ Whitehead, *Garretts of Leiston*, pp. 90 & 120.

¹²⁵ Dewey, 'Iron Harvests of the Field,' pp. 94-96.

¹²⁶ Whitehead, *Garrett 200*, p. 23.

sales for a thresher would often include the buying of a steam engine.¹²⁷ Although arguments within the family seemed to be a trait of the Garrett temperament, Richard IV and Frank I were the exception. It helped that they were many years apart in age and that they had different characters. Whitehead describes Richard IV as a John Bull type of Englishman, a throwback to the Regency period. In his younger days he had been a prize-fighter and had a fondness for hunting and shooting, a love of horses, cattle and sheep-breeding and farming. Frank, unlike Richard IV, had been educated at a public school, Rugby, and then at Stuttgart in Germany and was an example of the awakening social conscience of the middle classes. Although not ashamed of being in trade, he remained aloof from his workforce, unlike his brother Richard IV, who was well-liked by the Garrett's workers.¹²⁸

After a few years illness, Richard IV died in 1884 and Frank I then ran the business on his own. He had not only to contend with the continuing poor sales in the home market, but also a slackening of Britain's economic growth rates. Improvements were made to the factory and its products. For example, Frank I had a McNeill's timber drying kiln installed in the grounds of the works. This not only reduced the large area required to air dry timber, thus freeing up space for expansion, but reduced the capital tied up in large timber stocks. He also devised a corrugated crown fire box that was cheaper to construct and he introduced steel for the boilers. Although this latter necessitated expensive new machinery, it enabled the use of higher steam pressure and

¹²⁷ The advantage of the threshing machine was shown by statistics recorded in *The Times* 3 January 1851. Hand threshing cost three shillings and sixpence a quarter, by horse Powered thresher one shilling and seven pence, but by steam powered thresher, seven pence halfpenny. Quoted in Whitehead, *Garretts of Leiston*, p. 15.

¹²⁸ Whitehead, *Garretts of Leiston*, pp. 19-21.

brought about more energy efficient ‘compounding’ which, by using the same amount of steam to power two cylinders, reduced fuel consumption.¹²⁹

Table 4.4. The number of Garrett’s workforce from 1888-1918

1888	398		1899	702		1909	1,045
1889	424		1900	732		1910	1,145
1890	449		1901	680		1911	1,265
1891	495		1902	707		1912	1,229
1892	550		1903	819		1913	1,335
1893	588		1904	838		1914	1,227
1894	584		1905	863		1915	1,182
1895	571		1906	889		1916	1,729
1896	537		1907	1,006		1917	2,120
1897	582		1908	1,021		1918	1,848
1898	648						

Source: HC 30/A4/6-12 Suffolk Record Office, Ipswich

From the late 1880s the company started to expand. The number of workmen increased significantly (see table 4.4). From the 500 employed in Richard III’s time, the number reached 584 in April 1870, but had declined to 413 by October of that year as the Franco-Prussian war affected Garrett’s export trade.¹³⁰ It had dropped further to 398 by September 1888, but then recovered and continued to grow until 1918, where it stood at 1,848.¹³¹ Thus, in the decade 1888-98 there was a 63 per cent increase, from 1898-1908 a 58 per cent increase, and from 1908-18 a further increase of 81 per cent.¹³² Not surprisingly for the town, this growth is also reflected in the population figures of Leiston. In the 1890s there was an increase of 25 per cent and, during the 1900s, a 34 per cent rise.¹³³

¹²⁹ Garrett was a pioneer in the use of this innovation. Whitehead, *Garrett 200*, p. 69.

¹³⁰ Ibid., p. 44.

¹³¹ An exceptionally high figure, but Garrett was involved in a varied amount of war work.

¹³² These figures do not include salaried staff as they are only recorded from 1908-16. The average number of these would inflate the figures by about 3 per cent.

¹³³ B.P.P. *Accounts and Papers... 1881*, p. 362; *Irish University Press Series of B.P.P... 1891*, p. 390; *Accounts and Paper*, (December, 1902), p. 34.

Table 4.5. Total number of portable and self propelled engines constructed by Garrett 1903-18, compared to workforce numbers.

	Portables	Self propelled	Total	Workforce
1903	407	28	435	819
1904	366	41	407	838
1905	318	51	369	863
1906	382	64	446	889
1907	460	62	522	1,006
1908	511	85	596	1,021
1909	470	105	575	1,045
1910	537	87	624	1,145
1911	518	103	621	1,265
1912	468	144	612	1,229
1913	504	139	643	1,335
1914	312	145	457	1,227
1915	17	139	156	1,182
1916	30	87	117	1,729
1917	30	122	152	2,120
1918	29	134	163	1,848

Source: Whitehead, *Garretts of Leiston*, appendix 1. HC 30/A4/6-12 Suffolk Record Office, Ipswich. ‘Self propelled’ includes all traction engines, steam tractors and steam wagons.

The business, therefore, in these years was extremely buoyant, and this may have been due to Frank Garrett I’s, son Frank II. When he started to work for the company at the end of the nineteenth century, he came to the conclusion that the product range was too narrow and there was potential for the business to diversify.¹³⁴ For example, the weight of one man operated traction engines allowed on public roads was reduced by legislation in 1896 and 1903. Garrett saw the need and built lighter engines and thus was one of the pioneers of the fledgling road haulage industry. From this steam powered lorries developed. They also built steam rollers, which were exported, and large fixed self contained power plants which used compounding and had condensing apparatus which was more economical with the use of water. These moves

¹³⁴ Whitehead, *Garrett 200*, p. 81.

were being made to reduce the reliance on the agriculture sector.¹³⁵ Thus a more dynamic business strategy of finding new profitable products developed.

The number of steam engines Garrett manufactured between 1903 to 1918 is shown in table 4.5. For the two decades between 1858 and 1878 few self propelled engines¹³⁶ were produced and for the following decade only 51 engines of this type were constructed. There followed almost twenty years when virtually no self propelled engines were built. It was only in the twentieth century that the numbers started to increase, from four in 1898 to 85 in 1908, increasing to 139 by the start of the First World War. During the war, apart from 1916, these numbers were largely maintained, with a total of 1,536 of this type of engine, built between 1903-18, or an average of almost a 100 a year. This certainly indicated that in the early years of the twentieth century, up to and including the war years, Garrett devoted a considerable portion of their manufacturing to self propelled steam engines. The workforce certainly matched the increasing level of production. However, sales of portable engines far outpaced self propelled vehicles from 1903 to 1914, by more than five to one. The low sales of portables during the war years would indicate that a large proportion had previously been exported and the war had drastically reduced these sales.

With the increase of production, moves were made to streamline the management of the business. Frank E. Walker was appointed as quality controller, whose duties were not only to test the new types of Garrett's steam engines scientifically, but also to carry out investigations into the failings of various products. One of his most important achievements was to standardise the parts used in the works. The system had grown up that each type of engine was designed from scratch using

¹³⁵ Ibid., p. 87.

¹³⁶ It must be remembered that not only traction engines, but also steam wagons were regarded as self propelled. Whitehead, *Garretts of Leiston*, Appendix 1.

parts unique to itself, and considerable numbers of spare parts were necessary to service and repair these engines. Thus standardisation was a management strategy and the company encouraged him in this, appointing a full time 'standardiser' to accomplish this work.¹³⁷

The works, an island surrounded by roads, were unable to expand and became cramped, which reduced the efficiency of the plant. In 1913 a fire occurred in some buildings housing the thresher department on the east side of the site. This was extinguished, but several buildings were destroyed. The opportunity was taken to plan for new buildings for more efficient working. Another move was made to enlarge the works on a separate site near the station with larger buildings and more efficient working conditions. A start was made, but was curtailed by the First World War, although more workshops were built during the war to house Garrett's increasing war work production¹³⁸

The quantity of steam engines being exported before the war amounted to around 57 to 75 per cent of total sales. These export figures had slowed down before the outbreak of war to 52 per cent in 1912, reduced to 43 per cent in 1913 and 30 per cent in 1914. Thus Garrett was losing vital export orders before the interruption of the war, which was to become a major problem after the hostilities had ceased. The numbers dropped to 6 per cent in 1915, but, by 1917 and 1918, government contracts¹³⁹ made up the number to 38 per cent of the 122 built in 1917. This increased to 63 per cent of 134

¹³⁷ Whitehead, *Garrett 200*, p. 96.

¹³⁸ Ibid., pp. 90-97.

¹³⁹ The government needed traction engines for the restoration of the devastated French roads. Whitehead, *Garrett 200*, p. 105.

constructed in 1918.¹⁴⁰ During the war Garrett was also engaged in munitions, wagons, steam plants and even aircraft production.¹⁴¹

Frank Garrett II, like his uncle Richard IV and his son Stephen, had joined the Local Defence Force which by the time of the First World War had become the Territorial Army. He rose to the rank of Lieutenant Colonel and in 1914 was posted to France with his Battalion, the 4th Suffolks. Many of his men were Garrett employees who he would have known, and in the weeks that followed he was to see many of them killed. This broke his health in February 1915 and he was retired. His son, Captain Stephen Garrett, was killed just a month later.

During the war years Frank I retired from the business and died in 1918. Frank II spent his time on manufacturing munitions. Their shortage and quality had been a major factor in the deaths of soldiers under his command. Stephen was dead and Alfred was under considerable pressure running the company almost single handed with shortages of men and materials. Amongst all these family problems and tragedies, the business itself suffered a major catastrophe when, in 1918, the new communist government in Russia refused to pay for goods Garrett had already supplied to the former regime. Overnight the company lost £200,000.¹⁴² There was much indecision and a lack of leadership in the business. The question hanging over the direction of the company, after the war, was whether to continue with steam engines in a declining market, or to enter into production of the internal combustion engine or electrical motor vehicles. If it were to be the latter, then the default on Russian debts meant there was little money for research and development. In the end Frank II took the company into an amalgamation of fourteen similar agricultural engineering companies, given the name of

¹⁴⁰ Whitehead, *Garretts of Leiston*, appendix 1.

¹⁴¹ Ibid., pp. 187-8.

¹⁴² Whitehead, *Garrett 200*, pp. 100-105.

Agricultural General Engineers. Unfortunately this company had poor management structures and had neither the skill nor expertise to develop far sighted strategies or directions for the business as a whole. Each individual company followed its own policies, and in 1932 A.G.E. went into the hands of the receivers.¹⁴³

R. Hunt and Company Limited

Besides being the youngest of the four case study companies, R. Hunt and Company was the only business which had a single entrepreneur, Reuben Hunt, to cover almost the entire period of this study. Robert Hunt, the founder of the company, died in 1855, his eldest son in 1863 and the next eldest in 1867 (see Appendix 3 for Hunt's family tree). This left Reuben (1836 to 1927) in sole charge of a general engineering company selling to the local agricultural community, but which was in a poor financial condition.¹⁴⁴ It was due to Reuben's entrepreneurial ability that the company developed into an international industrial business. Although Robert, the founder of the company, was probably a millwright, his sons concentrated on the construction of agricultural implements, including cylinder reaping machines, horse hoes, land rollers and dressing machines. Many of these were to Hunt's own designs, but some were constructed to the patterns of others, the company also being agents for other manufacturers. This gave the business an extensive range and they manufactured standard items, mainly in metal, which required foundry-based skills and faculties. However, even before Reuben took sole charge, the company had taken the decision to show their products in the Great

¹⁴³ Ibid., pp. 110-41

¹⁴⁴ In 1863 Reuben married his first wife and acquired a dowry of a thousand pounds which was to be useful at a time the business was heading towards bankruptcy.
P.J. Burton-Hopkins, *Hunt for Machinery, the Rise, Success and Demise of R. Hunt and Company Limited of Earls Colne 1825-1988* (Halstead, 1995), pp. 36 & 73.

Exhibition of 1851, where they won the first of many medals for agricultural implements. They created and relied on a reputation for quality and reliability, and by showing their wares at other agricultural shows, their sales increased. The small ironworks was expanded in 1833 and again in the 1860s when it became known as the ‘Atlas Works’.¹⁴⁵

Reuben Hunt saw the need for increasing profits by expanding production and sales. In 1870 he bought, for £2,000, the patents, patterns and goodwill of Biddel’s animal food preparation machinery. It was an early move towards diversification and his uncle, William Hunt, was one of the directors of Ransome, Sims and Head of Ipswich, who owned Biddel.¹⁴⁶ This was a far sighted move on the part of Reuben and a successful business strategy, as the agricultural depression that greatly affected the farming industry from the 1870s, started with the reduction of corn prices, due to the importation of foreign grain. Thus domestic sales of agricultural implements slowed, while the markets for livestock remained buoyant and there was a need for machinery in the preparation of animal feeds, as English agriculture adjusted to the altered tune of trade between cereals and livestock farming. Also the Biddel’s business was a profitable one with an existing market which included a number of export customers, and its manager, who was part of the deal, was a successful businessman.¹⁴⁷ To help finance the expansion of the works in 1872, Reuben was obliged to take on a financial partner, James Tawell, a local man.

¹⁴⁵ Ibid., pp. 9-10. Dewey considered the 1840s as a flourishing time for agricultural machinery manufacturers firms, as well as the two decades after the 1851 exhibition, Dewey, *‘Iron Harvests of the Field’*, pp. 29 and 50.

¹⁴⁶ Burton-Hopkins, *Hunt for machinery*, p. 11.

¹⁴⁷ This was Henry Massingham, who was so successful that he stayed at Hunt for the rest of his life and became the only non-family member to be appointed a director of the company.

The other major diversification away from the main agricultural business occurred in 1883, when the manufacture of power transmission components was started. These were the elements that made up the shafting, coupling and pulleys needed in most factories to take the transmission from the single power source, usually a steam engine, to each individual machine. This was a shrewd move on the part of Reuben as the company had the foundry capacity and engineering skills to manufacture these components and, more importantly, this part of the business was not connected with the agriculture sector. Power transmissions by 1909 amounted to 50 per cent of total sales, rising to 66 per cent by 1917.¹⁴⁸ That the company had become financially successful is shown by the fact that Reuben dissolved the Tawell partnership in 1885, just two years after the company started to manufacture power transmissions. The business must have had the financial resources not only to buy Tawell's shares, but also to develop the plant and machinery without the need for extra finance. However, Reuben was also a man who liked to be in complete control, it was not in his nature to share leadership longer than was necessary.¹⁴⁹

Table 4.6. Hunt wage costs 1901-14

	Wages £			Wages £
1901	13,761		1908	15,842
1902	14,887		1909	15,842
1903	16,510		1910	17,678
1904	15,397		1911	18,213
1905	15,001		1912	17,858
1906	16,101		1913	17,678

¹⁴⁸ See below Table 4.7.

¹⁴⁹ The same could be said of Samuel Courtauld III. He had to have partners, but was able to dominate them by sheer force of character. Certainly the Garrett brothers Richard IV and John were both trying to rule their companies. Wanting to be in control manifested itself in other ways. Although Reuben allowed his eldest son, Harry, to become a director, he did not extent the same privilege to Frank or Arthur, his next eldest sons, or to his brother Zach, who was the works manager and who was not even allowed to hold company shares. Burton-Hopkins, *Hunt for machinery*, pp. 41, 47 and 54.

1907	16,575		1914	15,267*
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Source: Museum of Rural Life, Reading, T.R. HNT 250.

*The number of hands prior to the First World War in 1914 was 336.

In the early 1880s roller mills began to be used for grinding grain. Reuben Hunt diversified into this sector with his own version, first shown at the Royal Agricultural Show held at Doncaster in 1891. Diversification was to be one of Reuben's major business strategies to combat the ever growing recession in home sales. The company also developed a market for simple agricultural implements, used mainly in the underdeveloped farming areas of Egypt.¹⁵⁰ Reuben had observed the need for these after a visit there in 1887 and this is an example of an entrepreneur identifying and responding to a market opportunity, and is in direct contrast to general criticisms often directed at British exporters at this time.¹⁵¹

In 1898, the company employed 290 men and in 1900 the works covered five acres. The business became a private limited liability company in 1889 and a public limited liability company ten years later. In addition to a company that was responsive to market opportunities and capital requirements there appears to have been a simple management structure. At the head was Reuben with his son Harry as a junior director, but who died in 1909, aged 40. Harry and his brother Frank were managers and the company was divided into separate departments each with its own manager, answerable directly to Reuben.¹⁵²

Table 4.7. Hunt sales of European, London and Regional markets 1901-09. Sales in £s and decade changes in per cent.

	European Markets	London Markets	Regional Markets	Total all Markets	Balance sheets
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¹⁵⁰ Ibid., pp. 77-8 and 142.

¹⁵¹ Thompson and Magee, 'A soft touch? British industry, empire markets,' p. 689.

¹⁵² Hunt was also building villa type properties for salaried staff and perhaps skilled workers which indicated a number of managers being employed. See page 162 below.

	£s & %	£s & %	£s & %	£s & %	turnover
1901	7,076	19,180	7,777	34,033	98,384
1902	7,268 +2.7	19,157 -0.1	8,026 +3.2	34,451 +1.2	72,980 -25.8
1903	7,817 +7.5	18,654 -2.6	7,614 -5.1	34,085 -1.1	78,825 +8.2
1904	6,062 -22.4	17,639 -5.4	7,813 +2.6	31,514 -7.5	80,833 +2.5
1905	6,025 -0.6	17,840 +1.1	7,202 -7.8	31,067 -1.4	73,598 -8.9
1906	6,624 +9.9	21,559 +22.3	8,811 +22.3	36,994 +19.1	76,793 +4.3
1907	7,241 +9.3	22,427 +4.0	9,901 +12.4	39,569 +7.0	85,542 +11.4
1908	8,235 +13.7	18,406 -17.9	8,128 -17.9	34,769 -12.1	87,148 +1.9
1909	9,504 +15.4	16,997 -7.6	8,297 +2.1	34,798 +0.1	81,353 -6.6

Source: Museum of English Rural Life, Reading. T.R. HNT 208-16.

There were eighteen European countries listed in the archives, but only seven had appreciable markets whose total amounted to over 90 per cent of total sales. Holland was by far the best customer with 42 per cent of the total in 1906. France and Germany (both on 16 per cent) and Belgium (14 per cent) were the only other countries to make double percentage figures. The regions consisted of Norfolk, Suffolk, Essex, Cornwall, Devon, Dorset, Glamorgan, Gloucestershire, Pembroke, Somerset and Wiltshire. It also included the city of Birmingham.

Because there is no record of the number of employees in the company's surviving archive, the wages bill must be relied upon to show the growth of the business, table 4.6. Although not ideal, as it takes no account of increases in wages due to inflation, particularly during the war period, it does give some indication of the increase and decrease in the numbers employed.¹⁵³ In the periods 1901-04, 1905-08 and 1908-13, the first and last periods had almost the same growth of 11.9 per cent and 11.6 per cent respectively, but the middle period 1906-08 only saw a growth of just under 3 per cent, which indicates difficult trading conditions. The total growth in the number of employees between 1901-11 was just under a third. These numbers, however, are not reflected in the census figures: the 1900s saw just a 6 per cent rise in population.

¹⁵³ The 1902 Kelly's *Directory* records the workforce at about 300, but this was probably recorded the year before. If the wage figure for 1901 is divided by 300 it gives the sum of £46, which is a crude yearly average wage for each of Hunt's employees. Hunt made a census of their workforce in 1914 which amounted to 336. If the same wages were being paid, then the total wage bill would be £15,456, virtually the same as the wage bill for 1914 of £15,267. This gives confidence in using the wage bill in this way. However, because of inflation, it would be dangerous to come to the same conclusion with the war year figures. Kelly's *Directory of Essex* (London, 1902).

According to the census, the village of Earls Colne was stagnating throughout most of the nineteenth century. In 1821, for example, the population of Earls Colne was 30 per cent higher than Leiston, but by 1851 the roles were reversed, and at the 1911 census, Leiston had 133 per cent more inhabitants than Earls Colne. Between 1811 and 1911 Leiston's growth was fourfold, Earls Colne just three quarters. Hunt's workforce made up just 25 per cent of the working population, compared to the 40 to 49 per cent of the other cases study towns. Thus any increase of Hunt's workforce would not have a dramatic effect on the population figures.¹⁵⁴

Table 4.8. Hunt sales of agricultural machinery and power transmissions, home and export markets 1909-13. Sales in £s and decade changes in per cent.

	1 Agricultural machinery home	2 Agricultural machinery export	3 Transmissions Home	4 Transmissions Export	Total 1 to 4		Balance Sheets Turnover	
	£	£	£	£	£	%	£	%
1909	8,488	19,699	31,013	10,844	70,044		81,353	
1910	7,467	23,417	31,394	11,358	73,636	+5.1	83,810	+3.0
1911	9,079	26,137	37,312	16,109	88,637	+20.4	98,253	+17.2
1912	8,698	26,737	37,838	17,045	90,318	+1.2	102,094	+3.9
1913	8,659	24,639	39,260	14,507	87,065	-3.6	99,961	-2.1

Source: Museum of English Rural Life, Reading. T.R. HNT 208-16

From the formation of Hunt into a limited liability company in 1899, output figures survived. The sales of Hunt's European, London and regional markets from 1901-09, compared to the turnover figures as recorded in the company balance sheets, are shown in Table 4.7. Sales of agricultural machinery and transmission components have been compiled in both the home and export markets, 1909-13, and are shown in

¹⁵⁴ B.P.P. *Abstracts of Population Returns for 1811*, pp. 102; *Populations viz Enumeration... 1821*, pp. 97; *Abstracts of Answers and Returns* (1831), pp. 188; *Irish University Press series of B.P.P.*, (1841), pp. 201; *Irish University Press series of B.P.P.* (1851), pp. 636; *Census of England and Wales*, (1861), pp. 40; *Irish University Press series Of B.P.P.*(1871), pp. 315; *Accounts and Papers*, (1883), pp. 144; *Irish University Press series of B.P.P.1891*, pp. 147; *Accounts and Papers*, (1902), pp. 29.

Table 4.8. It is clear from table 4.7 that the home and European markets made up, on average, only 43 per cent of the total turnover figures recorded in the balance sheets and there must have been a large amount of other sales whose records did not survive. The numbers in Table 4.8 were more accurate as they made up 87 per cent of the company's turnover. These unrecorded sales have to be borne in mind as they could distort the conclusions.

Growth of the business can be judged by comparing the turnover figures (in the balance sheets) with sales in the three markets 1901-09 (Table 4.7) and also the agricultural machinery and transmissions 1909-1913 (Table 4.8). From 1901 to 1909 sales increased just 2.2 per cent on the total of all markets. But there was a wide variation between the London market with a fall in sales of 11.4 per cent, and the European market which showed an increase of 34.3 per cent. The turnover in the balance sheets had also decreased between 1901 and 1909 by 17.3 per cent. This indicated that the sales figures from the unknown part of the business must have been in decline. Turning to the more extensive figures for agricultural machinery and power transmissions, 1909-13, total sales grew 24.3 per cent which compares reasonably well with the 22.9 per cent of turnover. Again there is wide variation between the four sectors, the worst being, as would be expected, the home market for agricultural machinery at just a 2 per cent increase. Export sales of this sector were up by a quarter and transmission was even higher at 26.1 per cent growth for the home market and a third higher in the export trade.

These statistics taken together (Tables 4.7 and 4.8) confirm that, as with other manufacturing companies, Hunt suffered poor trading conditions at the time of the downturn in the British economy. In the early 1890s some of the employees were put on short time. However, towards the end of the 1900s the business was returning to

more prosperous times and the number of employees had risen to about 300.¹⁵⁵ The figures for the next few years showed a healthy rise in sales, particularly in the home sales of transmission and the export trade generally.¹⁵⁶ In fact, due to transmission, home sales were between 52 and 56 per cent higher than the exports figures. Also the 1913 total of all markets indicate that like Garrett, Hunt was losing export sales before the First World War.

During the First World War, Hunt experienced difficult trading conditions for most of its products, export sales suffering the most. Between 1914 and 1917, power transmissions sales were down a quarter and agricultural implements by a third. Home implement sales managed just a 4.6 per cent increase, which in real terms, taking into account high inflation, would at best be stagnating. The only bright spot was home sales of transmissions which was up by 45 per cent.¹⁵⁷ Taking the sector as a whole, growth was just a modest 8.6 per cent. In the same period, turnover, as shown on the balance sheets, increased 10.1 per cent. There is evidence that Hunt was manufacturing munitions but as the known total sales amounted to about 84 per cent of the turnover, armaments production, according to these figures, could not have amounted to much.¹⁵⁸

All through this period, Reuben Hunt has been shown to be a shrewd and canny entrepreneur. The diversification into animal food preparation equipment, power transmissions, roller mills and simple agricultural implements in underdeveloped countries, showed him picking profitable products. The need for major export lines to

¹⁵⁵ *Kelly's Directory of Essex* (London, 1902).

¹⁵⁶ These figures bear out Dewey's comments about how buoyant the agricultural machinery manufacturers exports were and how unfair the criticism about British exports in general, Dewey, *'Iron Harvests of the Field'*, p. 87.

¹⁵⁷ Museum of English Rural Life, Reading, T.R. HNT. pp. 208-16.

¹⁵⁸ Reuben Hunt, in 1916, claimed at the local tribunal (of which he was a member) that over 75 per cent of his employees worked on war work. Unless the making of power transmissions was under government contract, there seems to be a contradiction here.

counter the falling agricultural home markets was paramount. This started with the purchase of the Biddle's business, which had export trade begun by Massingham. Reuben found that he could use Massingham's agents for exporting other products of his business. To keep abreast of foreign markets Reuben went on frequent trips abroad, sometimes with his son Harry.¹⁵⁹ Besides exporting to Europe and other continental countries, he was also trading with the British Empire, though not in any extensive way.

Hunt was not a large company and with Reuben's determination that he was going to be in sole charge, no financial partners, apart from Tawell, were brought in to increase the capitalisation and scope of the business. There is no evidence that the company acquired other businesses, neither was there any attempt by other companies to take over the firm. It remained a family business with Reuben holding a large majority of the shares. The firm remained in the low wage area and little modernisation took place after the First World War. Moreover, Reuben's entrepreneurial ability dimmed as he got older.¹⁶⁰

Summary

All four case study companies experienced the same periods of prosperity and growth, and of poor trading conditions, recession and recovery, but at different times.¹⁶¹ Courtaulds were trading particularly well under Samuel Courtauld III in the 1860s and 1870s, but suffered badly in the late 1880s and early 1900s. With the arrival of Tetley, however, the business was soon back on its feet and was making large profits. The other

¹⁵⁹ Thompson and Magee, 'A soft touch?' pp. 699-700.

¹⁶⁰ Burton-Hopkins, *Hunt for Machinery*, p. 73-80.

¹⁶¹ That the two dissimilar industries, textiles and agricultural machinery manufactories should experience this at more or less at the same time is evidence that it was an all embracing phenomena that effected the whole country, but in varying degrees.

textile company, Gurteen, continuously expanded in the 1860s to the 1880s, under the leadership of Daniel Gurteen III. Unfortunately the statistics are not available to analyse how the business fared during the next couple of decades with the brothers William and Jabez Gurteen in charge, but the firm survived without too much job shedding or shrinking of the business. The engineering companies experienced slightly different timings. Garrett, under Richard Garrett III, had good trading years from the 1840s and 1850s, but the 1870s and 1880s, when Richard Garrett IV was in charge, were a particularly difficult time. Reuben Hunt was able to rescue a failing company when he took over in 1867 and, with the addition of the Biddel business, was able to profit from rising sales. Again, in 1883, with power transmission, he was able to operate away from the agricultural sector and his business was able to withstand the generally difficult trading conditions of the 1890s and early 1900s. Thus all the companies were able to take advantage of the booming British economy of the middle years of the nineteenth century and also to survive the poor trading conditions of the late nineteenth and early twentieth centuries, and profit from the less hostile economic climate leading up to 1914.¹⁶² That these trading conditions affected the four companies at different times, reflects, the individualistic nature of the businesses and their products. These companies, as with most other similar businesses in the country, were different. They were of different sizes, manufacturing different ranges of products, using different business strategies and policies and the character of their entrepreneurs were different. That they enjoyed prosperous times and periods of recession at around the same time is

¹⁶² Coinciding with the boom and recession periods of the rest of the country. R.C. Floud, 'Britain 1860-1914: a survey.', in, Floud and McCloskey, *The Economic History of Britain since 1700*, pp. 1-4; A.G. Ford, 'The trade cycle in Britain 1860-1914', in, Floud and McCloskey, *Economic History of Britain since 1700*.

probably due to the importance of the state of the British economy and its hold on British manufacturing industry.

The calibre of the entrepreneurs was of a variable nature. Samuel Courtauld III, Daniel Gurteen III, Richard Garrett III and Reuben Hunt built their businesses up into large industrial concerns. But, apart from George Courtauld III,¹⁶³ the other businessmen, William and Jabez Gurteen, Richard Garrett IV and the Frank Garretts I and II, could be regarded as leaders of the second division of entrepreneurs of their firms. This is because during the years they were in control, the companies failed to reach the same profitability. However, they were operating in a very different trading climate. It was straight forward if there was enough skill, luck and incentive to build up a company in times of good trading conditions, but when these conditions were not present, it took different qualities to survive. If a company was making a profit, however small, increased turnover would increase prosperity. Entrepreneurs, in times of boom, would want to expand their businesses and thus profits, using resources gained from previous years, or bringing in moneyed partners. But if the firm was making a loss, however small, the greater the turnover the greater the loss. The recession was something the entrepreneurs had no control over, it reduced their sales and often increased their raw material costs. These businessmen needed clear thinking, to pursue reasoned decisions. They needed a rational overhaul of their business methods and ruthlessly discarded unprofitable ventures, but above all they needed to cut costs and reduce expenditure. Entrepreneurs, who successfully steered their companies through recessions, had a better understanding of their businesses and trading capabilities, which

¹⁶³ It is ironic that because George Courtauld III withdrew from his responsibilities as chairman of the company, Henry Tetley was able to gain power and influence. Tetley was given free rein to push through the development of viscose manufacture at a time when it was unpopular with the rest of the Board, but without interference from the head of the business, and thus Tetley turned Courtauld into a large and prosperous company.

made them much more skilful and effective businessmen. They were able to bring their companies out of recession to a position of reasonable financial viability, ready to profit from an improving economy. The one major point that spurred them on was the necessity that the family company must survive at all costs to be handed on to younger family members. The business was the family's inheritance.

It was also this point that gave these companies such longevity. Courtaulds with its viscose operation in Coventry and Pennsylvania and its policy of buying up other textile companies, created one of the largest and most complex businesses in this country. However, even with the outsider Tetley in charge, it remained a firmly controlled family concern. The Gurteen company was passed from father to son through four generations to William and Jabez Gurteen, who managed to bring the business successfully through the recession of the 1890s and 1900s. They did not diversify into new ventures but were able to hand over a fairly prosperous business, the only one of the four case study companies that still survives as a family concern, and they did so by keeping the business firmly in the hands of immediate family members. The Garrett family had unfortunate argumentative traits, not helped by jealousies amongst siblings. They suffered personal and business traumas during the First World War. Frank Garrett II's decision to take the company into the Agriculture General Engineering conglomerate was an inappropriate one and led directly to the loss of the family business in the 1930s. But this was just a single, although critical, decision that Frank II made and a judgement of his entrepreneurial ability must rest with his reign taken as a whole, which was generally productive with several innovatory ideas.¹⁶⁴ Reuben Hunt's two families lived together with jealousies, arguments and disputes which lasted into

¹⁶⁴ For example Frank Garrett II had convinced his father on the desirability of diversifying into small traction engines for road haulage, which, with the steam wagon, gave Garrett another market for its products. Whitehead, *Garrett 200*, p. 81.

later life. Reuben himself, with an obsession for being in sole charge, did not help towards an effective transition of power at his death. There was no clear leader waiting in the wings, neither did he create a dynasty as the other case study families had done. But although his entrepreneurial energy had been dimmed by age he was able to pass on a viable company to his sons in the late 1920s.

The boom years of the third quarter of the nineteenth century turned the four case study companies into extensive and often international firms. Not only were they mechanised with the use of extensive machinery, but they increasingly needed new systems of management, some quite sophisticated, for the effective control of their businesses. The engineering companies, especially Garrett, needed designers and drawing office teams and with the other companies, sales office staff were required.¹⁶⁵ Courtauld was the largest of the four and evolved into a complex company. Samuel Courtauld III from forming the company in the 1820s, followed a policy of manufacturing in several locations with factories in Braintree, Bocking and Halstead, and later at Chelmsford and Earls Colne. Each of these factories contained power driven machinery and each had their own management structure. The other companies were not so large, but as their works grew, they devised simple systems of dividing their business into separate departments run by a manager or foreman.¹⁶⁶ In the textile companies this may have evolved from the introduction of 'flexible specialisation', and the 'putting out' system, which required few managers. Gurteen, for example, installed hand driven sewing machines into a building behind the family home in Haverhill's

¹⁶⁵ Whitehead, *Garrett 200*, pp. 75-78.

¹⁶⁶ The change of management from single proprietor or partnerships to private and public limited liability companies, indicated that the business needed a more sophisticated form of management, besides reducing the financial risk to partners/directors. Hunt was incorporated into a public liability company in 1889, Courtauld in 1891, Garrett in 1897. But Gurteen, perhaps with its financial backing, was not formed into a limited liability company until 1929.

High Street in 1863 for the manufacturing of smocks, even though the smocking and embroidery were still being undertaken by the 'putting out' system. In the ready made clothing industry much use was made of these handicraft methods. Despite the introduction of sewing machines, which certainly speeded up sewing, the major tasks in the manufacturing of clothing required hand operated tools. This contrasted to the engineering companies, who had little use for handicrafts work and 'flexible specialisation' was little used. The assembly of their products used hand labour, but could be quite complex and needed the strength of several men. However, Richard Garrett III was impressed by the American revolver company Colt's exhibit at the 1851 Great Exhibition. Colt had made the components of his guns interchangeable and their assembly was undertaken by the 'flexible specialisation' system using unskilled labour. Richard Garrett III tried to emulate this system for the assembly of his products by building the Long Shop. However this was only half hearted as standardisation, a major component of Colt's method, was not accomplished at Garrett till 1910, 44 years after Richard III's death.¹⁶⁷

All the four case study companies were affected by the cyclical fluctuations in the British economy during the late nineteenth and early twentieth centuries. The two engineering companies used exporting as an answer to their poor home sales figures and it became critical for their survival, although there were difficulties of trading with countries erecting high tariffs against importing companies. Reuben Hunt became personally involved with overseas agents and spent time and money to make regular trips to keep in touch with them. Garrett, the larger of the two engineering companies and producing larger products, exported mainly to Europe and particularly to the eastern part. The business also had close ties with Germany. They employed Germans as

¹⁶⁷ Whitehead, *Garrett 200*, p. 96.

designers and managers and Frank I worked for German engineering businesses before joining the company at Leiston. Thus they were in close touch with their German markets. Although exporting to the British Empire might be considered a better option, there is little evidence that the four case study towns carried this out in any systematic way. The markets were perhaps too far away, volatile and not large enough for full time agents.¹⁶⁸ There is little evidence to show how much exporting Courtaulds undertook during the time Samuel was in charge, but in 1893 almost a third of crape production was, reportedly, exported, a quarter going to France.¹⁶⁹ However, the crape industry was in rapid decline in this period, with viscose becoming Courtauld's primary business. As the company held only the British rights to the process there was little exporting except to the American Viscose Company where that firm could not meet the high demand for the product in the United States. Exporting could be a dangerous business. The prime example was Garrett's loss of £200,000 due to non-payment by the emerging Soviet Union.

In the later nineteenth and early twentieth centuries, the entrepreneurs from the four case study companies, by and large, successfully negotiated the difficult trading conditions of the period. While their predecessors experienced exciting times building up family businesses into large industrialised companies, their successors had the equally pleasing experience of creating communities within their towns for their workers to live what was hoped would be happy, healthy and contented lives. The next chapter will turn away from entrepreneurs as successful businessmen to entrepreneurs as creators of successful industrial communities.

¹⁶⁸ Thomas and Magee, 'A soft touch,'

¹⁶⁹ Coleman, *Courtaulds an Economic and Social History*, p. 140.

CHAPTER THREE

CASE STUDY COMPANIES AND COMMUNITIES BEFORE 1850

Before analysing the four case study companies: Samuel Courtauld and Company, Daniel Gurteen and Sons, Richard Garrett and Sons and R. Hunt and Company, it would be worthwhile to start this chapter by considering the region as a whole. The companies, and the entrepreneurs who created and nurtured them, were not working in isolation; the social, cultural and economic aspects of the region played no small part in their success. Suffolk forms the southern part of East Anglia and, like the rest of the region, constituted part of a prosperous and populous area in the medieval period. The settlements were often close to each other and land holdings were extensive and complex.¹⁷⁰ After the 'Black Death', the grazing of sheep was of great importance, the wool, regarded as being of good quality, was exported to Flanders or was spun and woven in the region. Essex had a similar economic base. The south west corner of the county which bordered London was influenced by the capital and grew to form part of its suburbs. Apart from Norwich, the second city in the country, and this metropolitan area of Essex, there were few large urban areas, and the region consisted of small market towns which tended to be of only local importance.¹⁷¹ Clark and Hosking, records 58 small towns in Essex and Suffolk in 1851. Of these only Barking, Braintree, Burnham on Crouch, Halstead and Romford, in Essex, and Lowestoft, Haverhill,

¹⁷⁰ As an example of this, the Doomesday volume dealing with East Anglia, was almost twice the size of the other volumes that dealt with the rest of the country. This is evidence that land ownership and holdings were not only complicated and open to disputes, but also indicated a progressive society.

¹⁷¹ There were, however, some areas where large powerful overlords could block the creation of these markets. The great Abbey at Bury St Edmunds is a good example. In the medieval period few markets, in the west of the county, were allowed to challenge the monopoly of its trade, although Haverhill's market was one.

Mildenhall and Newmarket in Suffolk are recorded as exceeding 75 per cent rise in population between 1811 and 1851.¹⁷² Leiston, which is not mentioned by Clark and Hosking, also had a similar growth rate during this period.

Hueckel described the first two thirds of the nineteenth century as a turbulent period for British agriculture. He cites disruption of food imports caused by the French wars and the burden placed on farmers to feed the nation despite reduction of their workforce. The decades of the 1820s to the 1840s, he argues, needed retrenchment to peace time conditions. In 1846 the Corn Laws were repealed, thus opening up the British grain market to foreign competition although, at first, this had no effect on prices because the cost of transportation from overseas was high.¹⁷³ However Dewey is more optimistic and regards the French wars as a buoyant time for the farming industry, particularly arable farmers as grain prices hit record amounts. So much so that the farmer considered himself, before the war, as a manual worker, now believed himself to be gentry.¹⁷⁴

Textiles industries

The history of the woollen industry is one of a variable nature in both Essex and Suffolk. It was the worsteds of the 'new draperies' which prolonged its survival into the nineteenth century. Coleman traced the development of these textiles to southern

¹⁷² P. Clark and J. Hosking, *Population Estimates of English Small Towns 1550-1981* (Leicester,

1993); N. Raven, 'Manufacturing and trade: the urban economies of the North Essex cloth towns c1770-1851', Ph.D thesis (University of Leicester, 1998).

¹⁷³ G. Hueckel, 'Agriculture during industrialisation,' in R. Floud and D. McCloskey (eds), *The Economic History of Britain since 1700*, I, (Cambridge, 1981), pp. 182-84.

¹⁷⁴ P. Dewey, 'Iron Harvests of the Field': *the Making of Farm Machinery in Britain since 1800*, (Lancaster, 2008), pp. 15-16.

Europe and from there to the Netherlands. The major influx of the industry into this country occurred through the extensive numbers of textile workers fleeing from the disastrous persecution of the protestants in northern Europe during the sixteenth and seventeenth centuries. These immigrants settled, amongst other places, in Norwich, north Essex and south Suffolk and it was because of their numbers, that extensive amounts of cloth were produced which brought prosperity to these areas.¹⁷⁵ They were concentrated in a few towns in the north of Essex, mainly in Colchester, Coggeshall, Bocking, Braintree, Halstead, Dedham and a few smaller places. On the Suffolk side of the border, the towns of Bury St Edmunds, Glemsford, Sudbury and Lavenham in West Suffolk and Needham Market, Ipswich and East Bergholt in East Suffolk were the centres of production.¹⁷⁶ In 1700, the economy of these north Essex towns was dominated by the cloth industry and Arthur Young calculated that, in 1784, 37,500 people in Suffolk were employed in yarn manufacture.¹⁷⁷ At the same time, A.F.J. Brown suggests that spinners in Essex were counted in tens of thousands.¹⁷⁸ Young also estimated, in 1804, that the spinning and combing of wool employed the highest number of workers in the Suffolk textile industry.¹⁷⁹ However, due to many factors, including the development of industrialised textile production in Lancashire and Yorkshire, the

¹⁷⁵ D.C. Coleman, 'An innovation and its diffusion: the new draperies' in R.A. Church and E.A. Wrigley (eds) *The Industrial Revolution*, 8 (Economic History Society, 1994), pp. 420-428. See also J.E. Pilgrim, 'The cloth industry in East Anglia', in J. G. Jenkins (ed.) *The Wool and Textile Industry in Great Britain* (London, 1972); C. Fell and M. Christy, 'Woollen industry', in W. Page and J. H. Rounds (eds), *Victoria County History of the Counties of England, Essex*, 2 (London, 1907), pp. 380-81.

¹⁷⁶ D. Dymond, 'The wool cloth industry', in D. Dymond and E. Martin (eds) *An Historical Atlas of Suffolk* (Ipswich, 3rd ed., 1999), pp. 140-1.

¹⁷⁷ A. Young, *General View of the Agriculture of the County of Suffolk* (Board of Agriculture, 1813), p. 232. Young's figures also includes an extensive number of part time weavers.

¹⁷⁸ A.F.J. Brown, *Essex at Work 1700-1815* (Chelmsford, 1969), p. 2.

¹⁷⁹ Young, 'General view of the agriculture of Suffolk' quoted in G. Unwin 'The new draperies, wool combing and spinning', W. Page, (ed.) *Victoria County History of the Counties of England, Suffolk*, 2 (London, 1907), p. 270.

Suffolk spinning trade was virtually extinct by the 1840s. Likewise, the weaving of worsted type textiles had virtually disappeared by the beginning of the nineteenth century. Young reported the weaving of says in the Sudbury district, and calimancoes in Lavenham, but which had all but disappeared by 1840.¹⁸⁰ The manufacture of buntings (flags) was also developed in the Sudbury district where there were 200 looms.¹⁸¹ The light worsted business was also carried out in a small way in Glemsford and Cavendish (eight or nine looms), but this trade had ceased by 1871.¹⁸²

In Essex the manufacture of the light worsted cloths had practically ceased by the end of the eighteenth century. Arthur Brown plots in detail the decline of the industry in Coggleshall, Braintree and Bocking.¹⁸³ The business of the Savill family, one of Bocking's largest clothiers, was a good example of an efficient company, but which, nevertheless, succumbed to the relentless power of the northern industry. Savill started to use machinery from the 1760s, although the family used this machinery mainly on the periphery of their major manufacturing processes.¹⁸⁴ This was a company prepared to put capital investment into machinery, but which also relied to a considerable extent on self-employed craftsmen and women working in their own homes. Savill added to this investment by owning cottages in the town valued at £1,000 in 1789. Savill, as a clothier, just managed the business, putting out work and storing the partly or fully finished textiles. Brown traced the fortunes of this important business between 1759 to the end of the eighteenth century and showed not only the booms and

¹⁸⁰ Says and calimancoes were two of the many types of light worsted cloths. Young, *General View of the Agriculture of ... Suffolk*, P. 231.

¹⁸¹ White, William, *History, Gazetteer and Directory of Suffolk* (Sheffield, 1874), p. 137.

¹⁸² Young, *General view of the agriculture of ... Suffolk*, p. 232.

¹⁸³ Brown, *Essex at Work 1700-1815*, pp. 6-10. See also Neil Raven, *Manufacturing and Trade*.

¹⁸⁴ This is evidence to show that there were businesses, other than those in the northern counties, who were prepared to purchase expensive machinery.

slumps, but also how, even after each thriving period, the business was in long term decline. By 1800 the industry had collapsed, but John Savill was able to remain solvent as he had invested outside the textile industry, particularly in land, and was thus able to take on the role of an esquire and country landowner.¹⁸⁵

Summary

Thus, by the beginning of the nineteenth century, the region of the textile case study companies already had a tradition of skilled textile workers, although in a rapidly declining industry. However, the trade was regenerated by the introduction of new fabrics that readily found markets. As with the introduction of the light worsted textiles of the so called 'new draperies' in the seventeenth century, which had revived the woollen trade and made it prosperous during the seventeenth and eighteenth centuries, so the introduction of spinning and weaving of silk, and to a lesser extent drab and other hempen fabrics, revitalised the trade in the nineteenth century.

This redistribution of the woollen industry into silk owed much to the London silk manufacturers, who expanded their businesses away from the capital at the end of the eighteenth century. The Spitalfield silk weavers had obtained an act of parliament which gave them a minimum wage, but which was a third higher than that paid to the weavers in the eastern counties, which provided an incentive to set up businesses in this area and so benefit from low wages. First companies expanded their businesses into Suffolk at Sudbury, Haverhill and Glemsford, and to a lesser extent in other local areas. Mildenhall was said to have briefly had a flourishing trade by 1823, which involved silk

¹⁸⁵ Brown, *Essex at Work*, pp. 6-14; John Booker, *Essex, and the Industrial Revolution* (Chelmsford, 1974), p. 51.

manufacturers from Norwich, though this lasted less than twenty years.¹⁸⁶ The industry in Essex was mainly concentrated in Coggeshall, Braintree and Bocking. Thomas Sawyer and John Hill had mills at Little and Great Coggeshall by 1819. There were also horse powered mills at Harlow in 1826 and an earlier one at Saffron Walden, though this had closed by 1836.¹⁸⁷ The silk industry prospered from the removal of duty on the raw silk in 1824 and throwing mills were established at Hadleigh, Glemsford and Nayland. These were mostly powered by water, although one used a steam engine.¹⁸⁸

Courtauld

It is into this maelstrom of pessimism about the decaying, almost extinct woollen trade and the optimistic progressive new silk industry, that Samuel Courtauld started up his business. At the beginning of the nineteenth century there was money to be made, or lost, by those who had the courage and expertise to start a business. The Courtauld family was of Huguenot descent and were one of a number of such families living in the Spitalfields area of London. Coleman starts his history with the business of George Courtauld (1761-1823) who he describes as: ‘A kindly, spirited man of high principles and virtuous intentions, he changed his mind with notable frequency and was remarkably deficient in business acumen’.¹⁸⁹ He was apprenticed into the silk throwing trade and had his own silk throwing and weaving business. However, this company did not enjoy the continuity of Samuel Courtauld and Company, set up by his son, Samuel

¹⁸⁶ G. Unwin, ‘Silk throwing and silk weaving’, in W. Page (ed.) *Victoria County History of the Counties of England Suffolk*, 2 (London, 1907), pp. 273-74.

¹⁸⁷ Booker, *Essex and the Industrial Revolution*, pp. 55-6.

¹⁸⁸ D.C. Coleman, *Courtaulds an Economic and Social History*, 1 (Oxford, 1969), pp. 60-5; G. Unwin, ‘The new draperies, wool combing and spinning’, in W. Page (ed.), *Victoria County Histories of the Counties of England, Suffolk*, 2 (London, 1907), p. 273.

¹⁸⁹ Coleman, *Courtaulds an Economic and Social History*, p. 33.

(1793-1881), in 1816 at Panfield Lane, Bocking, Essex¹⁹⁰ and although technologically backward (it used hand or horse powered machinery in the days of water power), it was at a time when the silk trade was flourishing due to buoyant demand. He had worked for his father, but the relationship was strained, and George had fallen out not only with his son, but also with the rest of his family, and his partner.

Samuel Courtauld understood the productivity advantages of using water power; he had helped his father set up a water powered throwing mill at Braintree. However, he had not the capital to invest in modern plant, and the early years of the business were ones of struggles to break even. Just twenty three years old when he started the venture, he suffered fits of depression and financial problems, and even contemplated selling the company as a going concern. He only managed to pull through with the help of friends, relatives and obliging bankers.¹⁹¹

By 1818 Samuel Courtauld's cousin, Peter Alfred Taylor, had joined him and the business was styled Courtauld and Taylor. They tried to find a suitable water mill to convert for silk throwing, but could only come up with a piece of land in Braintree on which to build another horse powered factory, but which, nevertheless trebled their production. Eventually they found what they wanted in Bocking and at a time of economic necessity sold both Panfield Lane and the Braintree plant. By 1825 the firm had become a profitable business. Panfield Lane had been bought back and further plant set up there. Even a small steam engine had been erected at Bocking. Also in 1825, Samuel started another venture with a different partner, the Spitalfield silk manufacturer, Stephen Beuzeville, with whom he purchased the corn mill over the river

¹⁹⁰ Ibid., p. 48.

¹⁹¹ Ibid., pp. 54-65.

Colne at Halstead and converted it to crape throwing.¹⁹² Samuel's younger brother, George II, an engineer of proven ability, joined him and designed and built the special power looms and other specialised textile machinery that the company made for its own use and whose design was advanced for the period. To exploit George's II skill and to sell the machinery to other weavers, a dedicated machine shop was built for him.¹⁹³ With the resources now available Samuel was able to think about expansion and concentrated on the weaving and finishing of funeral crape.¹⁹⁴ Samuel Courtauld's business partner, Beuzeville, was bankrupted in 1827 and Samuel was able to gain control of the mill at Halstead. Once again he began looking for another moneyed partner and went into business with Andrew Taylor (no relation to his other partner). This partnership was to last until 1849 when a new company, combining the three businesses, was formed. The years between 1830 and 1850 were ones of increasing profits and capital expenditure and, by 1840, 2,000 local people were directly or indirectly dependant on the company.¹⁹⁵ Halstead's population grew by over 80 per cent between 1821 and 1851, with an average of twenty two per cent for each of the three decades.¹⁹⁶ There were other businesses in the town during these years, but a considerable part of this increase was due to Courtaulds.

The business at this time concentrated on four areas - machine making (George Courtauld's part of the business), silk throwing, manufacture of soft-silk fabrics and the

¹⁹² Ibid., pp. 70.

¹⁹³ Ibid., p. 21

¹⁹⁴ Coleman calls this 'The powerful magic of mourning crape...', Coleman, *Courtaulds an Economic and Social history*, p. 82.

¹⁹⁵ Ibid., pp. 73-5, 82.

¹⁹⁶ B.P.P., *Census. Populations viz Enumeration... according to the census 1821*, 15 (1822), p. 101; *Abstracts of Answers and Returns. Enumeration abstracts*, 1 (1831), p. 186; *Irish University Press Series of B.P.P. Population 3. 1841 Census...* (Shannon, 1971), p. 200; *Irish University Press Series of B.P.P. Population 6. 1851 Census...* (Shannon, 1970), p. 622.

making of hard-silk material, notably crapes of various sorts.¹⁹⁷ But it was the manufacture of funeral crape that dominated and on which the company centralised their production. After the death of Prince Albert in 1861 and the expansion of the Victorian way of death, long periods of mourning necessitated the wearing of extensive amounts of crape for both men and women, and also for the often extended families involved. There was much demand for Courtauld's crape as it was of high quality and particularly sought after.¹⁹⁸

By 1850 Samuel Courtauld had already shown his entrepreneurial skills. His energy was prodigious in the early years of his company. His tenacity to carry on in the teeth of depression, to withstand falling sales and his ability to find suitable financial backers and partners was uncanny, as was his competence to imagine, in the middle of a severe depression, what the nature of the industry would be like when profitability returned. His insistence that unconventional methods of using horse or even hand powered machinery, which until then had served him well and generated profits for the partners, had no future, was perceptive. Coleman divides this period into two and describes the first period as 'summer' when the attractions of low wages coupled with increased demand appealed to silk manufacturers. After the legislation of free trade was adopted in 1826-29, there were no tariff barriers for imports. The second period of 'winter' set in and Samuel Courtauld foresaw that when prosperity returned, only the most efficient companies would survive. Despite the lack of profit the business was making during this 'winter', he arrogantly insisted that money be found to acquire up-to-date water powered premises - there would be no place for horse or even hand operated machinery. Subsequent developments proved him right and the business

¹⁹⁷ Coleman, *Courtaulds an economic and social history*, pp. 77-8.

¹⁹⁸ For an analysis of how the Victorian way of death affected Courtauld see Coleman, *Courtaulds an Economic and Social History*, pp. 128-33.

became prosperous.¹⁹⁹ Courtauld had to keep a fine balance between acquiring machinery which not only dramatically expanded production but which also increased capital costs and the need for a rise in the return of these investments. He found that hand loom weavers could be resorted to in times when power loom work could not keep up with demand, while in quieter times these hand workers would not be employed, thus incurring no additional capital costs.²⁰⁰ This was attractive to Samuel Courtauld in the early years of the expansion of his company as he was having problems finding financial backing. But high profits were impossible using hand loom weavers. Thus, as the business grew with sustained growth, it was financially more profitable to increase the number of power looms which caused a continuous reduction in hand loom workers.

Gurteen

The other fabrics that were to revitalise the textile trade in the region were hempen type cloths, checks, fustians, and other materials of wool or cotton mixed with linen. These were manufactured in Suffolk until the beginning of the nineteenth century. In Haverhill a material called linsey-wolsey was probably produced and it is reported that a wool house existed in the town in the middle of the seventeenth century.²⁰¹ But these fabrics were started to be replaced by the manufacture of drabbet from about 1815. This cloth, first composed of hemp and cotton, with the hemp later replaced by

¹⁹⁹ Coleman, *Courtaulds an Economic and Social History*, pp. 96-103.

²⁰⁰ For the concept of 'flexible specialisation' see, M. Dauntton, *Progress and Poverty an Economic and Social History of Britain 1700-1850* (Oxford, 1995), p. 13.

²⁰¹ F.D. Unwin, 'Haverhill's industrial history', *South West Suffolk Echo* (1st April 1922). Unwin was a long serving manger in Gurteen's factory and had an insight into the textile trade in Haverhill.

linen, was hard wearing and ideal for making into smocks, the working clothes of many rural workers.²⁰²

Gurteen is the only one of the four case study companies that survives as a functioning family firm in its original location, with its factory intact. Both the present joint managing directors are members of the Gurteen family, one being the seventh generation from the founder. The family are believed to be of Huguenot extraction and the first record of the firm is in 1784, when a Daniel 'Gurton' opened a bank account with £1,000, a considerable sum of money in the late eighteenth century.²⁰³ This was probably the reason for the firm's success: they had resources when they needed them, unlike Samuel Courtauld who seemed forever searching for financial backing.

Little is known about the firm before 1820, they were almost certainly clothiers, managing the manufacture of the light worsted type fabrics, checks and fustian.²⁰⁴ Gurteen for those few decades were probably the classic 'putting out' business, and their only premises were warehouses behind the family home in the High Street, Haverhill. By 1839 they had concentrated on the manufacture of drabbet²⁰⁵ and two years later, at the time of the census, there were 330 drabbet weavers in the town.²⁰⁶

²⁰² G. Unwin, 'Mixed textiles, (drabbit, horsehair, coconut fibre) and ready made clothing', In W. Page (ed.) *Victoria History of the Counties of England, Suffolk*, 2 (London, 1907), p. 274.

²⁰³ Gurteen's business records are housed in the company's museum.

²⁰⁴ *Pigot and company's London and Provincial Commercial Directory for 1823-24*... (London),

records five fustian manufacturers besides Daniel Gurteen. They were Samuel Nott, Jonathan Sizer, Barnabus Webb, John Webb and Isaac Wright.

²⁰⁵ The business was styled 'Daniel Gurteen & Son, drabbet manufacturer', in *Pigot's and Company's Royal... and Commercial Directory*... (London, 1839), Some of the other fustian weavers seemed to have survived and also changed to drabbet weaving; they were Joseph Nott, Thomas Sizer and Henry and Stephen Webb and also a new name, Pearce and Chater. See also William White, *History, Gazetteer and Directory of the County of Essex*, (Sheffield, 1844), p. 734.

²⁰⁶ Footnote in *Irish Press series of B.P.P. Population* 3, p. 410.

Gurteen started making smocks in 1811, also using the ‘putting out’ system. In White’s Directory of 1844, Gurteen’s are recorded as drabbet and smock frock manufacturers. In contrast to Samuel Courtauld who, from the creation of his business, was factory based, although not industrialised, Gurteen used the old traditional method of domestic production by workers based in their own homes. The manufacture of ready made clothes was of growing importance to the company. The industry in the early years of the nineteenth century was dominated by extensive clothing warehouses in London and Leeds.²⁰⁷ The importance of Haverhill in this business can be seen from an illustration of a 1828 handbill of the business of H. Hyam of Colchester. Amongst the discounted clothing listed, is an item, ‘Capital beverteen [jacket] lined throughout with real Haverhill drabit 14/6d.’ Later there is ‘Men’s real Haverhill open slops 6/6d.’²⁰⁸ This not only shows that Gurteen were supplying Hyam with clothing, possibly for some time before 1828, but also that the company and Haverhill were well known and had a good reputation for its clothes and drabbit. Thus it was worthwhile advertising this fact.

The Gurteen family history is confusing in that nearly all the major nineteenth century individuals in the firm were given the Christian name Daniel (see appendix II). The most prominent Daniel III (1809-93) had the entrepreneurial drive, energy and ability to make the business prosperous. It was to his credit that the success of the company in the second half of the nineteenth century was due. Both his father and grandfather had conducted a successful business (it had lasted 62 years when his father

²⁰⁷ S. Chapman, ‘The innovating entrepreneurs in the British ready-made clothing industry’, *Textile History*, 24, no. 1 (1993), pp. 12-22; D. Busfield, ‘Tailoring the millions’: the women workers of the Leeds clothing industry, 1880-1914’, *Textile History*, 16, no. 11 (1985); P. Sharpe, ‘Cheapness and economy’: manufacturing and retailing ready-made clothing in London and Essex 1830-50’ *Textile History*, 26, no. 2 (1995).

²⁰⁸ P. Sharpe, ‘De-industrialization and re-industrialization: women’s employment and the changing character of Colchester 1700-1850’, *Urban History*, 21, no. 1 (1994), p. 94.

died). Their firm was only one of several such firms in the community and did not dominate Haverhill. Although it was under the leadership of Daniel Gurteen II, the father (1777-1856), that the policy decision to cease fustian manufacture and produce drabbet was taken, it was not such a revolutionary step as three other fustian companies had also taken the same decision. Indeed, in previous generations the firm had been innovative in extending their product range and made up smocks. The business prospered between 1801 and 1841, and the population growth of Haverhill rose 87 per cent in those four decades, with almost a quarter of the increase in the decade 1821 to 1831 and a third in the following decade.²⁰⁹ Although expansion in Haverhill was not so dramatic as the rate of growth in some northern textile towns, for East Anglia it was impressive.²¹⁰

Iron-founding and engineering industry

Unlike the textile industry, with its long history from medieval times, iron-founding and engineering were comparatively modern. The effective smelting of iron only goes back to the eighteenth century and the creation of many iron foundries was a feature of the nineteenth century. Dewey has pointed out that the making of agricultural

²⁰⁹ B.P.P. *Abstracts of the answers and returns. Enumeration.* (1968), p. 341; *Abstracts of Population Returns for 1811...*, 111 (1812), p. 231; *Populations viz Enumeration...* (1822), p. 319; *Abstracts and Answers...2* (1831), p. 618; *Irish University Press Series of B.P.P. 1841*, P. 410.

²¹⁰ Examples of 1801-1841 growth in northern textile towns :-

	1801 pop.	1851 pop.	per cent increase
Huddersfield	7,000	31,000	343
Wakefield	11,000	23,000	109
Preston	12,000	70,000	483
Oldham	12,000	53,000	342
Blackburn	12,000	47,000	292

S.A. Counce, 'Northern English industrial towns: rivals or partners?' *Urban History*, 30, no. 3 (2003), Table 1, p. 352.

implements and machinery hardly existed before the last quarter of the eighteenth century and then only in the local village workshop.²¹¹ Smelting, which was never carried out in Essex or Suffolk, was the process of turning iron ore into cast or pig iron. Two sorts of iron were needed by engineers: cast iron and wrought or bar iron. The latter is made by repeatedly reheating and hammering pig iron until it becomes malleable. This produced wrought iron which had good tensile strength, but cast iron was needed to resist compression stresses. Booker made two points relating to the resources and skills necessary to run an iron foundry business successfully. The skill and expertise of pattern makers, moulders and founders was critical and without them a foundry could not function. He contrasts this with the blacksmith, millwright and wheelwright, who could run their businesses with few men, even working on their own. The second point was that the smiths were able to work with the minimum of machinery (just a forge and hand tools), whereas the iron founders needed to invest in substantial equipment.²¹² This tended, in the pioneering days, to make the iron founders much more receptive to technical innovation and to create entrepreneurs with an ability to find new markets and new ways of using iron. Dewey has compiled a list of 25 agricultural engineering and foundry businesses created between 1770 and 1815. Businesses from East Anglia and Essex are well represented. Nine out of the 25 came from this region and were: Burrell, founded 1770 in Thetford; Garrett, 1778 at Leiston; Ransome, 1785, first at Norwich, and, from 1789, at Ipswich; Rumsby, 1799 at Bungay; Smyth, 1801 at Peasenhall, Suffolk; Bental, 1803 at Maldon; Wedlake, 1803 at Romford; Hunt, 1808 at Earls Colne; and Wood, 1813 at Bury St Edmunds. Of these 25, nine were to become major concerns: Ransome, Smyth, Howard (founded in 1813 at Bedford), Hunt, Garrett,

²¹¹ Dewey, *Iron Harvests of the Field*, P. 11.

²¹² Booker, *Essex and the Industrial Revolution*, pp. 3-4.

Bamford (1805 at Utttoxeter), Bental, Hornsby (1815 at Lincoln), and Tasker (1813 at Andover). Five of these nine were in East Anglia or Essex and twelve of the 25 survived till at least the 1960s, although not necessarily still as agricultural machinery manufacturers. Dewey regards this as a remarkable record of commercial success.²¹³ He also compiled another list of agricultural engineers founded between c1815 to 1835, but of the seventeen names, only one each were from Norfolk and Essex and none from Suffolk, although there were two from Cambridgeshire. These seventeen businesses were not as successful or as long lived as the ones founded earlier. Few became large companies; most failed to grow and those that did owed their success to diversification out of the agriculture sector.²¹⁴

The location of many of these agricultural machinery businesses in East Anglia is evidence of its regional importance for arable farming. It became prosperous by a greater efficiency in managing the land, which enabled crop yields per acre to increase, coupled with rising grain prices, particularly during the times of the Napoleonic wars. By 1820, most ploughs in the region were made entirely of iron, threshing machines were making an appearance and progressive farmers were making use of the seed drills.²¹⁵ However, the region did not possess the raw materials for iron founding, namely iron ore, limestone, coke and moulding sand. Nevertheless, because of the need for iron castings, the first foundries in the counties were established to provide for agricultural improvements. Castings were also made for cog wheels for use in mills and other rural industrial uses. In eastern England, Suffolk and Essex were in the forefront of agricultural machinery improvements and innovation. Iron was increasingly used for farm implements and machinery. Iron castings made machinery more robust and they

²¹³ Dewey, *Iron Harvests of the Field*, pp. 9-12.

²¹⁴ Ibid., pp. 23-24.

²¹⁵ Ibid., p. 15.

lasted longer, thereby making them more economical. Ploughshares were a good example. Using cast iron for the share was not only more effective in ploughing, but various firms patented methods of case hardening parts of the ploughshare, which considerably prolonged their working lives.²¹⁶

Ransome was the most extensive of all these firms, employing 900 men in 1851, considerably more than Garrett who employed 300, itself not an inconsiderable number for the period.²¹⁷ Most of Ransome expansion was due to its superior ploughshare and the patent of 1803 for tipping the plough itself with case hardened iron. But the business only survived by diversifying into civil engineering between 1815-30. Other companies branched out into general smith's work and castings and Burrell built a bridge at Thetford and was involved in establishing the town's gasworks.²¹⁸

The iron ore, limestone, coal or coke and moulding sand were imported by sea and those companies established on or near ports or inland navigations had an advantage in terms of lower transport costs.²¹⁹ Being sited inland, however, was not a deterrent to success, although dependable transport was only by horse and wagon. Bar iron for the blacksmith, coal, and even Welsh slates had been effectively carried over the turnpike roads to virtually every corner of the region from the end of the eighteenth century and the carriage of coke, limestone and pig iron presented problems only in the cost of transportation. It is important to notice that a large majority of agricultural

²¹⁶ M. Lane, 'Iron foundries 1789-1900', in D. Dymond and E. Martin (eds) *An Historical Atlas of Suffolk*, (Ipswich, 3rd ed., 1999), p. 150.

²¹⁷ Hornsby (Grantham), Clayton and Shuttleworth (Lincoln) and Howard (Bedford) each employed about 400 men in 1851 and were the next largest firms to Ransome. After Garrett, at 300, were Burrell (Thetford) employing 160 and Hunt (Earls Colne) 100. Dewey considered that apart from these examples, it was rare to find a Agriculture engineering business employing more than 50 men. Dewey, *Iron Harvests of the Field*, p. 27.

²¹⁸ Dewey, *Iron Harvests of the Field*, pp. 26-27.

²¹⁹ Garrett used the east coast port of Aldeburgh for many years, before the arrival of the railways in the town.

machinery manufacturers, with extensive foundry and engineering plant, were situated in the lowland belt of eastern and southern England. This is in direct contrast to other foundries and engineering firms, not in the agriculture sector, which tended to be sited near to iron ore and coal production areas in the north of England. Thus, it would appear being near to customers, mainly farmers and landowners, in these progressive rural areas, was more important than being near to the raw materials.

Garrett

The business of Garrett was started in 1778 when the first Garrett took over a forge in Leiston, married a local girl and put down roots for a large and successful business. The family had been blade smiths from the late seventeenth century and Richard coupled this with the production of sickles and other edged tools, besides the usual repair and general smith's work. In the late eighteenth century the business employed just eight to ten men.²²⁰ Garrett's imagination with Christian names was as limited as Gurteen: all the earlier members were called Richard. The second and third generations brought entrepreneurial skills and corporate development. The second Richard took over the business in 1805 and married Sarah Balls of Hethersett, Norwich, whose father, John, had patented an improved threshing machine. John Balls joined the firm and along with the construction and marketing of this machine, the company started building agricultural machinery.²²¹ Richard I left the running of the business to Richard II from 1805, retiring as a farmer. In fact he outlived his son. Garrett also

²²⁰ R.A. Whitehead, *Garrett 200 a Bicentenary History of Garretts of Leiston 1778-1978* (London, 1978), pp. 9-11.

²²¹ R.A. Whitehead, *Garretts of Leiston* (London, 1964), pp. 9-10.

manufactured ploughs, harrows, turnip-cutters and chaff-cutters, and with the addition of a foundry and wheelwright's shop, the smithy became a factory.²²² By the time of the second son Richard's death (1839) the company employed 60 men.

Richard Garret III was born in 1807 and started in the business at the age of fourteen and his entrepreneurial skills were soon recognised. By the age of nineteen he controlled the company's finances and by 1835, aged twenty nine, he was in overall control.²²³ A poster of the company's products, c1828, included threshers, ploughs, field rollers, horse hoes, seed drills, chaff cutters, root 'pulpers' and hay 'tedders'.²²⁴ There were also illustrations of domestic grates, fireplaces and even elaborate park gates. At this time Garrett was the leading manufacturer of seed drills which were exported to all parts of the world. Besides drills specially adapted for the sowing of grasses, clover, turnips, beet, peas and beans, broadcast or in rows, there was also one manufactured for spreading of salt and sand on urban streets. Garrett also constructed the Jethro Tull horse hoe which gained a sound reputation after it had won many prizes at agricultural shows and a medal at the Great Exhibition of 1851. Garrett harvest machinery sold well, particularly in the colonies and America where, due to shortage of labour, there was a demand for ways of shortening the harvest process.²²⁵ By 1850 the workforce had increased to 500. The census shows the town of Leiston grew by 92 per cent between 1801 and 1851, with 34 per cent of the expansion in the 1840s and 41 per cent in the 1850s, the two highest decennial figures for a hundred years. As there was no other large business in the town at the time then clearly this growth is due to Garrett and in

²²² G. Unwin, 'Agricultural implements', in, Page, *Victoria History of the Counties of England, Suffolk*, pp. 281.

²²³ Whitehead, *Garretts of Leiston*, p. 11.

²²⁴ Ibid., Fig 8, p. 14.

²²⁵ Unwin, *Agricultural implements*, 283. Whitehead disputes this and states that the North American market had strong competition from the native American manufacturers.

particular to Richard Garrett III. Whitehead likens the transition of the Garrett family from well to do tradesmen to that of one of the leading families of East Suffolk, entirely due to Richard Garrett III.²²⁶ In keeping with his agricultural interests, this Richard was closely involved in setting up the Royal Agricultural Society of England, serving on its council for ten years from 1846.²²⁷

Hunt

The smallest of the four case study companies and communities, Hunt of Earls Colne, was also the last to be founded in 1825. Garrett had been in operation for 47 years, Gurteen 41 years and Samuel Courtauld's business had been founded some nine years before. Garrett, under Richard III, produced seed drills and threshers in large numbers during the 1840s, and then the company redirected their efforts towards the construction of steam engines, some of which were displayed in 1851 at the Great Exhibition. As a result the company had developed into a large industrial business of international importance. Gurteen's watershed had been in 1856 when they built a factory and installed 32 power looms. Courtauld was not so well defined, but between 1830 and 1850, Samuel had built the company into a large and prosperous business. In Hunt's case they employed perhaps half a dozen men in 1850 and it was not until Reuben Hunt took complete control in 1867 that the firm started to expand and became an international player.

²²⁶ Whitehead, *Garretts of Leiston*, p. 11.

²²⁷ *Ibid.*, p. 13.

The company was started by Robert Hunt, a wheelwright, who settled in Earls Colne and married Mary Ann Rogers. Similar to Garrett, the firm started to manufacture and repair agricultural implements for the local area. It was enlarged when a small foundry had been established by 1833. In this early period, Hunts designed and made their own machines, besides undertaking commission work to farmers own designs. As elsewhere, dependable products established a reputation for sound business and in Hunt's case was based on their clover-seed drill, which won a medal in the 1851 exhibition and was soon sold all over southern England. However, the company still had difficulty in surviving. Pig iron was brought from Northampton, casting sand from Kent and the nearest railway station was at Colchester, some twelve miles to the east, but along a well established turnpike road. It was the entrepreneurial skills of Reuben, with his drive and energy that saved the company and made it a successful business in the second half of the nineteenth century.²²⁸

Four businesses: comparisons and contrasts

The success of the businesses of Courtauld and Gurteen, Garrett and Hunt show the importance of entrepreneurs who had the ability, skill and courage to introduce new products and processes to businesses and to bring prosperity to the towns. However their paths took different routes. Courtaulds centralised their production to almost a single product, funeral crape, of which there seemed an insatiable demand and high profit margins. Gurteen, on the other hand, diversified as demand for certain fabrics collapsed and also expanded their product range. Garrett, having already been well

²²⁸ P. J. Burton-Hopkins, *Hunt for Machinery, the Rise and Demise of R. Hunt and Company Limited of Earls Colne 1825-1988*, (Halstead, Halstead & District Local History Society, 1995), pp. 8-10; J. Cooper, 'Earls Colne', in, J. Cooper (ed.), *Victoria County History, Essex*, 10 (London, 2001), pp. 97-98.

known for the production of agricultural edged tools, successfully exploited a design for a threshing machine, which gave them a reputation for practical and efficient agricultural implements and machinery. Hunt was formed much later and was a smaller company, but to an extent copied the policy of Garrett - a clover-seed drill made their reputation.²²⁹

There was a variety of reasons why these companies became successful businesses. The businessmen running them showed entrepreneurial acumen of a high order and they followed best business practices, keeping their eyes on their markets and exploiting any gaps that occurred. But above all, working in a rural region they were able to take advantage of a low wage area. Although of a later date, Table 3.1 shows how the average farm labourers' wages for the East and the South and Southwest were the lowest paid for the whole country.²³⁰ The textile companies were able to employ skilled handloom weavers from a sector that was suffering poor market conditions. Although iron founding was a new industry, Garrett and Hunt were able to recruit and retain skilled workers and also train others in their factories, far from the industrialised areas of northern and midland Britain.

Table 3.1 Farm labourers' weekly wages 1867-95.

	England & Wales	North	Midlands	East	South & South West
1867-71	11s 11d	14s 9d	12s 2d	11s 5d	10s 11d
1872-78	13s 5d	17s 4p	13s 11d	12s 11d	11s 9d
1879-90	13s 0d	16s 9d	13s 4d	11s 6d	12s 1d

²²⁹ Burton-Hopkins, *Hunt for Machinery*, p. 9.

²³⁰ W.A. Armstrong, *Farm Workers: A Social and Economic History 1770-1980* (London, 1988), table 5.2, p. 120. Colman also shows, for a similar period, that Essex, Suffolk and Norfolk had the lowest weekly agricultural labourers' wage between 1867-1907, apart from the West Country. But from 1898-1907, East Anglia had the lowest agricultural labourers wages' throughout England. Colman, *Courtaulds an Economic and Social history*, Table 35, p. 245.

1891-95	13s 4d	17s 4d	13s 6d	11s 5d	12s 7d
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Source: W.A. Armstrong, *Farm Workers: A Social and Economic History 1770-1980* (London, 1988), table 5.2, p. 120.

Company Communities

Turning to the communities, two of them, Halstead and Haverhill, were well established market towns and became Local Boards of Health, Halstead as early as 1852, and Haverhill in 1878. Leiston was constituted into an Urban District Council in 1895, but Earls Colne remained a village, although an extensive one, and became part of the Halstead Rural District Council, also in 1895.

During the first half of the nineteenth century virtually all the region's communities, except for the very few large towns, relied on agriculture as their primary source of employment and prosperity. It provided the majority of the population with its livelihood, either directly or indirectly, through associated trades or businesses. The farmers' and landowners' ability to spend resources on experimentation and machinery²³¹ was tied into the rural economic cycle. If landowners and farmers prospered, then money was found. At other times, unemployment and underemployment were prevalent. Power in the region was held by influential landowners, some of them absentees. The institutions which they dominated, in the four case study towns, were the ancient ones of manor and vestry. However, these institutions were in decline and the holders had little power, other than over the tenants of the manor. The vestry was made up of unpaid part time officials consisting of overseers and guardians of the poor, surveyors of the highways, constables and church

²³¹ Often the same thing occurring at the same time during the so called agricultural revolution. Dewey, *'Iron Harvests of the Field,'* pp. 20-22.

wardens. Although the major expense of parish business, the relief of the poor, was removed from parish control by the Poor Law Reform Act, 1834, the vestry remained the institution that ran the affairs of the community until the creation of the Local Boards of Health and Urban District Councils.²³² There were, of course, many tradesmen and businessmen who had limited influence but who filled the offices of the part time parish officials. The entrepreneurs and businessmen, often non-conformists in the case study companies, had very little power in parish politics during this period, as they had no land holdings. However, later, as they became prosperous, Samuel Courtauld and members of both the Gurteen and Garrett families, bought farms and land, although it is not obvious whether this was to increase their influence, give them an asset in order to borrow money for expansion or, as in the case of Garrett, a farm on which to experiment with new machinery.

In the following section, refer to the town maps in Appendix IV.

Halstead

Halstead was the largest of the four case study communities, with a population of almost 7,000 in 1851.²³³ The town was situated on major crossroads. The London, Chelmsford to Sudbury and Norwich road crossed the Midlands, Cambridge to Colchester and Harwich road. The main parish church was adjacent to this staggered junction, with the main street (London Road) running down a steep hill to cross the River Colne. However, the town was of an irregular shape with other streets branching off this hill and the later development was to the south west, on the other side of the valley where a new parish was formed to serve the increased population, with a church

²³² John Richardson, *The local Historian's Encyclopedia* (Historical Publications, 1975), pp. 37-43, 59.

²³³ The highest population figure for the whole of the period of this thesis.

erected in 1844. The town had good transport links. There were three coaches every day (except Sunday) to and from London and another one journeyed to Kelvedon, where passengers could board the London train. A Colchester to Cambridge coach passed through Halstead on two days of the week and from Cambridge to Colchester on three. There was even an omnibus, also serving as a carrier, which went to Colchester on Tuesday and Saturday mornings at 10.00 am, returning at 5.00pm., while the same proprietor ran a similar service to Sudbury on Thursdays. There were three carrier wagons to London, one by way of Chelmsford and then train to London on three days of the week, with a return. The other two ran four days of the week between them.²³⁴

A revealing ‘snapshot’ of the town can be obtained from the trade directories. The Kelly’s Directory (1846) mentions thirty six names classed as ‘gentry’. How many of these were owners of extensive land and therefore influential in the parish is not recorded, but there were enough to indicate a sociable town. Halstead had its own magistrates court with seven JPs, of whom three were resident in the town. Kelly recorded 250 separate ‘traders’. The greatest proportion, 28 per cent, were craftsmen (blacksmiths, wheelwrights, boot and shoe makers, though not building workers), whilst almost 25 per cent were involved in the food and drink sector, which included twenty inns and beer houses. The third largest sector were shopkeepers, who made up 13 per cent. There was also a police station supervised by an inspector, an indication of the presence of several policemen. The market, noted as in existence before the Norman Conquest, was held in the centre of the town on Thursdays, with two annual fair days held in May and October. Two new churches were under construction in 1846, and there were also two Independent churches, two Baptist chapels and one Quaker meeting

²³⁴ William White, *History, Gazetteer and Directory for the County of Essex* (Sheffield, 1848), PP. 690-98.

house within the town. A British Infant and two National Schools, with 300 day pupils and 695 Sunday School pupils were mentioned, as well as a long established grammar school. The Union workhouse, in the town, cost £7,500 and was erected in 1838 with room for 300 paupers and there was also a 'House of Correction'. The directory did not mention Courtauld in detail, but merely as 'Courtauld, Taylor and Courtauld crape manufacturers' and that 'a large number of hands are employed in the silk trade'. These were virtually all Courtauld workers. It also mentions that others, mostly women, were 'extensively engaged in the Tuscan and straw plait manufacture.'²³⁵ There was an 'agricultural implement manufacturer and a brass and iron founder', but that place of business was in the hamlet of Greenstead Green and outside the town.²³⁶ Halstead is pictured throughout this directory as a forward looking, busy, progressive town with a variety of shops, services and good communication to the capital and elsewhere. It almost doubled its population from 1801 to 1851.

Haverhill

Haverhill was virtually a one street town a mile in length from Haverhill Hamlet in the east (in Essex), stretching almost to the Cambridgeshire border, and was on the same Midlands, Cambridge to Colchester and Harwich road as Halstead and also Earls Colne. There were coaches to London on every day of the week (except Sundays) with two on Mondays, Wednesdays and Fridays. Carrier services to London were of the same frequency as the coaches. However, there was only one a week to Bury St Edmunds (Wednesdays), Cambridge and Newmarket (Tuesdays), two to Clare on

²³⁵ Tuscan and straw plait manufacture was a useful, if rather short lived industry, which gave many families in the district a secondary income.

²³⁶ Kelly's, *Directory of nine Counties... Essex*, (1846).

Mondays and one on Tuesdays, Thursdays and Saturdays. The chief landowners were Sir George Howland Beaumont of Cole-Orton, Leicestershire, a non-resident who was also Lord of the Manor of Haverhill; Queen's College, Cambridge; H.J. Sperling and William Wakelin Boreham F.R.A.S.²³⁷ The last was resident in the parish, recorded as 'gentleman' and the family owned a large brewery in the town. They were the leading dynasty in Haverhill at this time, before the rise of the Gurteen family.²³⁸ White's Directory noted that many of the old thatched cottages had been demolished and replaced by 'neat' slated buildings, which gave an indication of prosperity. There were 330 drabbet weavers working for 'several' manufacturers and 70 silk workers employed in a mill making umbrella and parasol fabrics, with many women outworkers making smock frocks from the woven drabbet. Similar to Halstead, there were a number of female workers making Tuscan straw plait. The market, which had a corn exchange attached, built in 1834, was held on a Friday, with fairs in May and October. A savings bank was created in 1836 with deposits amounting to £4,600 and in 1842 several Friendly Societies were established. Besides the Parish Church, there were also a Friends Meeting House, a Baptist Chapel, a Presbyterian Chapel and an Independent Chapel. Each of these congregations had their own Sunday Schools and a National School had been built. The Risbridge Union Workhouse was still situated in Haverhill and although enlarged to a capacity of 280, in 1836 to house the Risbridge Union paupers, in November 1841 it held just 138. It's Infirmary, nearby, was built in 1840 at a cost of £2200.²³⁹ Haverhill's population was 2,451 in 1841, and not much greater ten

²³⁷ William White, *History, Gazetteer and Directory of Suffolk...* (Sheffield, 1844), pp. 732-801.

²³⁸ White's directory, although mentioning the chief land owners, is not clear on what gentry were living in the town. He records four (including W.W. Boreham), but mixed up in this list are tradesmen and some names which are without descriptions.

²³⁹ White, *Directory of Suffolk* (1844), pp. 732-35.

years later. Gurteen was still one of a number of textile firms in the community and the town, although acquiring some pretensions of urbanisation, had not gone far along that road.

Leiston

Leiston was a coastal parish, sited on the Norwich, Halesworth, Yoxford to Aldeburgh road. It was described as being a large and well built 'village', despite the fact that the town housed the works of Richard Garrett and Son, 'the largest manufacturer of agricultural implements in the kingdom',²⁴⁰ although the population figures bore out the fact that it was only a village. The town's population in 1841 was 1,177, including the coastal hamlet of Sizewell. Leiston's population was smaller than Earls Colne whose number of inhabitants, without a large business, was 1,384. Nevertheless, Leiston had been growing. In 1821 its numbers stood at only 954, compared to Earls Colne's 1,229, but in the next two decades Leiston more than doubled its size to 2,252, leaving Earls Colne far behind at 1,540.²⁴¹ Communications were mainly to Ipswich by the Eastern Counties Railway. Coaches travelled most days of the week to the station, leaving at such times so as to catch the London trains and pick up passengers to take them back to Leiston. The town's carriers went to Ipswich station on three days of the week. There was also a carrier who journeyed from Norwich via Halesworth and travelled through the town to Aldeburgh, which town was regarded as Leiston's shipping port for London.²⁴² The principal landowner in the parish was

²⁴⁰ Kelly's, *Post office Directory of Nine Counties, Suffolk.*, (London, 1846), pp. 1444-45.

²⁴¹ B.P.P. *Populations viz Enumeration.... Census* (1821), p. 314; *Abstracts of answers and Returns...*, 2, (1831), p. 608; *Irish University Series of B.P.P.* (1841), p. 406.

²⁴² Kelly, *Post Office Directory of Nine Counties, Suffolk.*, (1846), pp. 1444-45.

Lord Huntingfield who lived in Heveringham Hall some twelve miles to the north west. Four other landowners were noted in the directories, none of whom lived in the parish and only five people could be described as resident 'gentry'. Leiston was a medieval market town but the market had long been defunct. The parish church, although described as having recently undergone considerable repairs, was still only thatched. The Wesleyans and Quakers were both established in the town and a Parochial School, supported by public subscription for the education of 100 poor children, had been formed in 1840.²⁴³ The parish was essentially a rural one, with the largest occupational group represented by farming at over a third of the total working population. The term 'village' as used in the directories seems appropriate. Trades made up 22 per cent of entries in the directory and food and drink comprised 12 per cent. In 1844 Leiston was a fast growing community, although it had not acquired many urban institutions and it had not rid itself of its rural nature.

Earls Colne

Earls Colne takes its name from the river that flows through the parish and from the de Vere family, the Earls of Oxford, who lived in a palace here during the early medieval period. By 1815 it was described as a large village with some market town services.²⁴⁴ It straddled the Midlands, Cambridge to Colchester and Harwich road and was just three miles east of Halstead. One of the Halstead coaches to London went

²⁴³ White's *directory for Suffolk*, (1844), pp. 381-83.

²⁴⁴ Earls Colne branch of the Workers' Education Association, *A History of Earls Colne*, (c1974), p. 12.

through Earls Colne every day of the week in the morning, except Sundays, and returned at night. The coach from Colchester to Cambridge had the same frequency as at Halstead - Monday, Wednesday and Friday to Cambridge and Tuesday, Thursday and Saturday to Colchester. There was also a coach to Kelvedon station for the London train and the Halstead omnibus and carrier to Colchester passed through each morning and back in the evening, two days a week. A Halstead carrier called on the way to Bishopgate Street in London on Mondays, Wednesdays and Fridays, returning on Tuesday, Thursdays and Saturdays.²⁴⁵ Judging by its growth, Earls Colne was a rural village not only in the first half of the nineteenth century but throughout those hundred years. Its fastest growing decade was the 1840s at just ten per cent and between 1821 and 1901 it did not even manage to double its population. It was the slowest growing community of the four case study towns. However it seemed top heavy in its resident gentry - Kelly's Directory records five women, nine esquires and four clergy (one a rural dean) out of a section of eighteen 'private' persons. No members of the Hunt family were listed as members of this sector. There were only three places of worship, the parish church, a Baptist chapel and a Quakers' meeting house, although an Elizabethan Grammar school existed, where some of the clergy may have been teachers. Nevertheless, the professional classes were the largest category recorded and constituted a quarter of all vocations. Second, at just under a quarter, was 'Trades', with food and drink at eighteen per cent, giving these three a total of 69 per cent of all classes. As well as a grammar school there was a National School established in 1843. Although Hunts had established an iron foundry by the 1840s, this was only a small business, employing a few men and was thus described in the directory as a 'blacksmith and wheelwright'.²⁴⁶

²⁴⁵ Kelly's, *Post Office Directory of Nine Counties*, Essex (1846).

²⁴⁶ Kelly's, *Post Office Directory of Nine Counties* (1846).

Earls Colne, in 1850, was a fashionable village, almost a suburb of the town of Halstead.

Summary

The area of north west Essex and south west Suffolk, the locations of three of the four case study communities is, almost exclusively, a rural region frequently dotted with villages, hamlets and a few small rural towns. Although the area had been the centre of a medieval, post medieval and early modern cloth industry whose prosperity is reflected in the many spacious medieval churches, by the beginning of the nineteenth century this trade had all but disappeared. As far as this research is concerned, it was a district which at the end of the eighteenth and beginning of the nineteenth centuries became home to a few small firms who through the courage and enterprise of the sons, nephews or grandsons of their founders grew to become, extensive prosperous international manufacturing companies. The same could be said of Leiston, sited on the rather poor soils of the Suffolk Sandlings. There seems no reason why the case study companies should have been located here. Once established they would have the advantage of cheap local labour which would have been abundant, being attracted by full time secure work. The region of North Essex and South Suffolk was not one paying high rates of pay to its agricultural labourers²⁴⁷ and the region was regarded as a low pay area. The textile firms had the added bonus that there were skilled textile workers out of work due to the decline of the existing handcrafted industry. For the agricultural engineering companies they found that they were able to train and retain skilled workers in an industry alien to the local area. The founding of nine agricultural engineering

²⁴⁷ See Table 3.1, p. 95.

companies in the region²⁴⁸ proves that these businesses, many in rural areas, survived during these early nineteenth century years and must have been able to recruit and train skilled staff. The growth of these companies was almost entirely due to the entrepreneurship of some of the family members and it was due to these families that these businesses thrived and prospered.

If the region of Essex and Suffolk is taken as a whole during the period 1800 to 1850, there were few extensive urban areas. Ipswich was growing strongly and, as the county town of East Suffolk, it developed many administration and service institutions. An extensive dock system grew in the period and Ransome, who were to become one of the largest agricultural machinery manufacturers,²⁴⁹ moved from Norwich and settled on a location adjoining the river Orwell. On the Essex side, Colchester, had become a major town with its port facilities and also developed a centre for ready made clothing. This contrast to the county town of Chelmsford that barely grew in the period, although Raven has shown what an important administration, service and commercial centre it had become.²⁵⁰ London, on the extreme south west corner of Essex, was to be of profound importance to the region. It was growing at a fast and almost unstoppable rate and the Essex parishes adjoining it were becoming its suburbs.²⁵¹ Its social influence was immense and all things fashionable emanated from it. By the end of the eighteenth centuries virtually all the turnpike roads had been built and the number spreading out of the capital to all corners of the kingdom was extensive. These snaked through the case study region, often giving even the rural areas a reliable and frequent transport system

²⁴⁸ Dewey, *'Iron Harvests of the Field'*, Table 1.1, p. 12.

²⁴⁹ Ibid., p. 26.

²⁵⁰ Raven, 'Chelmsford during the industrial revolution'.

²⁵¹ The Essex Metropolitan Borough of East Ham recorded a population of 133,487 in 1911, and Waltham Holy Cross 124,580. This compares to Colchester's 43,452 and Chelmsford, the county town at 18,008. B.P.P. *Accounts and Papers, 1912-13*, 63rd *Census of England and Wales*.

to the capital one way, and to other populous centres the other. Thus, although the case study area was situated in the more remote parts of the region, it had good communications via the best inland system available, turnpike roads. However, the coming of the railways was of vital importance to the case study companies. A consignment placed into a station could be transported quickly and reasonably efficiently to any one of the thousands of stations throughout the entire country. A situation not present with the local carrier on the turnpike roads. Leiston, however, was not in a good position in regards to turnpike roads, but did have the facilities of a port, Aldeburgh, in the next parish. However, the local carriers were taking advantage of using the railway at Ipswich by the 1840s.

By 1851, the four case study communities had contrasting characteristics. Halstead, at almost 7,000 inhabitants was the largest, had seen a period of growth that was not to be equalled for at least 150 years. It was an important and fashionable regional centre with its own magistrate court, twenty inns and beer houses, a market and two fairs, police station, eight places of worship, four schools and a brass and iron foundry. It became populous and a separate parish was formed in 1844. Haverhill, with a population of 2,535 in 1811, had also seen a period of extensive growth of some 76 per cent. There were sixteen inns and beer houses, five places of worship most with their own Sunday Schools, but there was only one day school. The town had a workhouse and infirmary and there was employment for 330 drabbet weavers and 70 silk weavers. Leiston was also a fast growing town with a 92 per cent rise between 1801 and 1851 when the population was 1,851. However it only had three places of worship and a parochial school, absentee landowners and just a few principal inhabitants. Finally Earls Colne was not only the smallest of the four case study towns but also saw the slowest growth. During the nineteenth century its increase in population only averaged

7.53 per cent per decade. But it was a fashionable community due to its close connection with Halstead and there was an excess of gentry living in the town.

These companies and towns, up to 1850, were merely embryonic industrial communities. It was to be in the second half of the nineteenth century that they were to become fully industrialised and urbanised places of national and international importance, which will be fully analysed and described in the next chapters.

CHAPTER FOUR

ENTREPRENEURS AND THE CASE STUDY COMPANIES 1850 - 1918

Introduction

The creation and development of the four case study companies up to the 1850s, was considered in the previous chapter. This chapter will look at how these businesses expanded over the next seventy years, the strategies and policies adopted by the entrepreneurs who ran them, and how successful these initiatives were in the challenging and difficult trading climate towards the end of the nineteenth and beginning of the twentieth centuries. To be a thriving entrepreneur required motivation, drive, confidence and often a single minded persistence with successful policies and strategies. It also required a certain amount of luck with timing as well as the necessary assets such as leadership and an ability to obtain sound financial backing.²⁵²

The four case study companies were family businesses and over the many years they developed into dynasties.²⁵³ The importance of the family cannot be overstated: it was the *raison d'être* for the company's existence. It gave the entrepreneurs the all enveloping incentive to succeed at all costs, not only in financial terms, but also in social status. A successful wealthy industrialist rose in power and influence in his community, and his wife, daughters and sons found themselves on the higher rungs of

²⁵² Tom Nicholas, 'Enterprise and management', R. Floud and P. Johnson (eds), *The Cambridge Economic History of Modern Britain*, II (Cambridge, 2004), pp. 249-52; S. Broadberry, 'Technological leadership in manufacturing since the industrial revolution: implications for the convergence debate,' *Economic Journal*, 104, pp. 291-302; J. Mokyr, *The Levers of Riches: Technological Creativity and Economic Progress* (Oxford, 1990), p. 266; D.N. McCloskey, 'Bourgeois virtue and the history of P. and S.,' in, *Journal of Economic History*, 58, p. 300; L.G. Sandberg, 'The entrepreneur and technological change', R. Floud and D. McCloskey (eds), *The Economic History of Britain Since 1700*, II (Cambridge, 1981), p. 100.

²⁵³ The exception to this is R. Hunt & Company. Reuben Hunt who virtually ran the company throughout the time span of this thesis.

the ladder of social status in a class conscious age.²⁵⁴ Economic historians have observed that entrepreneurs, by sticking faithfully to the tradition of keeping the business within the family, lost momentum and market share. They did not face up to overseas competition, and thereby failed to create the vibrant, dynamic and much larger businesses generated by take-overs and mergers necessary to face up to the fierce competition from Germany and America.²⁵⁵ Modern scholarship, however, considers that the difficult market conditions prevalent at the end of the nineteenth and beginning of the twentieth centuries were more complex.²⁵⁶ Takeovers and mergers tended to oust the original family, with sentiment and local commitment being secondary to larger companies' higher profits. It is no wonder that few family businesses would want to go down that road. Entrepreneurs were in business for themselves, not for the good of their country. It has also been claimed that an extensive number of these family firms had a poor survival rate and that many failed after a few years. However, Owens has shown from his research into family businesses in Stockport, that many of these firms were not bankrupt or closed through financial difficulties, but were liquidated to provide the money for the beneficiaries of the testator's family. The future of the family was important, not the business.²⁵⁷

²⁵⁴ P. L. Payne, *British Entrepreneurship in the Nineteenth century* (London, 1974), p. 25.

²⁵⁵ N. Crafts, 'Long-run growth,' in, Floud and Johnson, *Cambridge Economic History*, pp. 14-15; G.B. Magee, 'Manufacturing and technological change,' in, Floud and Johnson *Cambridge Economic History*, p. 89; Alastair Owens, 'Inheritance and the life-cycle of family firms in the early industrial revolution', in, *Business History*, 44, no. 1(2002), pp. 21-22; M.A. Upton, 'Some early features of the early merger movement in British manufacturing industry', *Business History*, 14, no. 1 (Jan. 1972), pp. 52-5; P.L. Payne, 'The emergence of the large-scale company in Great Britain, 1870-1914', *Economic History Review* (1967).

²⁵⁶ Magee, 'Manufacturing and technological change', pp. 78-9.

²⁵⁷ However his researches into Stockport was from the early part of the nineteenth century and involved small businesses such as textiles, public houses, maltings and tailors. He made the comment that it was more cost effective to keep larger companies in business. Owens, 'Inheritance and the life-cycle of firms, pp. 22-41.

Another reason for the difficult trading conditions was the inherent differences in the British and American manufacturing systems. America was short of labour but had plentiful supplies of raw materials. Its manufacturing industry tended to cut costs by developing labour saving machinery which produced cheap standardised products, but which depended on greater capital investment. Britain, on the other hand, had a surfeit of cheap labour, used less capital and its products were relatively more expensive. It made more use of its labour and less of plant. The American worker, with the increasing use of machinery was more productive than his British counterpart. Nevertheless the British manufacturers were more flexible and had the ability to make high quality, often, hand-crafted and customised products.²⁵⁸ Even small handicraft businesses were able to use what Daunton called 'Flexible Specialisation'.²⁵⁹ This is where the traditional handmade industries obtained higher productivity by breaking down production into separate tasks with individual workers specialising in particular activities.²⁶⁰ This speeded up production without significantly increasing capital expenditure and overheads. These methods had the advantage of being able to react quickly to changing markets and fashions. The products were of higher quality and this method encouraged innovation. However, textile manufacturers had, to a certain extent, been using this method for several centuries. Weaving and spinners had always carried their craft in their own homes, but the innovation of 'flexible-specialisation' meant that these hand workers and processes were accommodated in a factory and the skilled workers became employees rather than small masters.

²⁵⁸ Crafts, 'Long-run growth' p. 16.

²⁵⁹ M. Daunton, *Progress and Poverty an Economic and Social History of Britain 1700-1850* (Oxford, 1995), p. 13.

²⁶⁰ S. Broadberry, 'Human capitals and skills,' Floud and Johnson, *The Cambridge Economic History*, pp. 63-64.

With the home market under pressure in the trading conditions of the late 1890s and early 1900s, entrepreneurs relied increasingly on exports to keep up production and profitability. Exporting was not an easy option: companies found it difficult and expensive to have agents overseas and often combined with larger companies for this purpose. The agricultural engineering companies had little option but to export to obtain orders and keep profits high. There was also variability in local conditions that affected export prices, especially the use of tariffs to restrict importation of products in direct competition with that country's own industries. Most British exporters diversified into a variety of countries to operate effectively and keep order books full.²⁶¹ Thompson and Magee have argued that to sell to the countries of the British Empire was far from being a 'soft touch' as these markets also created problems. Pilkington, for instance, found that they had to build warehouses all over Canada in order to compete with local firms on delivery times and several companies set up subsidiary businesses in South Africa, Canada and Australia. Most of the imperial railway builders tended to be trained in Britain and ordered from British companies with whom they were acquainted. But the British suppliers to imperial markets were often upset by local circumstances where trade in primary commodities was susceptible to market fluctuations. Locally poor harvests in Australia in 1897 and 1917 and the Boer War in South Africa meant imperial purchasing power was often weak.²⁶² Even so, successful exporting kept many companies afloat, especially those engineering ones which form the part of this research.

²⁶¹ P. Dewey, 'Iron Harvests of the Field' *the Making of Farm Machinery in Britain since 1800* (Lancaster, 2007), pp. 94-97.

²⁶² A. Thompson and G. Magee, 'A soft touch? British industry, Empire markets and the self-governing dominions, c 1870-1914', *Economic History Review*, LVI, No. 4 (2003), pp. 694-710; P. Dewey, 'Iron Harvests of the Field' pp. 87-91.

One of the developments of late nineteenth and early twentieth century industry, was the creation of an increasing number of large businesses with the need for more elaborate management systems. In Britain, the pioneers were the railway firms whose businesses were nearly always limited liability companies.²⁶³ As the railway system evolved with mergers and take-overs, extensive companies were created towards the end of the nineteenth century, not only in size and number of employees but also in the amount of capital invested. To be able to control them effectively, professional managers were recruited, often using progressive American management systems. A managerial class evolved, both for top and middle administrators who knew less about the products but whose skills lay in the effective control of large and often complex concerns. This class of professional people could also be recruited into other industries, although the manufacturing sector was slow to emulate this approach. However, in response to the challenge of foreign competition, extensive companies were formed throughout the latter half of the nineteenth century, mainly by mergers, so that the era 1895 to 1902 witnessed the creation of the greatest number of mergers in the period leading up to the Second World War.²⁶⁴ Apart from Courtauld, which needed a complex management structure, none of the other case study companies had the need for sophisticated management systems, though all needed to keep a watching brief on their production and marketing.

The problems that faced the four case study companies and most of the rest of industrial Britain during the late nineteenth century revolved around the loss of business due to a downturn in competitiveness. Cheaper foreign products prompted new methods of management and marketing to counter these conditions. But, as with the rest of the

²⁶³ Christopher J. Schmitz, *The Growth of Big Business in the United States and Western Europe 1850-1939* (London, 1993), pp. 18-21.

²⁶⁴ Upton, Some features of the early merger movement, p. 52.

manufacturing sector, the four case study companies used a variety of solutions to solve their particular problems, as will be seen in the following sections.

Samuel Courtauld and Company

At the start of the 1850s, Samuel Courtauld III's main business was still the making of soft and hard silks, silk throwing and building textile machinery. But he soon changed the policy to concentrate on a single product - funeral crape. With the doubling of the population between 1801 and 1851 and the corresponding increase of those rich enough to observe the strict mourning code, with its lavish use of crape, there was a steady increase in sales and profits. The lower classes also sought to imitate the middle classes and the formal and complex etiquette of mourning became fashionable, particularly after the death of Prince Albert. Samuel Courtauld, with uncanny ability, had foreseen these markets and the business strategy was able to grow and generate high profits.²⁶⁵ As the company increased production, so Samuel acquired moneyed partners to finance the venture. These he obtained through his extended family - the Taylor, Bromley, Warren and Nettlefold relations.²⁶⁶ See Appendix 3 for details of the family tree. Most were Unitarians who followed a creed believing in a rational explanation of the scriptures, a humanist approach to truth through scholarship, reason and individual responsibility.²⁶⁷ Scientists and businessmen tended to be Unitarians and

²⁶⁵ Expansion was taking place in the 1860s. In 1866 a mill was brought at Chelmsford and out of work weavers migrated to Braintree, Bocking and Halstead for work. C.H. Ward-Jackson, *A History of Courtaulds, an Account of the Origin and Rise of the Industrial Enterprise of Courtaulds Limited and of its Associate American Viscose Corporation* (London, 1941), p. 51.

²⁶⁶ D.C. Colman, *Courtaulds an Economic and Social History*, 1 (Oxford, 1969), pp. 112-6 & 178-81.

²⁶⁷ G. Hague, *The Unitarian Heritage: an Architectural Survey of Chapels and Churches in the*

they bonded together and looked to each other for influence and support. In Samuel III it formed a strong part of his character. He firmly held the view that he had not only to support his immediate family, but also his extended relations. Accordingly the company had to remain strong and prosperous.

Samuel III died in 1881 and the leadership of the company passed to his nephew, George Courtauld III who Samuel detested, but, despite this, made him his successor. Between 1886 to 1898, George had to face challenging trading conditions. Coleman explained this crisis in four parts.²⁶⁸ Firstly, the general manufacturing downturn in the British economy and secondly, the special difficulties that the silk industry and especially crape manufacturers encountered, as ritual mourning began to take on different forms, which exposed the vulnerability of Courtauld's concentration on one fabric. Thirdly, the plant designed and built by George's father, George Courtauld II, was 'state of the art' 50 years before, but much of it, in the 1890s, was obsolete. Finally, there was the questionable calibre of the partners of the business and their ability to turn round its fortunes. It is not surprising therefore, that the partners decided in 1891 to form the business into a private limited liability company - it would have been too hazardous to continue as a partnership and be saddled with the debts of the business if, as it looked likely, the business failed. In 1892 the Chelmsford factory was closed and the value of the company's capital had to be halved to £200,000.²⁶⁹ The combination of a lower selling price and the increase in raw silk prices reduced profit margins. The entire industry was in crisis. The well known silk centres of Coventry and

Unitarian Tradition in the British Isles (Unitarian Heritage, 1986), pp. 9-11.

²⁶⁸ Coleman, *Courtaulds an Economic and Social History*, p. 163.

²⁶⁹ C.H. Ward-Jackson, *A History of Courtaulds...*, p. 66.

Spitalfields ceased production and most of the scattered throwing mills in the counties of Buckinghamshire, Hertfordshire, Suffolk and Somerset vanished.²⁷⁰

The most critical component of the crisis was falling sales. Funeral fashions had evolved; the etiquette of mourning was less strict. No longer were people expected to mourn for such long periods or to wear only mourning clothing. This severely reduced Courtauld's sales, but it was also coupled with a reaction against stiffness and rigidity in ladies fashions and a move to the use of chiffon and lighter materials.²⁷¹ George Courtauld III had inherited a business which was centred on the manufacture of hard silks; it was no solution merely to change production to more colourful crapes. A complete overhaul was needed to bring the business back to its former profitability.

George Courtauld III was the classic indictment of British industry. A reluctant businessman who was more at home on his rural estate as a country gentleman, conducting his work as a Justice of the Peace and as the Member of Parliament for Maldon. He had been brought up as a Unitarian, but, soon after he married, he attended the local Anglican church and his political views shifted from a liberal to that of a moderate conservative and unionist. He had attended a Unitarian school, whereas his sons went to public school and some to Cambridge University.²⁷² His was the stereotyped case of a businessman taking over a highly profitable company, but lacking the dynamism, energy or interest to improve its standing. His answer to the financial crisis was to withdraw himself from the business and his attendance at board meetings

²⁷⁰ Coleman, *Courtaulds an Economic and Social History*, p. 163.

²⁷¹ Ibid., pp. 165-171.

²⁷² At this period, children of wealthy Unitarians went to public school and Oxbridge, mixed with the aristocracy and local gentry and, as Hague has pointed out, their status 'had little time for doctrinal niceties'. However in George III's case he neglected to attend the local Unitarian Chapel. Hague, *Unitarian Heritage*, p. 71.

became sporadic.²⁷³ Coleman criticised the calibre of the other senior partners and maintained they too were out of touch with the latest textile developments and market conditions. However, they had been brought in not only as family members but also as successful businessmen. Although the management system Courtauld adopted was unclear, these senior men had proven track records as directors of other businesses and so had management experience and expertise, if little knowledge of silk.²⁷⁴ These were the new men of top professional management.²⁷⁵ They may not have known the type of textile products that were needed to bring the firm out of recession, but they knew, in management terms, the need to recruit someone who did. Their appointment of Henry Tetley in 1893, who was made a director two years later, was inspirational.²⁷⁶ It was he who not only brought Courtaulds out of the recession, but created profits unheard of even in Samuel Courtauld III's day.

Henry Tetley was a complete outsider to the family, the Courtauld business and the area. He was 42 years old when he joined the business and had been head of the silk manufacturing section of Lister and Company, an extensive Yorkshire textile business, where he had worked for 22 years. He brought into Courtaulds, as the sales manager, Thomas Latham, who was four years younger and had been Lister's representative in Manchester and New York.²⁷⁷ Tetley, as a new broom, brought to the business the sense

²⁷³ Coleman, *Courtaulds, an Economic and Social History*, pp. 174-6

²⁷⁴ For example, Frederick Nettlefold was the son of John Sutton Nettlefold who had an ironmongery business in London and who set up a successful screw manufactory with Joseph Chamberlain in Birmingham. Frederick became a partner and then chairman of this Company. Henry Browne held directorships in a number of railway and mining companies in Britain and abroad. He was also chairman of the London, Tilbury and Southend Railway and as such had much experience of the management of a variety of businesses. Coleman, *Courtauld, an Economic and Social History*, pp. 179-180.

²⁷⁵ Schmitz, 'The growth of big business'.

²⁷⁶ See D.C. Coleman 'Henry Greenwood Tetley' in, *Dictionary of National Biography*, 54 (Oxford, 2004).

²⁷⁷ Tetley and Latham made an ideal partnership. The imagination, enthusiasm and driving

of urgency, vigour and dynamism that it had had during the era of Samuel III, but which it lacked under George III. His business strategy was to concentrate on the manufacturing of coloured hard silks and of lighter gauzes, much in vogue in the new Edwardian fashion world and which Latham was having success in selling. Tetley started immediately to change the atmosphere of indecision and gave direction to the firm. New plant and buildings were sanctioned and the old obsolete machines built by George Courtauld were replaced.²⁷⁸ In 1900 Tetley instigated an important policy change, the purchase of a factory at Leigh in Lancashire, for the increased production of these coloured fabrics.²⁷⁹ Special looms were needed, with more skilled weavers to operate them. There was no longer an abundance of skilled labour in North Essex.²⁸⁰

In 1904 the business was converted into a public limited liability company. The make up of the directors showed that, although still in the hands of the Courtauld family, more experienced businessmen were involved.²⁸¹ Tetley persuaded the board of directors in 1904 to purchase the English rights to the patents for the manufacture of artificial silk by the viscose process. This was to be the most important decision the company was to make in its endeavours to climb out of recession. However, at the time, Tetley's fellow directors felt it to be an annoying sideline to their major business,

power of Tetley was balanced by the critical coolness, financial wisdom and pertinacity of Latham. Ward-Jackson, *History of Courtaulds...* p. 68.

²⁷⁸ In 1895 there was expansion at Halstead with extra space provided for 500 looms, which in a

few years had increased to 1,000. Ibid., p. 69.

²⁷⁹ C. Fell and Miller Christy, 'Silk industry' in, William Page (ed.), *The Victoria History of the Counties of England, Essex*, 2 (London, 1907), p. 467.

²⁸⁰ Perhaps of more importance to Tetley was moving the business away from the dominance of

The Courtauld family in north West Essex. Bocking was the headquarters of the company.

²⁸¹ The chairman was John Warren and the other directors were his brother T.P. Warren, George

Courtauld III (now retired from running the business), H.D. Browne and Frederick Nettlefold. The latter two were experienced businessmen (see footnote 23 above). The Newer generation consisted of H.G. Tetley, T.P. Latham who were joint managing directors and Samuel August Courtauld II, son of George Courtauld III.

particularly as the operation of converting wood pulp into usable yarn was far from perfected and needed extensive work by the company's chemists and engineers to turn it into a practicable process.²⁸² Their first effort was unsuccessful as it infringed a German patent.²⁸³ Tetley's character was revealed by this episode. He knew that his power and influence within the company rested on his ability to produce significant profits. Consequently he was highly motivated and proceeded to do all in his power, including pressurising and bullying the company's chemists and engineers, to resolve the fundamental issues.²⁸⁴ With a successful conclusion, he moved production to a new plant in Coventry solely for the manufacture of artificial silk. The company's centre of operation was moving away from North West Essex.

Table 4.1. Courtauld gross trading profits. Yearly percentage changes, Bocking operation and Coventry 1903-1912.

	Bocking	Coventry
1903-04	-11	
1904-05	10.4	
1905-06	10.6	
1906-07	-22.7	
1907-08	-4.1	
1908-09	56	504.6
1909-10	-3.7	23.8
1910-11	7.8	236.9
1911-12	-11.1	21.7

Source: Coleman, *Courtaulds an economic and social history*, Vol. II, table 2, p. 40.

Table 4.1 shows the critical time when falling sales at Bocking was overtaken by the rise in profits at Coventry. Once Courtauld had perfected the process of producing yarn from wood pulp, Tetley and Latham wasted no time in manufacturing and

²⁸² Ward-Jackson, *History of Courtaulds...* p. 85.

²⁸³ Coleman goes into extensive detail about this patent and the subsequent court case, but Ward-Jackson does not mention it. It is probable that the whole chemical procedures, which also involved two other different processes, were so complex that it was difficult to unravel. Both Coleman and Ward-Jackson appear unclear about this complicated issue. D.C. Coleman, *Courtaulds, an Economic and Social History*, Vol. II (Oxford, 1969), pp. 9-23; Ward-Jackson, *History of Courtaulds...*, pp. 73-81.

²⁸⁴ Coleman, 'Henry Greenwood Tetley' p. 179.

marketing it. The Coventry business almost exclusively produced viscose yarn and what became known as the 'Bocking' operation²⁸⁵ was used for experimental work in showing prospective customers new ways that this viscose yarn could be used.²⁸⁶ This was critical since, despite the efforts of Latham, mourning crape sales continued to decline, even if coloured crapes and the lighter gauzes sold in reasonable amounts. But it was the profits made at Coventry that dominated Courtauld's balance sheets, after 1908 (see table 4.1).

To increase sales and profits, Courtaulds exported to America with its large scale potential.²⁸⁷ However, America increasingly imposed high import tariffs to protect its own manufacturers. To get round this, Tetley set up a separate American business in 1911, called the 'American Viscose Company' and built a factory in Marcus Hooke, Pennsylvania. By 1916 the American plant employed 2,500 workers, producing 5,741,000 lbs of yarn a year.²⁸⁸ Despite the American law that prohibited foreign nationals from owning companies in the USA, Courtauld was able to receive the considerable profits accrued by this Company. Thus the acquisition of the viscose process and its development was one of the most successful policies adopted by the business.

Henry Tetley was totally devoted to running and developing Samuel Courtauld and Company into a highly profitable business. The contrast with Samuel III could hardly be more marked, with Samuel's religious background and commitment to his

²⁸⁵ That is the manufacturing taking place at the Bocking, Braintree and Halstead plants.

²⁸⁶ 'Bocking' not only showed the practical way of winding, weaving and dyeing viscose fabrics, but also pioneered the use of mixed fabrics and hosiery. Ward-Jackson, *A History of Courtaulds...*, pp. 91-109.

²⁸⁷ In 1893 Courtauld crape sales were 65 per cent in the home market, 24 per cent to France and only 5 per cent to America. The other 6 per cent was mainly to European countries. However, the company held only the English rights to the viscose process and was denied exporting viscose yarn to other European countries. *Ibid.*, p. 140.

²⁸⁸ Ward-Jackson, *History of Courtaulds...*, pp. 94-195.

family contrasting strongly with Tetley's lack of political ambitions and strong religious convictions. But Tetley's ability to appoint men of judgement, who were able to solve the technical problems of the viscose process and the issues concerning the legality of the American Viscose Company, matched Samuel's ability to find moneyed partners. Tetley shunned self publicity and refused honours, unlike Thomas Latham who received a baronetcy in 1919.²⁸⁹

With the exceptional profits that Courtauld were making from the end of the nineteenth century, they were able to expand horizontally by buying up various businesses, thus increasing their market share and influence. This was part of their business strategy. In 1898 they bought the weaving business of Samuel Brown of Leigh, Lancashire, to increase the production of coloured crapes and gauzes. They acquired an interest in the Belgian Viscose Company in 1907 which provided access to a European market. During the First World War, Courtauld took over the British Glanzstoff Company, a German business which had lost its key German workers and which also produced artificial silk by using a different process. They also built a sulphuric acid plant in Manchester, used mainly for the manufacture of munitions, but which they were also able to use for their viscose production. Despite wartime conditions, demand for viscose remained buoyant; it was used extensively in women's clothing and women war workers were reasonably paid and had money to buy clothes. In another example of horizontal amalgamation, Ward's company in Halifax was purchased in 1917. As this company specialised in tapestries, Courtauld were able to slot it into their business by using the material, mixed with viscose yarn, for furnishing fabrics.²⁹⁰

²⁸⁹ Colman, *Courtaulds an Economic and Social History*, p. 207.

²⁹⁰ *Ibid.*, pp. 57-119.

The British side of the Courtauld business suffered interference in its markets during the First World War. However, the American arm had no such problems and production and profits increased. This left the Courtauld company with a highly profitable business in 1918 and in the years that followed. Courtauld continued to acquire businesses and became a complex world-wide organisation, branching out into other sectors besides viscose and silk, capable of competing with large American and European companies. This was the legacy left by Henry Tetley who died in 1921.

D. Gurteen and Sons

The other textile case study company was D. Gurteen and Sons. See Appendix 3 for the Gurteen family tree. The firm was founded in 1784 and manufactured at the other end of the textile trade to Courtauld, making cloth and clothing for the working classes. In 1856, Daniel Gurteen II died and his son, Daniel III, took charge, immediately sanctioned the building of a weaving factory that housed 32 power driven drabbitt looms.²⁹¹ The construction of this plant was critical for the future of the business, and was undertaken during a period of recession in the company during the 1840s and 1850s.²⁹² There are few records that survived from this period and none on which to base any business statistics, but the rate of growth of the company can be inferred from the growth of the population of Haverhill, where it was sited. Chapter three described this growth when the population of Haverhill rose 87 per cent between

²⁹¹ Correspondence from T.L. Scott of P.W. Smith & Brothers, Sun Iron Works, Heywood, 6th June 1857 to 16th November 1857. Gurteen archive.

²⁹² Daniel Gurteen IV remembers Haverhill in the early 1850s as being in the ‘...most miserable condition, being looked upon as one of the most godforsaken places in the world.’ He also claimed to have seen 500 unemployed men standing idle on the Market Hill, Haverhill during this period. *The Story of a Family Firm* (Published by D. Gurteen & Sons, 1973), p. 9.

1801-41.²⁹³ There were other textile businesses in the town in this period, so it is probable that they all enjoyed the prosperous decades and contributed to a rapidly increasing population. After 1841, in contrast, the population growth declined substantially, to just 3 per cent in the 1840s and a decline of 6 per cent in the 1850s. None of the other textile businesses seemed to have imitated Gurteen's example of reinvestment and all had closed down.²⁹⁴

Daniel III was not the eldest son, his brother Stephen was a year older and both worked for the company, but it was only Daniel III who was made a partner in 1833. His capabilities must have been recognised from an early age.²⁹⁵ By 1856, the company had changed from weaving fustian to the manufacture of drabbit and production of smock frocks. Gurteen sold the textile and clothes wholesale, the marketing being a part of the business that was undertaken by both Stephen and Daniel III.

Whether constrained by an overbearing father, who died in the critical year of 1856, or by under capitalisation and cash flow limitations, Daniel III waited until he was in his forties before he took the necessary steps to get the new mechanisation project underway. Despite the recession of the 1840s and 1850s both partners were conscious of the need for radical change. Daniel Gurteen III had been a partner since 1833, and had 25 years experience of the company and the textile trade. He had seen the impact the large northern textile businesses' pricing policy had on Gurteen's profits. With entrepreneurial zeal Daniel III built the factory and installed the power plant.²⁹⁶

²⁹³ See page 87.

²⁹⁴ *Pigot and Company's Royal... and Commercial Directory...* (London, 1839), pp. 552-3; William White, *History, Gazetteer and Directory of Suffolk...* (Sheffield, 1844), pp. 732-5; William White, *History, Gazetteer and Directory of Suffolk...* (Sheffield, 1855), pp. 798-801.

²⁹⁵ It could have been that Stephen suffered ill health and was not physically fit to run the business. He died the year that the factory was built, 1856, at the age of 54.

²⁹⁶ This building was state of the art for its time and region. The traditional industrial buildings

Although trained as a salesman with limited knowledge of steam driven plants, nevertheless he had the confidence to organise the project himself, with help from the loom manufacturers, W. Scott and Brothers of the Sun Iron Works at Heywood near Manchester and the steam engine builders and boiler makers, Headly and Manning of Cambridge. The venture was probably financed from accrued business profits and partners' private funds.²⁹⁷

Further expansion took place six years later when the Colne Valley and Halstead railway reached Haverhill and trade picked up. From the mid 1860s and for the next twenty years, Daniel III conducted an almost continuous programme of expansion, which was matched by a rise in population of 25 per cent in the 1860s, 22 per cent in the 1870s and 24 per cent in the 1880s. There were additions to the number of drabbet looms in 1867 and 1871. In 1868, to increase smock manufacturing productivity, Daniel III installed hand powered sewing machines, although the smocking and embroidery still had to be produced by outworkers.²⁹⁸ The factory was enlarged in 1872 to make room for even more looms, which brought the number up to 150 and further capacity was added for yarn preparation and cloth finishing.

All these developments indicated that Daniel III built up the firm into an extensive industrial business with the considerable profits being ploughed back into the

of this period were multi-floored like wind and water mills. Gurteen's factory was a single storey structure, lit from the roof using north light trusses. Single storied structures cut down on the double handling of taking the raw material upstairs and bringing the finished product down again.

²⁹⁷ Gillian Holman, *The Survival of a Suffolk Manufacturer Gurteens, 1850-1900*, M.A. thesis (University of Southampton, 1995), p. 45; Schmitz, *The Growth of Big Business in the United States & Western Europe*, p. 50.

²⁹⁸ This is an example of Dauntton's 'flexible specialisation'. See above page 83. These machines were housed in a factory built in the garden of the family home in the High Street, Opposite Chantry Mill.

company.²⁹⁹ By the 1880s smock frocks were going out of fashion, since only older workers were wearing them, but Daniel III found other uses for drabbitt. It was used for military uniforms, pockets and ‘motor cloths’.³⁰⁰ Production of ready made clothes was also expanded. Power driven sewing machines introduced in 1876 were so successful that in 1881 they were housed in a specially constructed building,³⁰¹ reputed to be the second largest in the country.³⁰² Holman believes that Gurteen were originally going to enlarge the loom shops, but the cotton famine due to the American civil war, changed their policy and they put the money into building the machine shop.³⁰³ Another machine Gurteen adopted was the band knife. This piece of equipment, which was developed by Barran of Leeds, was able to cut many layers of cloth at the same time, thus increasing productivity of the cutting out process.³⁰⁴ A new and more powerful steam engine was installed in 1880 to power all the additional looms and sewing machines.³⁰⁵ Holman has pointed out that by concentrating on the middle classes’ need for cheap clothing, the

²⁹⁹ In contrast to the Gurteen example is the experience of Francis Henry Crittall of the metal window company Crittall, whose works were in Braintree. Francis, although running the company in the 1880s, was the junior partner to his brother Richard and a grocer, Arthur Dyer. The senior partners insisted on taking the extensive profits that Francis was making for themselves and this left little resources for Francis to plough back into the firm and the business stagnated. David J. Blake, *Window Vision* (Crittall Windows, Braintree, 1989), p. 12.

³⁰⁰ G. Unwin, ‘Mixed textiles, drabbett, horsehair, coconut fibre and ready made clothing’, in, W. Page (ed.), *The Victoria History of the Counties of England, Suffolk* (London, 1902), p. 275. Drabbitt had a long term future, as a similar textile was woven for the manufacture of overalls, in which the company was to specialise.

³⁰¹ F.D. Unwin, ‘Haverhill’s industrial history’, in, *South West Suffolk Echo* (1st April 1922). Unwin had been one of the managers at Gurteen so had inside knowledge about the company.

³⁰² George Unwin, ‘Mixed textiles, drabbitt, horsehair, coconut fibre and ready made clothing’, p. 276.

³⁰³ G. Holman, *Survival in Suffolk, a History of East Anglia’s Textile and Clothing Industries* (unpublished manuscript, 2006), p. 107.

³⁰⁴ D. Busfield, ‘Tailoring the millions’: the women workers of the Leeds clothing industry, 1880-1914’, in, *Textile History*, 16, no. 1 (1985), p. 79.

³⁰⁵ Sara Payne, *The Gurteens of Haverhill, two Hundred Years of Suffolk Textiles* (Cambridge, 1984), pp. 38-9.

business was able to exploit an expanding market.³⁰⁶ In addition, the real wages of most workers increased due to a decline in commodity prices, thus the lower classes enjoyed improved purchasing power, having money to spend on items such as clothing.³⁰⁷

Like Samuel Courtauld III, Daniel Gurteen III³⁰⁸ showed considerable entrepreneurial skill and boldness in pursuing expansionist policies. He built the business up into a large successful company. He was fortunate with timing as the period between the 1850s and mid 1870s was a reasonably buoyant one in the British economy. Also, the location of the business in a low wage area, with good transport connections were positive factors. It was, however, undoubtedly his leadership, sound policies and ability to obtain financial resources from within the company and the family that were the deciding factors. Daniel Gurteen III, unlike Samuel Courtauld III, instigated a policy of product diversification. He was an opportunist entrepreneur, finding and exploiting gaps in the market.³⁰⁹ The two new major areas of textiles were hair cloth, introduced in 1880 and mat weaving, started in 1885. Hair cloth, a mixture of cotton and horse tail hair, was ideal for stiffening garments and, when crinolines came back into fashion, Gurteen was asked to provide considerable quantities. Because it could only be woven on hand looms, Daniel III used every available space in the factory and set up looms in sheds in the weavers' back gardens to increase production. He was desperately using 'flexible specialisation' and the 'outputting' systems to produce the

³⁰⁶ Holman, *The survival of a Suffolk manufacturer*, p. 59.

³⁰⁷ In the 1890s bread prices dropped by a half and tea, sugar and meat costs declined significantly. Because of this, the buying power of wages between 1875 and 1900 rose about a third. M. Pugh, *State and Society a Political History of Britain 1870-1997* (London, 1999), pp. 45-6.

³⁰⁸ Daniel Gurteen III and Samuel Courtauld III were acquainted.

³⁰⁹ In 1908, for example, Kelly's directory for Suffolk, records such obscure fabrics as cheesecloth, huckaback, crash (coarse linen with a rough surface used for towels) and scrym (an open weave fabric used by gardeners and paper hangers). *Kelly's Directory of Norfolk and Suffolk* (1908), p. 169.

considerable amount required. So much was produced in Haverhill that the town was called the 'crinoline metropolis'.³¹⁰ Mat weaving started after a request by weavers from Sudbury who were out of work due to a strike and from this the weaving of mats from coconut fibres was developed. These could only be woven on hand looms and, reputedly, needed the strength of men. In 1892 a special three storied factory was built, to house the hand looms. Hand weaving of mats continued till the 1990s which showed Gurteen using outmoded practices, but they were a commercial business and would have only continued the process if it was profitable. It was a specialised product and there was still a market for the genuine coconut mat rather than the more usual plastic one. An example of the late working of 'flexible specialisation'.³¹¹

Not all of Daniel Gurteen III's policies were successful. He did not foresee the decline of the smock, having set up his factory for the mass production of drabbet, the cloth from which it was manufactured. However, he was able to find other markets for the textile, which allowed the company to make reasonable profits. While Samuel Courtauld III was making an extensive income over a single product, Daniel Gurteen III was spreading his resources thinly over a number of moderately profitable lines. It is perhaps no coincidence that the two textile products started in the 1880s, hair cloth and coconut matting, could only be manufactured on the less capital intensive hand looms. Nevertheless, both these types of looms were housed within the factory and continued the 'flexible specialisation' method of manufacturing, although business strategy was influenced by financial constraints. There were limits to the finance forthcoming from

³¹⁰ 'The crinoline metropolis, horsehair weaving in Haverhill', in, *Morning Leader*, quoted in *South West Suffolk Echo* (Haverhill, 5 February 1893).

³¹¹ F.D. Unwin 'Haverhill's industrial history'; George Unwin, 'Mixed textiles', p. 274. They Also made mats for circus rings and horseboxes, Payne, *The Gurteens of Haverhill, Two Hundred Years of Suffolk Textiles*, p. 90.

family sources and Gurteen did not venture into raising capital from external sources. Consequently the company remained as a tightly run family business.

Daniel Gurteen III died in 1893, his son Daniel IV a year later. From 1894 to 1918 the extent of the business and its responses to market conditions are difficult to analyse due to lack of primary sources. After Daniel IV's death his successors were his brothers William Gurteen (1839-1913), Jabez Gurteen (1843-1924) and later Daniel IV's son Daniel Maynard Gurteen (1872-1952). It can only be surmised that the difficult trading conditions of the 1890s and 1900s affected the business. The population figures for Haverhill showed a slowing down from 24 per cent growth in the 1880s to just 6 per cent in the 1890s and a decline of 2 per cent in the 1900s. However, there is one set of statistics which show an increase in turnover. The annual amount of stock in the Gurteen's warehouse and mill from 1882 to 1901 is shown in Table 4.2. These are not ideal figures as the amount of stock fluctuated as the textiles were used, and they did not take into account any inflation, but they do give an indication of growth in the long term. The cost of the total stock expanded in the course of twenty years, 1882 to 1901, rose by 38 per cent overall. Not outstanding, but lacking any other statistical evidence, it does indicate a modest average increase in growth.

Table 4.2. Stock from Gurteen warehouse and mill 1882-1901 (£)

	1882	1887	1891	1896	1901*
Warehouse	129,948	132,935	140,928	121,745	123,751
Mill	10,924	18,233	28,822	53,443	70,407
Total	140,872	151,168	169,750	175,188	194,158
Percentage rise		7.3%	12.3%	3.2%	10.8%

Source: Gurteen company archive. Not numbered.

* The 1901 figure was for eleven months. An estimated figure was reached by dividing the eleven months period by eleven and adding this to the total.

Although not of the same dynamic calibre of Daniel Gurteen III, William and Jabez kept the business ticking over, (see appendix 3 for Gurteen family tree). The

period from 1894 to 1914 showed little growth or expansion of the plant and no new product was manufactured. Electricity began to be installed in 1896 and a gas engine fixed in the matting department a year later. In 1909 Gurteen had obtained the rights of the patented power driven Henderson hair looms and thus increased productivity of hair cloth which was exported and won gold medals in exhibitions in Belgium, Holland, France and North America.³¹² Ready made clothing was becoming more acceptable and Gurteen concentrated more of their resources on its manufacture.³¹³ From 1910 to 1912 Gurteen listed the average number of workers in the ready made clothing department, see Table 4.3. This was not a complete list of all Gurteen workers since drabbet and hair cloth weavers, mat makers, workers from other parts of the factory or other outworkers were not enumerated. Not knowing the numbers of these workers it is impossible to verify the figure of 3,000 workers given in the Victoria County History,³¹⁴ which would make Gurteen one of the largest textile employers in the country. Although not as large

³¹² Payne, *The Story of a Family Firm*, p. 12.

³¹³ A subtle change had taken place in the trade directories entries. In Kelly's Directory for 1888, ready made clothing is just tagged on the end of the entry – '*...They also manufacture clothing for home trade and exportation...*', but by 1908, clothing heads the list – '*Makers of all classes of clothing for wholesale, home trade and export. Woollen in juvenile and men corduroys and moles[moleskins], white drill and leggings...*' The 1916 edition also mentions mechanics and engineers overalls, skirt gloves [gauntlets?] and motor mats. *Kelly's Directory of Suffolk* (1888), p. 992; *Kelly's Directory of Suffolk* (1908), p. 169; *Kelly's Directory of Suffolk* (1916).

³¹⁴ George Unwin records 2,000 working in the factory and 1,000 as outworkers. His main source was F.D. Unwin a manager at Gurteen. George Unwin, 'Mixed textiles', p. 276. However, a perusal of the enumerators' returns indicated that this figure may be exaggerated. The numbers counted from these returns do not indicate a number as high as 3,000, even after taking into account outworkers in the surrounding parishes. The percentages of the ages of women working in the readymade clothing department under the age of 29, was 60.5%, compared to women outworkers over the age of 40 at 57 per cent and thus the outworkers were much older than the average in the factory and could have been part time and not recorded in the census. See Busfield, 'Tailoring the millions'; the women workers of the Leeds clothing industry, 1880-1914,' p. 76.

as some of the London or Leeds ready made clothing businesses, the firm, nevertheless, was substantial when compared with its rural location.³¹⁵

Table 4.3. Number of Gurteen's workers in the ready made clothing department 1910 to 1912 (average per annum).

Women factory workers	Women outworkers	Men	Total	Percentage of women compared to men
532	300	240	1,072	78 per cent women 22 per cent men

Source: Gurteen company archive 20/91.

George Unwin described the factory as being 'organised on a thoroughly modern basis'.³¹⁶ It was divided into sections, each supervised by a manager and foreman. George Unwin also maintained that 20,000 garments were made per week and that there was a large export trade. In 1905 the government ordered khaki uniforms and in the First World War placed large contracts for uniforms with the company.³¹⁷

A complete overhaul was made of the partnership in 1917, no doubt as the company faced the prospect of the post war years without the lucrative government contracts. Though new blood was brought in, Gurteen remained a tight knit family company. Jabez Gurteen and his nephew Daniel Maynard Gurteen were the senior partners with the addition of four new members, the sons of Jabez, Frank (1873-1952), Horace (1882-1960) and Conrad (1884-1960), the fourth member being another of Jabez's nephews, Arthur Smart (1867-1956).³¹⁸ The company was not as profitable as Courtauld, but managed to remain a prosperous business up to the present time.

³¹⁵ H. Frazer, *The coming of the mass market* (London, 1981), pp. 175-77. Quoted by Holman, *The Survival of a Suffolk Manufacturer...*, pp. 61-62.

³¹⁶ George Unwin, 'Mixed textiles', p. 276.

³¹⁷ *The story of a Family Firm*, p. 12. In the company's museum is a First World War army Battle dress sample with a sealed label attached to it, stating it to be passed for manufacturing.

³¹⁸ William Gurteen had died in 1913. 'Obituary of Jabez Gurteen', *South West Suffolk Echo*,

Richard Garrett and Sons

By the middle of the nineteenth century, Richard Garrett III was well into his stride, making Richard Garrett and Sons a substantial international company. The engineering firm employed 500 people, an increase of about 12 per cent from the time his father had died, and this expanding workforce indicated a developing business.³¹⁹ By 1850, agriculture in Eastern England had emerged from the days of high grain prices caused by wartime conditions and the protectionism of the corn laws.³²⁰ Progressive farmers and land owners started to look for ways of increasing production and profits in the new machine age.³²¹ The seed drill speeded sowing, the thresher hastened the threshing process, and Richard III concentrated on these two pieces of machinery in order to develop the firm. Garrett remained a company selling almost exclusively to the agricultural sector.

Richard Garrett III also sought growth through diversification into steam engines. It was during the latter half of the nineteenth century that industrialisation in the manufacturing sector had increased at such a pace that there was an extensive demand for all kinds of steam power units. In the 1830s, Richard III developed the expertise and capability of the engineering side of his business and was building complete steam engines. Not only did this expand his business and increased his profits and influence, but it was an extensive venture to master the engineering skills and to

(28 June 1924).

³¹⁹ R.A. Whitehead, *Garretts of Leiston* (London, 1964), p. 11.

³²⁰ The price of grain reached 119.5 shillings a bushel in 1801 and 126.5 shillings in 1812, when the usual price during the first decade of the nineteenth century was 83.9 shillings. Dewey, *'Iron Harvests of the Field'*, p. 3.

³²¹ *Ibid.*, pp. 29-91.

muster manufacturing techniques. In keeping with the agricultural emphasis of the company, most of the engines were used in stationary positions, often in barns, to power the fixed threshers, but they could also drive other machinery.³²² Later, steam engine manufacturers found that they could manufacture cheaper models by specialising in the production of a standard pattern for particular industries and by using parts common to the different types of engines. By concentrating on mass production techniques they could secure substantial markets.³²³ From 1849, Richard III concentrated on producing a portable engine mounted on wheels with shafts, so that it could be towed by horses. It was primarily intended for powering the moveable threshers.

Unlike Samuel Courtauld III and Daniel Gurteen III, Richard Garrett III did not spend all his time on wealth-making and running his business. Like his father and grandfather, he was keenly interested in agriculture and in 1837 assisted the Duke of Richmond and William Shaw in creating the Royal Agricultural Society of England. Besides making influential friends, he was able to use the 'Royal Shows' to showcase his company's wares.³²⁴ Another influential friend and customer was the railway contractor and promoter, Samuel Morton Peto. Peto became the major guarantor of the 1851 Great Exhibition and persuaded Richard III to take on a similar role. This gave Richard even more influential friends and acquaintances³²⁵ and he became a nationally known entrepreneur and engineer.

Richard Garrett III had five sons of whom Richard IV (1829-84), John (born 1831), Henry (born 1841), and Frank (1845-1918) entered the business (see Appendix 3

³²² R.A. Whitehead, *Garrett 200, a Bicentenary History of Garretts of Leiston 1778-1978* (London, 1978), pp. 76-90.

³²³ It was during this period that Richard III built the 'Long Shop', a building dedicated to the manufacture of portable steam engines using an assembly line process. As such it is one of the earliest examples and because of this is a listed building.

³²⁴ Whitehead, *Garrett 200*, p. 18.

³²⁵ *Ibid.*, P. 24.

for Garrett's family tree). In 1855 he retired from the company and went to live in London, leaving his two eldest sons, Richard IV and his brother John, to run the firm. Richard IV, like his father, had responsibility thrust upon him from an early age. At 21 years of age in 1850, he was made works manager. However, left on their own, the two elder brothers could not agree and the relationship deteriorated sufficiently that Richard III felt compelled to return. Eventually John left to start a similar business in Germany.³²⁶ Richard III died in 1866 aged fifty nine and Richard IV became head of the company with his brothers Henry and Frank as his partners, although Henry left the company in 1878. Despite these problems within the Garrett business, the agricultural machinery industry was buoyant during the 1840s to the 1860s and most companies were prospering from extensive growth.

It is not surprising that the years between 1855 and 1866, fuelled by family problems, was a troubled time for the company. From the 1870s Richard IV also had to contend with the serious agricultural depression. This was mainly due to increasing imports of corn which caused grain prices to fall and arable farmers and landowners had fewer resources to spend on expensive machinery.³²⁷ Company sales slumped. The trend was also reflected in the slowing down in the growth of Leiston, where Garrett was by far the largest employer.³²⁸ The two fast growing decades of the 1840s and 1850s (42 per cent and 41 per cent) were followed by near stagnation in the 1860s (1

³²⁶ The arguments were mainly about John not liking to play second fiddle to his elder brother who was just two years older. They both agreed that Germany was a major customer, but disagreed in the way to supply it. John advocated a daughter company set up in that country as away round the high tariffs the Germans were demanding. Richard disagreed and refused to sanction the project. Whitehead, *Garrett 200*, p. 19.

³²⁷ Dewey, *'Iron Harvests of the Fields,'* pp. 79, 92.

³²⁸ The use of census statistics as mirroring the growth of companies can be justified in Leiston's case by the mention in the 1861 census, that the increase in population from 1851 was due to an '...extensive agriculture machine and implement manufactory'. B.P.P. *Census of England and Wales... 1861* (London, 1862), p. 122.

per cent), the 1870s (8 per cent) and the 1880s (7 per cent).³²⁹ It was in these decades that Garrett was to face its worst trading conditions in the period 1850-1914 and, although they continued to make agricultural machinery, exports, mainly to central and eastern Europe, became increasingly critical to Garrett's balance sheet.³³⁰ In the export market there was competition not only from the Americans and the Germans, but also from home grown agricultural machinery manufacturers, all desperately needing export trade. The export trade peaked 1873-74 and by late 1870s was depressed, especially when Germany in 1879 and France in 1881 raised high import tariffs. Ransome's trade cycles peaked in the early 1870s and 1880s when they exported three quarters of their production, but this fell back to half in the trading troughs. In the export boom of the early 1890s they also experienced a buoyant home market. Garrett exported 65 per cent of their main class of agricultural engine, 1858-1913 and up to 90 per cent when the export market was buoyant. Savage of King's Lyne exported 50 per cent and Burrell of Thetford 30 per cent.³³¹

One obvious development was to develop a self propelled portable steam engine and Garrett built a prototype, but Richard IV found a better proposition was to build, under licence, a traction engine, designed by Aveling of Kent. Aveling had the demand for their engine but not the manufacturing capacity. However, by 1881 the market for self propelled engines was slow and Garrett ceased to build these engines for fifteen years.³³²

³²⁹ B.P.P. *Census of England and Wales...* 1861, p. 122; *Irish University Press series of B.P.P. Population 16, 1871* (Shannon, 1970), p. 566; *Accounts and Papers. Population Census of England and Wales 1881*, 48 (1883), p. 362; *Irish University Press Series of B.P.P. Population 21, 1891* (Shannon, 1970).

³³⁰ Whitehead, *Garretts of Leiston*, pp. 90 & 120.

³³¹ Dewey, 'Iron Harvests of the Field,' pp. 94-96.

³³² Whitehead, *Garrett 200*, p. 23.

Although not as successful as his father, Richard IV nevertheless was an able engineer and instigated various improvements in the design of the threshers and steam engines. In 1859 he and James Kerridge, the head of the thresher department, greatly improved this machine, making it the most efficient in the market and were able to increase sales. Thresher and portable steam engine were often sold as a pair and thus sales for a thresher would often include the buying of a steam engine.³³³ Although arguments within the family seemed to be a trait of the Garrett temperament, Richard IV and Frank I were the exception. It helped that they were many years apart in age and that they had different characters. Whitehead describes Richard IV as a John Bull type of Englishman, a throwback to the Regency period. In his younger days he had been a prize-fighter and had a fondness for hunting and shooting, a love of horses, cattle and sheep-breeding and farming. Frank, unlike Richard IV, had been educated at a public school, Rugby, and then at Stuttgart in Germany and was an example of the awakening social conscience of the middle classes. Although not ashamed of being in trade, he remained aloof from his workforce, unlike his brother Richard IV, who was well-liked by the Garrett's workers.³³⁴

After a few years illness, Richard IV died in 1884 and Frank I then ran the business on his own. He had not only to contend with the continuing poor sales in the home market, but also a slackening of Britain's economic growth rates. Improvements were made to the factory and its products. For example, Frank I had a McNeill's timber drying kiln installed in the grounds of the works. This not only reduced the large area required to air dry timber, thus freeing up space for expansion, but reduced the capital

³³³ The advantage of the threshing machine was shown by statistics recorded in *The Times* 3 January 1851. Hand threshing cost three shillings and sixpence a quarter, by horse Powered thresher one shilling and seven pence, but by steam powered thresher, seven pence halfpenny. Quoted in Whitehead, *Garretts of Leiston*, p. 15.

³³⁴ Whitehead, *Garretts of Leiston*, pp. 19-21.

tied up in large timber stocks. He also devised a corrugated crown fire box that was cheaper to construct and he introduced steel for the boilers. Although this latter necessitated expensive new machinery, it enabled the use of higher steam pressure and brought about more energy efficient ‘compounding’ which, by using the same amount of steam to power two cylinders, reduced fuel consumption.³³⁵

Table 4.4. The number of Garrett’s workforce from 1888-1918

1888	398		1899	702		1909	1,045
1889	424		1900	732		1910	1,145
1890	449		1901	680		1911	1,265
1891	495		1902	707		1912	1,229
1892	550		1903	819		1913	1,335
1893	588		1904	838		1914	1,227
1894	584		1905	863		1915	1,182
1895	571		1906	889		1916	1,729
1896	537		1907	1,006		1917	2,120
1897	582		1908	1,021		1918	1,848
1898	648						

Source: HC 30/A4/6-12 Suffolk Record Office, Ipswich

From the late 1880s the company started to expand. The number of workmen increased significantly (see table 4.4). From the 500 employed in Richard III’s time, the number reached 584 in April 1870, but had declined to 413 by October of that year as the Franco-Prussian war affected Garrett’s export trade.³³⁶ It had dropped further to 398 by September 1888, but then recovered and continued to grow until 1918, where it stood at 1,848.³³⁷ Thus, in the decade 1888-98 there was a 63 per cent increase, from 1898-1908 a 58 per cent increase, and from 1908-18 a further increase of 81 per cent.³³⁸ Not surprisingly for the town, this growth is also reflected in the population figures of

³³⁵ Garrett was a pioneer in the use of this innovation. Whitehead, *Garrett 200*, p. 69.

³³⁶ Ibid., p. 44.

³³⁷ An exceptionally high figure, but Garrett was involved in a varied amount of war work.

³³⁸ These figures do not include salaried staff as they are only recorded from 1908-16. The average number of these would inflate the figures by about 3 per cent.

Leiston. In the 1890s there was an increase of 25 per cent and, during the 1900s, a 34 per cent rise.³³⁹

Table 4.5. Total number of portable engines and self propelled engines constructed by Garrett 1903-18, compared to number of the workforce.

	Portables	Self propelled	Total	Workforce
1903	407	28	435	819
1904	366	41	407	838
1905	318	51	369	863
1906	382	64	446	889
1907	460	62	522	1,006
1908	511	85	596	1,021
1909	470	105	575	1,045
1910	537	87	624	1,145
1911	518	103	621	1,265
1912	468	144	612	1,229
1913	504	139	643	1,335
1914	312	145	457	1,227
1915	17	139	156	1,182
1916	30	87	117	1,729
1917	30	122	152	2,120
1918	29	134	163	1,848

Source: Whitehead, *Garretts of Leiston*, appendix 1. HC 30/A4/6-12 Suffolk Record Office, Ipswich. 'Self propelled' includes all traction engines, steam tractors and steam wagons.

The business, therefore, in these years was extremely buoyant, and this may have been due to Frank Garrett I's, son Frank II. When he started to work for the company at the end of the nineteenth century, he came to the conclusion that the product range was too narrow and there was potential for the business to diversify.³⁴⁰ For example, the weight of one man operated traction engines allowed on public roads was reduced by legislation in 1896 and 1903. Garrett saw the need and built lighter engines and thus was one of the pioneers of the fledgling road haulage industry. From this steam powered lorries developed. They also built steam rollers, which were exported, and large fixed self contained power plants which used compounding and had

³³⁹ B.P.P. *Accounts and Papers... 1881*, p. 362; *Irish University Press Series of B.P.P... 1891*, p. 390; *Accounts and Paper*, (December, 1902), p. 34.

³⁴⁰ Whitehead, *Garrett 200*, p. 81.

condensing apparatus which was more economical with the use of water. These moves were being made to reduce the reliance on the agriculture sector.³⁴¹ Thus a more dynamic business strategy of finding new profitable products developed.

The number of steam engines Garrett manufactured between 1903 to 1918 is shown in table 4.5. For the two decades between 1858 and 1878 few self propelled engines³⁴² were produced and for the following decade only 51 engines of this type were constructed. There followed almost twenty years when virtually no self propelled engines were built. It was only in the twentieth century that the numbers started to increase, from four in 1898 to 85 in 1908, increasing to 139 by the start of the First World War. During the war, apart from 1916, these numbers were largely maintained, with a total of 1,536 of this type of engine, built between 1903-18, or an average of almost a 100 a year. This certainly indicated that in the early years of the twentieth century, up to and including the war years, Garrett devoted a considerable portion of their manufacturing to self propelled steam engines. The workforce certainly matched the increasing level of production. However, sales of portable engines far outpaced self propelled vehicles from 1903 to 1914, by more than five to one. The low sales of portables during the war years would indicate that a large proportion had previously been exported and the war had drastically reduced these sales.

With the increase of production, moves were made to streamline the management of the business. Frank E. Walker was appointed as quality controller, whose duties were not only to test the new types of Garrett's steam engines scientifically, but also to carry out investigations into the failings of various products. One of his most important achievements was to standardise the parts used in the works.

³⁴¹ Ibid., p. 87.

³⁴² It must be remembered that not only traction engines, but also steam wagons were regarded as self propelled. Whitehead, *Garretts of Leiston*, Appendix 1.

The system had grown up that each type of engine was designed from scratch using parts unique to itself, and considerable numbers of spare parts were necessary to service and repair these engines. Thus standardisation was a management strategy and the company encouraged him in this, appointing a full time ‘standardiser’ to accomplish this work.³⁴³

The works, an island surrounded by roads, were unable to expand and became cramped, which reduced the efficiency of the plant. In 1913 a fire occurred in some buildings housing the thresher department on the east side of the site. This was extinguished, but several buildings were destroyed. The opportunity was taken to plan for new buildings for more efficient working. Another move was made to enlarge the works on a separate site near the station with larger buildings and more efficient working conditions. A start was made, but was curtailed by the First World War, although more workshops were built during the war to house Garrett’s increasing war work production³⁴⁴

The quantity of steam engines being exported before the war amounted to around 57 to 75 per cent of total sales. These export figures had slowed down before the outbreak of war to 52 per cent in 1912, reduced to 43 per cent in 1913 and 30 per cent in 1914. Thus Garrett was losing vital export orders before the interruption of the war, which was to become a major problem after the hostilities had ceased. The numbers dropped to 6 per cent in 1915, but, by 1917 and 1918, government contracts³⁴⁵ made up the number to 38 per cent of the 122 built in 1917. This increased to 63 per cent of 134

³⁴³ Whitehead, *Garrett 200*, p. 96.

³⁴⁴ *Ibid.*, pp. 90-97.

³⁴⁵ The government needed traction engines for the restoration of the devastated French roads. Whitehead, *Garrett 200*, p. 105.

constructed in 1918.³⁴⁶ During the war Garrett was also engaged in munitions, wagons, steam plants and even aircraft production.³⁴⁷

Frank Garrett II, like his uncle Richard IV and his son Stephen, had joined the Local Defence Force which by the time of the First World War had become the Territorial Army. He rose to the rank of Lieutenant Colonel and in 1914 was posted to France with his Battalion, the 4th Suffolks. Many of his men were Garrett employees who he would have known, and in the weeks that followed he was to see many of them killed. This broke his health in February 1915 and he was retired. His son, Captain Stephen Garrett, was killed just a month later.

During the war years Frank I retired from the business and died in 1918. Frank II spent his time on manufacturing munitions. Their shortage and quality had been a major factor in the deaths of soldiers under his command. Stephen was dead and Alfred was under considerable pressure running the company almost single handed with shortages of men and materials. Amongst all these family problems and tragedies, the business itself suffered a major catastrophe when, in 1918, the new communist government in Russia refused to pay for goods Garrett had already supplied to the former regime. Overnight the company lost £200,000.³⁴⁸ There was much indecision and a lack of leadership in the business. The question hanging over the direction of the company, after the war, was whether to continue with steam engines in a declining market, or to enter into production of the internal combustion engine or electrical motor vehicles. If it were to be the latter, then the default on Russian debts meant there was little money for research and development. In the end Frank II took the company into an amalgamation of fourteen similar agricultural engineering companies, given the name of

³⁴⁶ Whitehead, *Garretts of Leiston*, appendix 1.

³⁴⁷ Ibid., pp. 187-8.

³⁴⁸ Whitehead, *Garrett 200*, pp. 100-105.

Agricultural General Engineers. Unfortunately this company had poor management structures and had neither the skill nor expertise to develop far sighted strategies or directions for the business as a whole. Each individual company followed its own policies, and in 1932 A.G.E. went into the hands of the receivers.³⁴⁹

R. Hunt and Company Limited

Besides being the youngest of the four case study companies, R. Hunt and Company was the only business which had a single entrepreneur, Reuben Hunt, to cover almost the entire period of this study. Robert Hunt, the founder of the company, died in 1855, his eldest son in 1863 and the next eldest in 1867 (see Appendix 3 for Hunt's family tree). This left Reuben (1836 to 1927) in sole charge of a general engineering company selling to the local agricultural community, but which was in a poor financial condition.³⁵⁰ It was due to Reuben's entrepreneurial ability that the company developed into an international industrial business. Although Robert, the founder of the company, was probably a millwright, his sons concentrated on the construction of agricultural implements, including cylinder reaping machines, horse hoes, land rollers and dressing machines. Many of these were to Hunt's own designs, but some were constructed to the patterns of others, the company also being agents for other manufacturers. This gave the business an extensive range and they manufactured standard items, mainly in metal, which required foundry-based skills and faculties. However, even before Reuben took sole charge, the company had taken the decision to show their products in the Great

³⁴⁹ Ibid., pp. 110-41

³⁵⁰ In 1863 Reuben married his first wife and acquired a dowry of a thousand pounds which was to be useful at a time the business was heading towards bankruptcy.
P.J. Burton-Hopkins, *Hunt for Machinery, the Rise, Success and Demise of R. Hunt and Company Limited of Earls Colne 1825-1988* (Halstead, 1995), pp. 36 & 73.

Exhibition of 1851, where they won the first of many medals for agricultural implements. They created and relied on a reputation for quality and reliability, and by showing their wares at other agricultural shows, their sales increased. The small ironworks was expanded in 1833 and again in the 1860s when it became known as the ‘Atlas Works’.³⁵¹

Reuben Hunt saw the need for increasing profits by expanding production and sales. In 1870 he bought, for £2,000, the patents, patterns and goodwill of Biddel’s animal food preparation machinery. It was an early move towards diversification and his uncle, William Hunt, was one of the directors of Ransome, Sims and Head of Ipswich, who owned Biddel.³⁵² This was a far sighted move on the part of Reuben and a successful business strategy, as the agricultural depression that greatly affected the farming industry from the 1870s, started with the reduction of corn prices, due to the importation of foreign grain. Thus domestic sales of agricultural implements slowed, while the markets for livestock remained buoyant and there was a need for machinery in the preparation of animal feeds, as English agriculture adjusted to the altered tune of trade between cereals and livestock farming. Also the Biddel’s business was a profitable one with an existing market which included a number of export customers, and its manager, who was part of the deal, was a successful businessman.³⁵³ To help finance the expansion of the works in 1872, Reuben was obliged to take on a financial partner, James Tawell, a local man.

³⁵¹ Ibid., pp. 9-10. Dewey considered the 1840s as a flourishing time for agricultural machinery manufacturers firms, as well as the two decades after the 1851 exhibition, Dewey, *‘Iron Harvests of the Field’*, pp. 29 and 50.

³⁵² Burton-Hopkins, *Hunt for machinery*, p. 11.

³⁵³ This was Henry Massingham, who was so successful that he stayed at Hunt for the rest of his life and became the only non-family member to be appointed a director of the company.

The other major diversification away from the main agricultural business occurred in 1883, when the manufacture of power transmission components was started. These were the elements that made up the shafting, coupling and pulleys needed in most factories to take the transmission from the single power source, usually a steam engine, to each individual machine. This was a shrewd move on the part of Reuben as the company had the foundry capacity and engineering skills to manufacture these components and, more importantly, this part of the business was not connected with the agriculture sector. Power transmissions by 1909 amounted to 50 per cent of total sales, rising to 66 per cent by 1917.³⁵⁴ That the company had become financially successful is shown by the fact that Reuben dissolved the Tawell partnership in 1885, just two years after the company started to manufacture power transmissions. The business must have had the financial resources not only to buy Tawell's shares, but also to develop the plant and machinery without the need for extra finance. However, Reuben was also a man who liked to be in complete control, it was not in his nature to share leadership longer than was necessary.³⁵⁵

Table 4.6. R. Hunt and Company wage costs 1901-14

	Wages £			Wages £
1901	13,761		1908	15,842
1902	14,887		1909	15,842
1903	16,510		1910	17,678
1904	15,397		1911	18,213
1905	15,001		1912	17,858
1906	16,101		1913	17,678

³⁵⁴ See below Table 4.7.

³⁵⁵ The same could be said of Samuel Courtauld III. He had to have partners, but was able to dominate them by sheer force of character. Certainly the Garrett brothers Richard IV and John were both trying to rule their companies. Wanting to be in control manifested itself in other ways. Although Reuben allowed his eldest son, Harry, to become a director, he did not extent the same privilege to Frank or Arthur, his next eldest sons, or to his brother Zach, who was the works manager and who was not even allowed to hold company shares. Burton-Hopkins, *Hunt for machinery*, pp. 41, 47 and 54.

1907	16,575		1914	15,267*
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Source: Museum of Rural Life, Reading, T.R. HNT 250.

*The number of hands prior to the First World War in 1914 was 336.

In the early 1880s roller mills began to be used for grinding grain. Reuben Hunt diversified into this sector with his own version, first shown at the Royal Agricultural Show held at Doncaster in 1891. Diversification was to be one of Reuben's major business strategies to combat the ever growing recession in home sales. The company also developed a market for simple agricultural implements, used mainly in the underdeveloped farming areas of Egypt.³⁵⁶ Reuben had observed the need for these after a visit there in 1887 and this is an example of an entrepreneur identifying and responding to a market opportunity, and is in direct contrast to general criticisms often directed at British exporters at this time.³⁵⁷

In 1898, the company employed 290 men and in 1900 the works covered five acres. The business became a private limited liability company in 1889 and a public limited liability company ten years later. In addition to a company that was responsive to market opportunities and capital requirements there appears to have been a simple management structure. At the head was Reuben with his son Harry as a junior director, but who died in 1909, aged 40. Harry and his brother Frank were managers and the company was divided into separate departments each with its own manager, answerable directly to Reuben.³⁵⁸

Table 4.7. R. Hunt and Company sales of European, London and Regional markets 1901-09. Sales in £s and decade changes in per cent.

	European Markets	London Markets	Regional Markets	Total all Markets	Balance sheets
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³⁵⁶ Ibid., pp. 77-8 and 142.

³⁵⁷ Thompson and Magee, 'A soft touch? British industry, empire markets,' p. 689.

³⁵⁸ Hunt was also building villa type properties for salaried staff and perhaps skilled workers which indicated a number of managers being employed. See page 162 below.

	£s & %	£s & %	£s & %	£s & %	turnover
1901	7,076	19,180	7,777	34,033	98,384
1902	7,268 +2.7	19,157 -0.1	8,026 +3.2	34,451 +1.2	72,980 -25.8
1903	7,817 +7.5	18,654 -2.6	7,614 -5.1	34,085 -1.1	78,825 +8.2
1904	6,062 -22.4	17,639 -5.4	7,813 +2.6	31,514 -7.5	80,833 +2.5
1905	6,025 -0.6	17,840 +1.1	7,202 -7.8	31,067 -1.4	73,598 -8.9
1906	6,624 +9.9	21,559 +22.3	8,811 +22.3	36,994 +19.1	76,793 +4.3
1907	7,241 +9.3	22,427 +4.0	9,901 +12.4	39,569 +7.0	85,542 +11.4
1908	8,235 +13.7	18,406 -17.9	8,128 -17.9	34,769 -12.1	87,148 +1.9
1909	9,504 +15.4	16,997 -7.6	8,297 +2.1	34,798 +0.1	81,353 -6.6

Source: Museum of English Rural Life, Reading. T.R. HNT 208-16.

There were eighteen European countries listed in the archives, but only seven had appreciable markets whose total amounted to over 90 per cent of total sales. Holland was by far the best customer with 42 per cent of the total in 1906. France and Germany (both on 16 per cent) and Belgium (14 per cent) were the only other countries to make double percentage figures. The regions consisted of Norfolk, Suffolk, Essex, Cornwall, Devon, Dorset, Glamorgan, Gloucestershire, Pembroke, Somerset and Wiltshire. It also included the city of Birmingham.

Because there is no record of the number of employees in the company's surviving archive, the wages bill must be relied upon to show the growth of the business, table 4.6. Although not ideal, as it takes no account of increases in wages due to inflation, particularly during the war period, it does give some indication of the increase and decrease in the numbers employed.³⁵⁹ In the periods 1901-04, 1905-08 and 1908-13, the first and last periods had almost the same growth of 11.9 per cent and 11.6 per cent respectively, but the middle period 1906-08 only saw a growth of just under 3 per cent, which indicates difficult trading conditions. The total growth in the number of employees between 1901-11 was just under a third. These numbers, however, are not reflected in the census figures: the 1900s saw just a 6 per cent rise in population.

³⁵⁹ The 1902 Kelly's *Directory* records the workforce at about 300, but this was probably recorded the year before. If the wage figure for 1901 is divided by 300 it gives the sum of £46, which is a crude yearly average wage for each of Hunt's employees. Hunt made a census of their workforce in 1914 which amounted to 336. If the same wages were being paid, then the total wage bill would be £15,456, virtually the same as the wage bill for 1914 of £15,267. This gives confidence in using the wage bill in this way. However, because of inflation, it would be dangerous to come to the same conclusion with the war year figures. Kelly's *Directory of Essex* (London, 1902).

According to the census, the village of Earls Colne was stagnating throughout most of the nineteenth century. In 1821, for example, the population of Earls Colne was 30 per cent higher than Leiston, but by 1851 the roles were reversed, and at the 1911 census, Leiston had 133 per cent more inhabitants than Earls Colne. Between 1811 and 1911 Leiston's growth was fourfold, Earls Colne just three quarters. Hunt's workforce made up just 25 per cent of the working population, compared to the 40 to 49 per cent of the other cases study towns. Thus any increase of Hunt's workforce would not have a dramatic effect on the population figures.³⁶⁰

Table 4.8. R. Hunt and company sales of agricultural machinery and power transmissions, home and export markets 1909-13.
Sales in £s and decade changes in per cent.

	1 Agricultural machinery home	2 Agricultural machinery export	3 Transmissions Home	4 Transmissions Export	Total 1 to 4		Balance Sheets Turnover	
	£	£	£	£	£	%	£	%
1909	8,488	19,699	31,013	10,844	70,044		81,353	
1910	7,467	23,417	31,394	11,358	73,636	+5.1	83,810	+3.0
1911	9,079	26,137	37,312	16,109	88,637	+20.4	98,253	+17.2
1912	8,698	26,737	37,838	17,045	90,318	+1.2	102,094	+3.9
1913	8,659	24,639	39,260	14,507	87,065	-3.6	99,961	-2.1

Source: Museum of English Rural Life, Reading. T.R. HNT 208-16

From the formation of Hunt into a limited liability company in 1899, output figures survived. The sales of Hunt's European, London and regional markets from 1901-09, compared to the turnover figures as recorded in the company balance sheets, are shown in Table 4.7. Sales of agricultural machinery and transmission components

³⁶⁰ B.P.P. *Abstracts of Population Returns for 1811*, pp. 102; *Populations viz Enumeration... 1821*, pp. 97; *Abstracts of Answers and Returns* (1831), pp. 188; *Irish University Press series of B.P.P.*, (1841), pp. 201; *Irish University Press series of B.P.P.* (1851), pp. 636; *Census of England and Wales*, (1861), pp. 40; *Irish University Press series Of B.P.P.* (1871), pp. 315; *Accounts and Papers*, (1883), pp. 144; *Irish University Press series of B.P.P.* 1891, pp. 147; *Accounts and Papers*, (1902), pp. 29.

have been compiled in both the home and export markets, 1909-13, and are shown in Table 4.8. It is clear from table 4.7 that the home and European markets made up, on average, only 43 per cent of the total turnover figures recorded in the balance sheets and there must have been a large amount of other sales whose records did not survive. The numbers in Table 4.8 were more accurate as they made up 87 per cent of the company's turnover. These unrecorded sales have to be borne in mind as they could distort the conclusions.

Growth of the business can be judged by comparing the turnover figures (in the balance sheets) with sales in the three markets 1901-09 (Table 4.7) and also the agricultural machinery and transmissions 1909-1913 (Table 4.8). From 1901 to 1909 sales increased just 2.2 per cent on the total of all markets. But there was a wide variation between the London market with a fall in sales of 11.4 per cent, and the European market which showed an increase of 34.3 per cent. The turnover in the balance sheets had also decreased between 1901 and 1909 by 17.3 per cent. This indicated that the sales figures from the unknown part of the business must have been in decline. Turning to the more extensive figures for agricultural machinery and power transmissions, 1909-13, total sales grew 24.3 per cent which compares reasonably well with the 22.9 per cent of turnover. Again there is wide variation between the four sectors, the worst being, as would be expected, the home market for agricultural machinery at just a 2 per cent increase. Export sales of this sector were up by a quarter and transmission was even higher at 26.1 per cent growth for the home market and a third higher in the export trade.

These statistics taken together (Tables 4.7 and 4.8) confirm that, as with other manufacturing companies, Hunt suffered poor trading conditions at the time of the downturn in the British economy. In the early 1890s some of the employees were put

on short time. However, towards the end of the 1900s the business was returning to more prosperous times and the number of employees had risen to about 300.³⁶¹ The figures for the next few years showed a healthy rise in sales, particularly in the home sales of transmission and the export trade generally.³⁶² In fact, due to transmission, home sales were between 52 and 56 per cent higher than the exports figures. Also the 1913 total of all markets indicate that like Garrett, Hunt was losing export sales before the First World War.

During the First World War, Hunt experienced difficult trading conditions for most of its products, export sales suffering the most. Between 1914 and 1917, power transmissions sales were down a quarter and agricultural implements by a third. Home implement sales managed just a 4.6 per cent increase, which in real terms, taking into account high inflation, would at best be stagnating. The only bright spot was home sales of transmissions which was up by 45 per cent.³⁶³ Taking the sector as a whole, growth was just a modest 8.6 per cent. In the same period, turnover, as shown on the balance sheets, increased 10.1 per cent. There is evidence that Hunt was manufacturing munitions but as the known total sales amounted to about 84 per cent of the turnover, armaments production, according to these figures, could not have amounted to much.³⁶⁴

All through this period, Reuben Hunt has been shown to be a shrewd and canny entrepreneur. The diversification into animal food preparation equipment, power transmissions, roller mills and simple agricultural implements in underdeveloped

³⁶¹ *Kelly's Directory of Essex* (London, 1902).

³⁶² These figures bear out Dewey's comments about how buoyant the agricultural machinery manufacturers exports were and how unfair the criticism about British exports in general, Dewey, *'Iron Harvests of the Field'*, p. 87.

³⁶³ Museum of English Rural Life, Reading, T.R. HNT. pp. 208-16.

³⁶⁴ Reuben Hunt, in 1916, claimed at the local tribunal (of which he was a member) that over 75 per cent of his employees worked on war work. Unless the making of power transmissions was under government contract, there seems to be a contradiction here.

countries, showed him picking profitable products. The need for major export lines to counter the falling agricultural home markets was paramount. This started with the purchase of the Biddle's business, which had export trade begun by Massingham. Reuben found that he could use Massingham's agents for exporting other products of his business. To keep abreast of foreign markets Reuben went on frequent trips abroad, sometimes with his son Harry.³⁶⁵ Besides exporting to Europe and other continental countries, he was also trading with the British Empire, though not in any extensive way.

Hunt was not a large company and with Reuben's determination that he was going to be in sole charge, no financial partners, apart from Tawell, were brought in to increase the capitalisation and scope of the business. There is no evidence that the company acquired other businesses, neither was there any attempt by other companies to take over the firm. It remained a family business with Reuben holding a large majority of the shares. The firm remained in the low wage area and little modernisation took place after the First World War. Moreover, Reuben's entrepreneurial ability dimmed as he got older.³⁶⁶

Summary

All four case study companies experienced the same periods of prosperity and growth, and of poor trading conditions, recession and recovery, but at different times.³⁶⁷ Courtaulds were trading particularly well under Samuel Courtauld III in the 1860s and 1870s, but suffered badly in the late 1880s and early 1900s. With the arrival of Tetley,

³⁶⁵ Thompson and Magee, 'A soft touch?' pp. 699-700.

³⁶⁶ Burton-Hopkins, *Hunt for Machinery*, p. 73-80.

³⁶⁷ That the two dissimilar industries, textiles and agricultural machinery manufactories should experience this at more or less at the same time is evidence that it was an all embracing phenomena that effected the whole country, but in varying degrees.

however, the business was soon back on its feet and was making large profits. The other textile company, Gurteen, continuously expanded in the 1860s to the 1880s, under the leadership of Daniel Gurteen III. Unfortunately the statistics are not available to analyse how the business fared during the next couple of decades with the brothers William and Jabez Gurteen in charge, but the firm survived without too much job shedding or shrinking of the business. The engineering companies experienced slightly different timings. Garrett, under Richard Garrett III, had good trading years from the 1840s and 1850s, but the 1870s and 1880s, when Richard Garrett IV was in charge, were a particularly difficult time. Reuben Hunt was able to rescue a failing company when he took over in 1867 and, with the addition of the Biddel business, was able to profit from rising sales. Again, in 1883, with power transmission, he was able to operate away from the agricultural sector and his business was able to withstand the generally difficult trading conditions of the 1890s and early 1900s. Thus all the companies were able to take advantage of the booming British economy of the middle years of the nineteenth century and also to survive the poor trading conditions of the late nineteenth and early twentieth centuries, and profit from the less hostile economic climate leading up to 1914.³⁶⁸ That these trading conditions affected the four companies at different times, reflects, the individualistic nature of the businesses and their products. These companies, as with most other similar businesses in the country, were different. They were of different sizes, manufacturing different ranges of products, using different business strategies and policies and the character of their entrepreneurs were different. That they enjoyed prosperous times and periods of recession at around the same time is

³⁶⁸ Coinciding with the boom and recession periods of the rest of the country. R.C. Floud, 'Britain 1860-1914: a survey', in, Floud and McCloskey, *The Economic History of Britain since 1700*, pp. 1-4; A.G. Ford, 'The trade cycle in Britain 1860-1914', in, Floud and McCloskey, *Economic History of Britain since 1700*.

probably due to the importance of the state of the British economy and its hold on British manufacturing industry.

The calibre of the entrepreneurs was of a variable nature. Samuel Courtauld III, Daniel Gurteen III, Richard Garrett III and Reuben Hunt built their businesses up into large industrial concerns. But, apart from George Courtauld III,³⁶⁹ the other businessmen, William and Jabez Gurteen, Richard Garrett IV and the Frank Garretts I and II, could be regarded as leaders of the second division of entrepreneurs of their firms. This is because during the years they were in control, the companies failed to reach the same profitability. However, they were operating in a very different trading climate. It was straight forward if there was enough skill, luck and incentive to build up a company in times of good trading conditions, but when these conditions were not present, it took different qualities to survive. If a company was making a profit, however small, increased turnover would increase prosperity. Entrepreneurs, in times of boom, would want to expand their businesses and thus profits, using resources gained from previous years, or bringing in moneyed partners. But if the firm was making a loss, however small, the greater the turnover the greater the loss. The recession was something the entrepreneurs had no control over, it reduced their sales and often increased their raw material costs. These businessmen needed clear thinking, to pursue reasoned decisions. They needed a rational overhaul of their business methods and ruthlessly discarded unprofitable ventures, but above all they needed to cut costs and reduce expenditure. Entrepreneurs, who successfully steered their companies through recessions, had a better understanding of their businesses and trading capabilities, which

³⁶⁹ It is ironic that because George Courtauld III withdrew from his responsibilities as chairman of the company, Henry Tetley was able to gain power and influence. Tetley was given free rein to push through the development of viscose manufacture at a time when it was unpopular with the rest of the Board, but without interference from the head of the business, and thus Tetley turned Courtauld into a large and prosperous company.

made them much more skilful and effective businessmen. They were able to bring their companies out of recession to a position of reasonable financial viability, ready to profit from an improving economy. The one major point that spurred them on was the necessity that the family company must survive at all costs to be handed on to younger family members. The business was the family's inheritance.

It was also this point that gave these companies such longevity. Courtaulds with its viscose operation in Coventry and Pennsylvania and its policy of buying up other textile companies, created one of the largest and most complex businesses in this country. However, even with the outsider Tetley in charge, it remained a firmly controlled family concern. The Gurteen company was passed from father to son through four generations to William and Jabez Gurteen, who managed to bring the business successfully through the recession of the 1890s and 1900s. They did not diversify into new ventures but were able to hand over a fairly prosperous business, the only one of the four case study companies that still survives as a family concern, and they did so by keeping the business firmly in the hands of immediate family members. The Garrett family had unfortunate argumentative traits, not helped by jealousies amongst siblings. They suffered personal and business traumas during the First World War. Frank Garrett II's decision to take the company into the Agriculture General Engineering conglomerate was an inappropriate one and led directly to the loss of the family business in the 1930s. But this was just a single, although critical, decision that Frank II made and a judgement of his entrepreneurial ability must rest with his reign taken as a whole, which was generally productive with several innovatory ideas.³⁷⁰ Reuben Hunt's two families lived together with jealousies, arguments and disputes which lasted into

³⁷⁰ For example Frank Garrett II had convinced his father on the desirability of diversifying into small traction engines for road haulage, which, with the steam wagon, gave Garrett another market for its products. Whitehead, *Garrett 200*, p. 81.

later life. Reuben himself, with an obsession for being in sole charge, did not help towards an effective transition of power at his death. There was no clear leader waiting in the wings, neither did he create a dynasty as the other case study families had done. But although his entrepreneurial energy had been dimmed by age he was able to pass on a viable company to his sons in the late 1920s.

The boom years of the third quarter of the nineteenth century turned the four case study companies into extensive and often international firms. Not only were they mechanised with the use of extensive machinery, but they increasingly needed new systems of management, some quite sophisticated, for the effective control of their businesses. The engineering companies, especially Garrett, needed designers and drawing office teams and with the other companies, sales office staff were required.³⁷¹ Courtauld was the largest of the four and evolved into a complex company. Samuel Courtauld III from forming the company in the 1820s, followed a policy of manufacturing in several locations with factories in Braintree, Bocking and Halstead, and later at Chelmsford and Earls Colne. Each of these factories contained power driven machinery and each had their own management structure. The other companies were not so large, but as their works grew, they devised simple systems of dividing their business into separate departments run by a manager or foreman.³⁷² In the textile companies this may have evolved from the introduction of 'flexible specialisation', and the 'putting out' system, which required few managers. Gurteen, for example, installed hand driven sewing machines into a building behind the family home in Haverhill's

³⁷¹ Whitehead, *Garrett 200*, pp. 75-78.

³⁷² The change of management from single proprietor or partnerships to private and public limited liability companies, indicated that the business needed a more sophisticated form of management, besides reducing the financial risk to partners/directors. Hunt was incorporated into a public liability company in 1889, Courtauld in 1891, Garrett in 1897. But Gurteen, perhaps with its financial backing, was not formed into a limited liability company until 1929.

High Street in 1863 for the manufacturing of smocks, even though the smocking and embroidery were still being undertaken by the 'putting out' system. In the ready made clothing industry much use was made of these handicraft methods. Despite the introduction of sewing machines, which certainly speeded up sewing, the major tasks in the manufacturing of clothing required hand operated tools. This contrasted to the engineering companies, who had little use for handicrafts work and 'flexible specialisation' was little used. The assembly of their products used hand labour, but could be quite complex and needed the strength of several men. However, Richard Garrett III was impressed by the American revolver company Colt's exhibit at the 1851 Great Exhibition. Colt had made the components of his guns interchangeable and their assembly was undertaken by the 'flexible specialisation' system using unskilled labour. Richard Garrett III tried to emulate this system for the assembly of his products by building the Long Shop. However this was only half hearted as standardisation, a major component of Colt's method, was not accomplished at Garrett till 1910, 44 years after Richard III's death.³⁷³

All the four case study companies were affected by the cyclical fluctuations in the British economy during the late nineteenth and early twentieth centuries. The two engineering companies used exporting as an answer to their poor home sales figures and it became critical for their survival, although there were difficulties of trading with countries erecting high tariffs against importing companies. Reuben Hunt became personally involved with overseas agents and spent time and money to make regular trips to keep in touch with them. Garrett, the larger of the two engineering companies and producing larger products, exported mainly to Europe and particularly to the eastern part. The business also had close ties with Germany. They employed Germans as

³⁷³ Whitehead, *Garrett 200*, p. 96.

designers and managers and Frank I worked for German engineering businesses before joining the company at Leiston. Thus they were in close touch with their German markets. Although exporting to the British Empire might be considered a better option, there is little evidence that the four case study towns carried this out in any systematic way. The markets were perhaps too far away, volatile and not large enough for full time agents.³⁷⁴ There is little evidence to show how much exporting Courtaulds undertook during the time Samuel was in charge, but in 1893 almost a third of crape production was, reportedly, exported, a quarter going to France.³⁷⁵ However, the crape industry was in rapid decline in this period, with viscose becoming Courtauld's primary business. As the company held only the British rights to the process there was little exporting except to the American Viscose Company where that firm could not meet the high demand for the product in the United States. Exporting could be a dangerous business. The prime example was Garrett's loss of £200,000 due to non-payment by the emerging Soviet Union.

In the later nineteenth and early twentieth centuries, the entrepreneurs from the four case study companies, by and large, successfully negotiated the difficult trading conditions of the period. While their predecessors experienced exciting times building up family businesses into large industrialised companies, their successors had the equally pleasing experience of creating communities within their towns for their workers to live what was hoped would be happy, healthy and contented lives. The next chapter will turn away from entrepreneurs as successful businessmen to entrepreneurs as creators of successful industrial communities.

³⁷⁴ Thomas and Magee, 'A soft touch,'

³⁷⁵ Coleman, *Courtaulds an Economic and Social History*, p. 140.

CHAPTER FIVE

ENTREPRENEURS AND THEIR COMMUNITIES 1850-1914

Introduction

By 1850, the case study companies had developed into reasonably sized industrial concerns, and their communities were largely rural in character with few urban amenities. Local political control was still with land owning elites through the institution of the vestry and transport links still largely remained at the pace of the horse. In the next fifty to sixty years these communities were to change radically, often by dramatic growth, and also by successfully challenging the power of the local oligarchies. Urbanisation began its evolutionary role in contesting paternalistic attitudes. From education to burial, the townspeople found that their lives were being controlled by local institutions and, through these, by state intervention.³⁷⁶ Public initiatives included the instigation of burial boards, school boards, local boards of health and urban district councils. Improvements were made in the paving and lighting of the towns' streets, the general environment, and the education of the inhabitants' children and the control of crime. Thus, there were internal and external pressures and stresses in what had been reasonably contented communities.³⁷⁷ Market forces effected the sale of the

³⁷⁶ B.M. Doyle, 'The changing functions of urban government: councillors, officials and pressure groups', in Martin Dauntton (ed.), *Cambridge Urban History of Britain*, III (Cambridge, 2000), p. 287.

³⁷⁷ R. Trainor, 'The middle classes', in Dauntton, *Cambridge Urban History Britain*, p. 674; C. Pooley, 'Patterns on the ground: urban form, residential structure and the social construction of space', in Dauntton, *Cambridge Urban History Britain*, pp. 434-45; J. Davis, 'Central government and the towns', in Dauntton, *Cambridge Urban History Britain*, pp. 264-72; R. Millward, 'The political economy of urban utilities', in Dauntton, *Cambridge Urban History Britain*, p. 323; Doyle, 'The changing functions of urban government', p. 292; R. Millward, 'Urban government, finance and public health in Victorian Britain', in R.J. Morris and R.H. Trainor (eds) *Urban Governance Britain and beyond since 1750* (Aldershot, 2000), p. 61; D. Loftus 'Industrial conciliation, class and the urban landscape in

companies' products, for example, and produced pressures not only within the individual company, but also in the town itself, as the prosperity of the business governed the prosperity of the community. Within the parish there was often conflict between political and religious groups, the Anglicans and Conservatives vying with the Nonconformists and Liberals.³⁷⁸ Private initiatives saw the creation of corn exchanges,³⁷⁹ gas companies and above all, railway companies which were essential for business growth. Although there had been built institutions before 1850, these increased in size and a few new ones were created. Churches and chapels expanded to accommodate larger congregations. A few new schools were built and existing ones rebuilt or enlarged to house the extra pupils after the expansion of schooling due to the 1870 compulsory Education Act.³⁸⁰ But as the second half of the century progressed so the case study companies increased the provision of housing for their employees, with sports and social clubs for the socialising of their communities.

Defining small towns

The definition of small towns presents a problem. Robson has stated '...at what point does a collection of people and buildings become a town?' He cites the historical

mid-Victorian England', in Morris and Trainor, *Urban Governance*, pp. 182-86;
M. Goldsmith and J. Garrard, 'Urban governance: some reflections', in Morris and Trainor, *Urban Governance*, pp. 17-18.

³⁷⁸ Anglicans and the Conservatives tended to have *laissez-faire* attitudes, while the Liberals and

Nonconformists inclined to favour the urbanisation of their communities. While this is not a hard and fast rule, there are many examples of opposing outlooks, nevertheless this did not diminish the stresses and pressures within the towns.

³⁷⁹ Markets tended to survive in larger towns with better transport access. This meant they were

also more viable with a larger customer base and thus resources could be found to build more substantial exchanges. P.J. Waller, *Town, city and nation, England 1850-1914* (Oxford, 1983), p. 151.

³⁸⁰ D.A. Reid, 'Playing and praying,' in, Dauntton, *Cambridge Urban History Britain*, pp. 760-61.

geographer C.M. Law who suggested that there should be a population of not less than 2,500, a minimum density of one person per acre, and a criteria of spatial clustering. This last point was to define towns as an area of continuous buildings, consisting of small separate communities covering a relatively wide area.³⁸¹ However this would seem to bring unnecessary complications. One person to the acre would seem low for a town and what about parkland within an urban area: what would the minimum have to be to preserve the integrity of the community as a whole? A simpler and more recent approach is taken by Royle, who defines a small town as having a maximum population of 10,000 inhabitants, but he gives no lower threshold. He considered it was more important that the community must function as a town, with some sort of town institutions and attitudes: 'Function is more important than population.'³⁸² Using this definition Royle considered there were 722 small towns in England with a combined population of over 2.1 million in 1851. English population at that time was 14.4 million which by 1901 had increased to just under 27 million. However, during the same period, the 722 small towns had decreased to 641 with a total population of under 2.1 million. While England's overall population, in this period increased 87 per cent, the small towns lost half a per cent of their population and were just holding their own, not attracting extra numbers of rural immigrants. It is against this background that the four case study towns need to be judged.

The importance of a company to its town is manifested by the prosperity, extent of housing, built facilities and social amenities it provided. Family companies tended to

³⁸¹ B. T. Robson, *Urban growth an approach* (London, 1973), p. 47.

³⁸² S. A. Royle, 'The development of small towns in Britain', in Daunton, *Cambridge Urban History Britain*, p. 152. It must be emphasized that Royle's small towns never reached 10,000 in population, if they did they were discarded. See also P. Clark and J. Hoskins, *Population estimates of English small towns 1550-185* (Leicester, 1993); P. Clark, 'Small towns in England 1550-1850: national and regional population trends', in P. Clark (ed.), *Small towns in early modern Europe* (Cambridge, 1995).

be long lived institutions which brought stability and permanence to their communities. The cyclical nature of this prosperity and the years of boom and growth of the 1860s and 1870s, contrasted to the years of retrenchment in the 1890s and early 1900s.³⁸³ However, by these dates the case study companies dominated the towns and, being the largest employers, they had a important influence on their communities. The payments made by the companies through the wages paid to their employees, often living in company housing, worked their way into the coffers of the towns' shopkeepers and tradesmen. By maintaining corporate vitality, wherever possible, the entrepreneurs not only saved the livelihood of their employees, but the vigour of the town itself.

Table 5.1. Population, working population and the percentage of the companies' workforce over working population. Four case study towns 1901.

	Halstead	Haverhill	Leiston	Earls Colne
Population	6,361	4,862	3,259	1,762
Working population	2,911	2,418	1,330	789
Percentage of working population	45.8%	49.6%	40.8%	44.8%
Company workforce	1,069 ³⁸⁴	1,088	702	198
Percentage of company workforce to working population	36.4%	45.1%	52.8%	25.1%

Sources: B.P.P. *Accounts and Papers. Populations England and Wales. Session* (December 1902), pp. 29, 34, 71; Rate books, Essex Record Office, D/F 3/3/24, pp. 85-90; Suffolk Record Office, Ipswich, HC 30/A4/8. Average for 1901.

The first part of this chapter will analyse the impact that the factory, its workforce and housing, had on the towns. The second part will concentrate on the different ways the companies governed and controlled their communities. Urbanisation

³⁸³ For an example see page 146.

³⁸⁴ This figure is from 1899.

by definition created problems often by crowding many people into congested communities, in numbers not seen in rural and semi-rural areas. This called for variable and often *ad hoc* numbers of government initiatives for local involvement. A few of these had been established for many years, others were created to solve particular contemporary problems. Some were aimed at parish level, others at groups of parishes. All required the local, mainly middle class inhabitants with their middle class attitudes, to serve their localities. It also gave the companies' entrepreneurs the chance to control their towns by serving on these local bodies.

Impact of factory and workforce on the case study towns

In 1901 the domination of companies' workforces over the rest of the working population in their town, can be seen in Table 5.1. The proportion of the working population to total population was reasonably constant at between 40 and 50 per cent, but there were variations between the different towns.³⁸⁵ Although Halstead was the largest of the case study towns, there were other industrial concerns besides Courtauld within the urban area.³⁸⁶ However, significantly over a third of the working population were Courtauld's employees.³⁸⁷ In Haverhill the number of Gurteen's workforce was extrapolated from the enumerators' returns and may be on the low side due to older women workers being under recorded. As almost half of the working population worked for the business, this too indicated a high degree of control of Haverhill's labour market.

³⁸⁵ Working population is the number of inhabitants in a parish who are recorded in the census as having occupations.

³⁸⁶ A manufacturer of stoves and ranges, a tannery, a brewery and a maltings. Also the Colne Valley and Halstead Railway had their engineering works and headquarters in the town. *Kelly's Directory of Essex* (London, 1912).

³⁸⁷ Although Courtauld were laying off workers during this period, the census rarely mentions unemployment. Edward Higgs, *A clearer sense of the census: the Victorian censuses and historical research* (H.M.S.O., 1996), p. 111.

Although Garrett in Leiston employed over half of the working population in 1901, an impressive figure in its own right, this was only just the beginning of a rapidly expanding workforce, which was to grow substantially by 30 per cent in five years and 86 per cent in ten.³⁸⁸ At the other extreme, Hunt's low figure in Earls Colne is a reflection of the size of the business, but here again the workforce was expanding and, according to the wage figures, reached a 17 per cent rise from 1901 to 1906 and 32 per cent to 1911.³⁸⁹ This company was the dominant employer in Earls Colne, as it had over double the workforce of the agricultural sector, its nearest rival.

Table 5.2. The population growth or fall of the four case study towns 1851-1901 compared to towns of similar sizes.

Halstead 1901 pop. 6,361 1851-1901 -9%	Haverhill 1901 pop. 4,852 1851-1901 +91%	Leiston 1901 pop. 3,259 1851-1901 +106%	Earls Colne 1901 pop. 1,762 1851-1901 +16%
Beccles +57%	Ashby	Bungay -14%	Cowbridge +13%
Briton Ferry +301%	de la Zouch +26%	Chepstow -29%	Coggeshall -26%
Stranraer +56%	Braintree +88%	Diss +55%	Cullen -39%
Welshpool -7%	Castle	Fakenham +30%	Eye -23%
	Donnington -9%	Kirkwell +52%	Fishguard -14%
	Flint +40%	Pwllheli +36%	Lutterworth -29%
	Lerwick +56%	Stornoway +61%	
	Ludlow -3%	Swaffham -13%	
	Monmouth -11%	Towyn +36%	
	Woodbridge -10%		

Source: Adapted from Table 5.1 Stephen A. Royle, 'The development of small towns in Britain' in, Martin Daunton (ed.) *The Cambridge Urban History of Britain* (Cambridge, 2000), pp. 154-5.

Each of the four case study towns, in 1901, are compared with other similar sized communities and shown in Table 5.2.³⁹⁰ Between 1851 and 1901, the case study towns of Haverhill, Leiston and Earls Colne had the greatest growth of towns of their comparative size within the limits of small towns set by Royle. Halstead was the exception, having a negative growth of 9 per cent, it was the worse of the four similar

³⁸⁸ See Table 4.4 page 134.

³⁸⁹ See Table 4.6 page 142.

³⁹⁰ The data is taken from Table 5.1 in S. A. Royle, 'The development of small towns in Britain', in Daunton, *Cambridge Urban History Britain*, pp. 154-5. Halstead is mentioned, but Haverhill, Leiston and Earls Colne are not.

sized communities. At 92 per cent growth, Haverhill's nearest rival, according to Royle's figures, was Braintree at 88 per cent, but there were three towns of similar size which had negative growth. Although doubling its population by 1901, Leiston saw even more growth in the next decade. No town came anywhere near matching the years,

Table 5.3.1. Population of the four case study towns 1851-1911.

	1851	1861	1871	1881	1891	1901	1911
Halstead	6,982	6,917	6,904	6,701	6,959	6,361	6,540
Haverhill	2,535	2,434	3,031	3,685	4,587	4,852	4,862
Leiston	1,580	2,227	2,252	2,439	2,616	3,259	4,359
Earls Colne	1,518	1,540	1,481	1,594	1,720	1,762	1,871

Source on all three tables: B.P.P. *Irish University Press Series of B.P.P. Population 6... 1851* (Shannon, 1970), pp 622, 636, 640, 650; *Census of England and Wales... 1861* (London, 1862), pp 40 and 122; *Irish University Press Series of B.P.P... Population 16, 1871 Census* PP. 315, 316, 565, 566; *Accounts and Papers, Population Census of England and Wales 1881* (1883), pp. 114, 144, 362; *Irish University Press series of B.P.P. Population 2, 1891 census of England and Wales* (Shannon, 1970), pp. 147, 148, 385, 390; *Accounts and Papers Population England and Wales..., 68 and 71* (1902), pp. 29, 26 and 34; *Accounts and Papers, 1912-13...*, pp. 133, 307, 313.

Table 5.3.2. Number of inhabited houses in each case study town 1851-1911.

	1851	1861	1871	1881	1891	1901	1911
Halstead	1,409	1,535	1,540	1,542	1,614	1,544	1,570
Haverhill	468	506	614	745	902	1,047	1,078
Leiston	335	470	497	536	562	690	934
Earls Colne	311	334	235 ³⁹¹	346	368	410	n.a.

Table 5.3.3. Percentage change per decade of population and inhabited houses of the four case study towns.

		1851-61	1861-71	1871-81	1881-91	1891-1901	1901-11
Halstead	Pop.	-0.1%	-0.2%	-2.9%	+3.8%	-8.6%	-2.8%
	Houses	+8.9%	+0.3%	+0.1%	+4.6%	-4.3%	+1.7%
Haverhill	Pop.	-4.0%	+24.5%	+21.6%	+24.5%	+5.8%	+0.2%
	Houses	+8.1%	+21.3%	+21.3%	+21.1%	+16.1%	+3.0%

³⁹¹ The 1871 figure for inhabited houses in Earls Colne was 235. When compared with the 1861 and 1881 figures of 334 and 346 respectively, this must be regarded as an error.

Leiston	Pop.	+40.9%	+1.1%	8.4%	+7.2%	+24.6%	+33.7%
	houses	+40.3%	+5.7%	+7.8%	+4.8%	+22.8%	+35.4%
Earls Colne	Pop.	+1.4%	-3.8%	+7.6%	+7.9%	+2.4%	+6.2%
	Houses	+7.4%	-	+3.6% ³⁹²	6.4%	+11.4%	n.a.

1851 and 1901. With this in mind, the national importance of these three towns as being examples of dynamic growing communities is clearly shown, but how many other similar sized towns are also missing?

Although it is clear that the four case study companies dominated the employment market in their respective towns, the same cannot be said about their housing. The lack of sources makes it difficult to be certain about the number of houses each company owned. The survival of archives that record company housing, therefore, is critical. These dwellings can be traced in rate books or in company records, but they tend to survive only for limited periods.³⁹³

The population of each of the towns and the numbers of inhabited houses from 1851-1911, with their percentage decadal increase or decrease is shown in Tables 5.3.1. to 5.3.3. The method used was to count the number of houses in the enumerator's returns, in rate books or in company records. The problem with the census is what the enumerator considered to be a house. In the England and Wales census from 1851 to 1901, a house was defined as a space enclosed by external and party walls, be it 'the hut

³⁹² Percentage increase is taken between 1861-81.

³⁹³ Halstead has only a single rate book, for 1890, surviving from the period, D/P 96/11/67 Essex Record Office, Chelmsford. Although there is a water rate book for 1895, it only records dwellings where water was laid on and Courtauld was a large user of water meters. The valuation books, unfortunately, record all dwellings up to the 1920s. A/R 2/2 16 and 17, Essex Record Office, Chelmsford. The rate books for Haverhill only survive up to 1884, EF 511/1/27, Suffolk Record Office, Bury St Edmunds, but there is a water rate book for 1900, EF 511/4/66, Suffolk Record Office, Bury St Edmunds. Leiston rate books are available for 1886 and 1910, EF 5/2/3/2, Suffolk Record Office, Ipswich. No rate books survive for Earls Colne, probably because it never became a local board or urban district council, but just formed part of the Halstead Rural District Council. However, in the company archives the number of houses are recorded for various dates between 1900-20, T.R. HNT. Museum of Rural life, University of Reading.

on the moor, the castle on the hill and the palace.³⁹⁴ No attempt was made to assess the number of separate apartments within multi-roomed structures. On many counts, the census must be regarded as suspect in the accuracy of its data. However these crude figures do present a countrywide snapshot and the general trends shown are accurate enough for this analysis.³⁹⁵

Halstead's population was stagnating and declining, a 6.3 per cent loss of numbers. 1851-1911 (Table 5.3.1.). However the number of inhabited houses was rising, although only slowly, 11.4 per cent in 60 years, but it was almost a continuing growth (Table 5.3.2. and Table 5.3.3). With a declining population the town was not going to need a mass injection of housing, but a growth in housing of this magnitude against a deteriorating numbers in population, indicated a flourishing town.³⁹⁶ Of the other case study towns which were all growing and thriving, Leiston had the most rapid expansion of both population and housing of the four towns. A rise of 176 per cent in population and 179 per cent rise in the number of inhabited dwellings for the 60 years. Also, the decennial increase is similar in both categories, which indicated that the growth of population being matched by an increase in the number of dwellings. Of course not all the growth in inhabited houses was due to new buildings; existing structures were converted into dwellings, particularly during times of housing shortages. The buying of large numbers of houses by the Gurteen family and company, may be why the number of inhabited houses in Haverhill increased by almost a third above the population growth figures. Daniel Gurteen III was apparently investing in a large

³⁹⁴ B.P.P. *Census of England and Wales...* (1861), P. 40; *Irish University Press Series of B.P.P.* (1871), p. 315.

³⁹⁵ It needs to be pointed out that there are several sets of figures relating to this data. The census abstracts record the number of inhabited *houses* and may not be totally accurate. The rate books' figures can be only used to record the number of worker's '*cottages*'.

³⁹⁶ Waller, *Town, city and nation*, pp., 4-6; N. Raven, 'Chelmsford during the Industrial Revolution', *Urban History*, 34, no. 1 (2003).

housing portfolio. Although not so clear as Leiston, the Haverhill decades did show a trend, apart from the 1850s, of matching the rise and fall of its population to its housing figures, but on a longer time scale. Both Leiston and Haverhill dramatically increased their housing stock. Leiston increased theirs by over a third in the 1850s and again by two thirds in the 1890s and 1900s, Haverhill doubling theirs between 1861 and 1891. However, the smallest of the four case study towns, Earls Colne, had the most variable of the population to housing numbers, although the absence of 1871 and 1911 housing figures makes exact comparisons difficult. The total figure for housing, therefore, terminates in 1901 and there is only a single figure for both the decades of the 1860s and 1870s. Virtually all decades show major disparities in the ratio of both population and inhabited housing numbers. In the 1880s, for example, there was seven times the growth of population in contrast to housing, compared to the five times increase in housing above population growth in the 1890s. It is unfortunate that there are gaps in the housing figures in the 1870s and 1900s. Hunts were building 30 houses in the 1870s, 36 in the 1890s and 38 in the 1900s up to 1912.³⁹⁷ The majority of the 52 extra housing constructed in the 1890s were mainly supplied by Hunt and that it is probable that if the figures were available Hunt would also have erected similar proportions of new houses. However, it cannot be stressed too much that these are crude figures and can only be viable where major differences occur.

Company housing

Due to the absence of comprehensive data on company housing, there are limited statistics available for the proportion of company dwellings to the number of inhabited houses as shown in the census and only the decades of the 1890s and 1900s

³⁹⁷ See Table 5.4 below page 165.

will be reviewed. Halstead's population had increased some 106 per cent from 1801 to 1851 and an extra parish was formed in 1844³⁹⁸. With the spread of its industrial base there was plenty of scope for speculative cottage building in the town. This, coupled with its negative growth during the period 1851 – 1911, was possibly the reason why Courtauld had the lowest level of company housing in the case study group,³⁹⁹ with just 30 houses recorded in the 1890 rate book.⁴⁰⁰ This number remained constant through the rest of the period. Even the valuation books still record Courtauld as only owning this number of dwellings.⁴⁰¹ Their workforce may have been the most critical as far as the prosperity of the town was concerned, but the company did not dominate Halstead's housing market.

Daniel Gurteen III, his company and family, owned over a quarter, 189 houses and cottages, of the total 719 dwellings as recorded in the 1884 Haverhill rate book.⁴⁰²

³⁹⁸ The ecclesiastical parish of Holy Trinity was formed in 1844. The Urban District Council's territory was within a radius of 1,000 yards from the Town Bridge. Beyond this was under the jurisdiction of Halstead Rural Parish. Thus the population is counted as either the two ecclesiastical parishes or as Halstead Urban District Council with Halstead Rural Parish, being part of the Halstead Rural District Council. In this study the population is counted as the number of the two ecclesiastical parishes. This is the reason why the Halstead population figures do not tie in with several other sources.

³⁹⁹ Coleman describes Courtauld's partners and company as building 'substantial' numbers of Houses for their employees in Halstead, Bocking and Gosfield. However the rate books indicate only 30 houses were owned in Halstead and probably less in Bocking, while the number built at Gosfield were for workers employed on Samuel Courtauld's Gosfield Hall estate which eventually extended to 3,200 acres. Coleman also makes the point that this housing was for senior employees, rather than for the majority of Courtauld's workforce who were female and either daughters or wives of the men that rented the property. In 1899 86 per cent of the workers at the Halstead plant were women and at Earls Colne's Courtauld Mill 96 per cent, D.C. Coleman, *Courtaulds an Economic and social history*, vol. I (Oxford, 1969), pp. 127, 232, and 256.

⁴⁰⁰ These are two terraces of three storey cottages in Factory Lane East designed by John Birch built in 1872, and a series of semi-detached housing designed by George Sherrin in 1883, built in an Arts and Crafts style and facing the river in the Causeway. St. Andrews overseers Rate book 1890. D/P 96/11/67. Essex Record Office, Chelmsford.

⁴⁰¹ Valuation books for Cambridgeshire valuation district, Halstead Urban. A/R 2/2 16 & 17, Essex Record Office, Chelmsford. Unfortunately these do not provide yearly totals of Houses, but show the total dwellings recorded between 1912 and the 1920s.

⁴⁰² The 1884 rate book figure of 719 is close to the 1881 census number of 745 inhabited

The water rate book of 1900⁴⁰³ is not so accurate as it only records properties which had water laid on and as no addresses are recorded, there is no way of knowing accurately which were the dwellings that were supplied with mains water. However, Gurteen's housing tended to be near their factory which was in the centre of the town and within the area of the water mains. It would be to the company's advantage to have the water laid on, and it is highly probable that most, if not all, its houses would be recorded in the water rate book. From this source it is possible that they owned around 200 dwellings, which would indicate an increase of 5.8 per cent from 1884. Because it is impossible to record individual years in the valuation book, these statistics are of limited use to this study, but they did provide evidence that at some stage, up to the 1920s, Gurteen were shedding some of their housing stock. Since the 200 dwellings Gurteen owned in 1900, shrank to 119.⁴⁰⁴ However, the evidence is overwhelming that during the period from the 1880s to the 1900s, Gurteen owned by far the largest number of dwellings in the community.

The Leiston rate book of 1886 records the total number of cottages owned by the company as 57. Although just 12.1 per cent of the total of 471 dwellings, this was double the 25 owned by James Walsingham, the next largest owner.⁴⁰⁵ There is no source for 1900 but the 1910 rate book records a total of 84 houses and cottages owned by Garrett, 25 owned by the company and 59 by Frank Garrett.⁴⁰⁶ This gives virtually the same percentage of 12.2 of the total housing stock. The valuation book indicated

houses, although the number of inhabited houses is rising substantially with a 21.1 per cent growth to 1891. Haverhill Local Board rate book, 10 January 1884, EF 511/1/27 Suffolk Record Office, Bury St Edmunds.

⁴⁰³ Haverhill Urban District Council Water Rent Book 1900, EF 511/4/66 Suffolk Record Office, Bury St Edmunds.

⁴⁰⁴ Valuation books, Haverhill EF 511/5/1. Suffolk Record Office, Bury St Edmunds.

⁴⁰⁵ Leiston vestry rate book 1886. EF 5/2/31. Suffolk Record Office, Ipswich.

⁴⁰⁶ Leiston Urban District Council rate book 1910. EF 5/2/3/2. Suffolk Record Office, Ipswich.

that Garrett had changed their housing policy. It records only four cottages, but 88 houses and building plots.⁴⁰⁷ Whitehead made the point that there was no ‘tied cottage’ policy at Garrett,⁴⁰⁸ although the rate books indicated that the company owned some housing and Frank Garrett even more. But, as with Daniel Gurteen, this personal investment in housing would not bring in high rentals, although it was a safe asset. Because there are no yearly totals in the valuation books, it is impossible to date this change of policy. It was possible that there were two explanations why the company was realising their assets on the lower paid workers’ cottages. One would be to use the resource to build housing for management staff. The extensive increase in Garrett’s workforce from 1898-1910 would indicate a necessity for extra supervisory and drawing office staff and housing (not cottages) for their accommodation.⁴⁰⁹ The other explanation would be to generate extra finance. Rents and profits on management staff housing would be much greater than on workers cottages and would help to make up the £200,000 Russian debt.

Table 5.4. Hunt’s type of housing and dates of construction.

	High Street	Foundry Lane	Hayhouse Road	The Croft	Burrows Road	Halstead Road	York Road	Total
Terraces	2 blocks of 5, 1859-60 ⁴¹⁰	Blocks of 12 & 10, 1872 & 1876. 2 blocks of 4, 1900	2 blocks of 3, 1897. 3 blocks of 4, 1899.	2 blocks of 4, 1903.	1 block of 4, 1895.			70
Semi-detached					2 blocks of semis, 1895.	14 blocks of semis, 1905-12.	1 block of semis, 1905	34
Totals	10	30	18	8	8	28	2	104

⁴⁰⁷ Leiston valuation book EF 5/2/4/1. Suffolk Record Office, Ipswich.

⁴⁰⁸ R.A. Whitehead, *Garretts of Leiston* (London, 1964), p. 21.

⁴⁰⁹ See above Table 4.4, page 134.

⁴¹⁰ Mentioned in James Bettley and Nikolaus Pevsner, *The buildings of England, Essex*, (New Haven and London, 2007 edition), p. 333.

Source: Noted during a walk around the town 7th August 2009.

In Earls Colne, Hunt had lists of houses it was renting to its employees from 1900 to 1920, but no records before this date.⁴¹¹ By using the 1900 figures, Hunt owned 54 dwellings or 13 per cent of the 410 inhabited houses recorded in the 1901 census. By 1905 this figure had increased to 74 dwellings and the largest total was 105 in 1910 and 1914. The vast majority of these dwellings survived and are conveniently provided with date stones. The archaeological evidence is summarised in Table 5.4. The earlier terrace in the High Street was built by a farmer in 1856-60, and sold to Reuben Hunt at a much later date. The 1872 and 1876 long terraces in Foundry Lane were the first housing Reuben built himself. After a pause of almost twenty years, he continued for the next eight years with much shorter terraces of three or four dwellings, which were provided with much larger gardens, as in Foundry Lane, Hayhouse Road, Burrows Road and The Croft. In 1895, he started to build semi-detached housing, starting with a couple of blocks in Burrows Road. Ten years later he instigated a much more ambitious scheme along the Halstead Road and built a long line of fourteen pairs and another shorter line of five, all provided with long front gardens. This change of design may have been reinforced when Reuben and his son Harry, in 1905, visited the ‘new cottages at the garden city’ (Letchworth?).⁴¹² Reuben’s semis have been described as being in a ‘garden suburb setting’.⁴¹³ However, being semi-detached, it is probable that these were built with skilled workmen, clerical employees and supervisory staff in mind. In 1900

⁴¹¹ In, TR HNT, University of Reading.

⁴¹² P.J. Burton-Hopkin, *Hunt for machinery, the Rise and Demise of R. Hunt and Company Limited of Earls Colne 1825-1988*, (Halstead and District Local History Society, 1995), p. 16.

⁴¹³ Tony Crosby, Adam Garwood and Adrian Corder-Birch, ‘Workers’ housing in Essex’ in, *Industrial Archaeology Review*, XXX, no. 2 (2008), p. 115.

the company employed 198 workers with 54 dwellings. When this is compared to the 336 employees with 105 dwellings in 1914,⁴¹⁴ the proportion of workers to houses is almost the same, 3.7 for 1900 and 3.2 for 1914 (See Table 5.5.). This would indicate that the company was keeping pace with its house building despite its increasing workforce. Besides this housing Reuben also constructed, in 1909, a block of five almshouses in Burrows Road.

Table 5.5. Ratio of R. Hunt and Company's employees to its housing, 1900 and 1914.

	1 Employees	2 Company housing	1 divided by 2
1900	198	54	3.7
1914	336	105	3.2

Source: TR HNT 250 & 280. University of Reading.

Most of the four case study companies' entrepreneurs were the largest single housing owners in their towns, and when this is converted to the rates they paid, they had considerable influence as ratepayers. This gave them a power base if and when they wanted to become leaders of their communities.

Urbanisation and the built environment

Reeder and Rodger have shown that urbanisation and industrialisation went hand in hand in forcefully changing the economic conditions in nineteenth century towns and cities. They argued that urban areas were ideal places for manufacturing companies to set up. In the compact district, with its most influential people congregated in a small area, was excellent for gaining knowledge of a commercial

⁴¹⁴ The company made a list of its employees the week previous to the outbreak of the war. TR HNT 280, University of Reading

nature through banking and the trustworthiness of potential customers and suppliers.⁴¹⁵ This information of knowledge, networks and bourgeoisie know-how came from local chambers of commerce and trade protection societies only available in large towns and cities. 'The talk of the bourgeoisie, not the smoke of the factory, was the defining characteristic of the modern city economy'.⁴¹⁶ Other advantages, they pointed out, were that in towns the public infrastructure was paid for by taxes levied against the residential sector rather than businesses, although the civic authority might pass byelaws against pollution from industrial processes. But above all there was an abundant supply of labour and under the system of supply and demand this reduced labour costs. Private charities and the poor law paid for social welfare, thus giving the manufacturer a flexible workforce, which in times of poor trading conditions could be reduced without incurring any direct costs to the business, although it was inclined to make the industry labour intensive.⁴¹⁷ A number of these advantages also occurred in smaller towns but there were notable exceptions. The 'talk of the bourgeoisie' for example, would not be much use in small towns without the influential professional classes. However, each of the four case study towns did have the advantage of cheap skilled labour.

The four case study towns up to 1850 were described in chapter three. It showed that their communities had already experienced a degree of urban expansion. The major part of this was often brisk growth of housing erected within the communities. The earlier part of this chapter described the number of dwellings erected in the four case

⁴¹⁵ D. Reeder and R. Rodger, 'Industrialisation and the city economy', in Daunt, *Cambridge Urban History of Britain*, pp. 553-59.

⁴¹⁶ C.J. Simon and C. Nardinelli, 'The talk of the town: human capital, information and the growth of English cities, 1861-1961, in *Explorations in Economic History*, 33 (1996), quoted in Reeder and Rodger, 'Industrialisation and the city economy'. P. 555.

⁴¹⁷ This was in contrast to the United States where more use was made of machines to reduce the labour content of manufacturing. Simon and Nardinelli, 'The talk of the town', p. 559.

study towns and the proportion of these built by the companies.⁴¹⁸ The quality of most of these houses were standard 'byelaw' terrace types, the houses consisting of parlour, kitchen and scullery, two or three bedrooms and an outside privy or water closet.⁴¹⁹ How this developed can be seen by the example of the Ashworth brothers at their mills at Egerton and Bank Top near Bolton. They changed their housing policy for their workers from the provision of small back to back houses to dwellings with three bedrooms. Geoffrey Timmins has shown how, after an outbreak of fever in the back to back houses, the brothers decided to inspect them periodically for cleanliness. From these inspections they perceived the need, on moral grounds, for three bedrooms, one for the parents, one for boys and one for girls. They built larger houses with three bedrooms and, although more expensive, Henry Ashworth claimed that there was a demand for them. The Ashworths modelled their housing for the needs of their communities, with smaller two bedroom houses for families of three and those with young children. This made available cheaper houses for those who could not afford the larger three bedroom dwellings and it economised on the company capital costs. However, as Henry Ashworth himself noted, young people brought up in two bedroom cottages had not the same moral perceptions as he himself and some observers thought not all the bedrooms were being used as sleeping rooms.⁴²⁰

Most of the houses built for the working classes, were constructed by speculative builders who in the past have been criticised for building cheaply and often

⁴¹⁸ See above pages 157-62.

⁴¹⁹ With passing of the Public Health 1848, local boards of health were created and the establishment of urban district and rural district councils from the mid 1890s, byelaws were passed requiring statutory standards in house planning and construction. From this standard type of terrace houses evolved, 'byelaw houses', which were built in extensive numbers all over the country.

⁴²⁰ Geoffrey Timmins, 'Housing quality in rural textile colonies c1800-50: the Ashworth settlements revisited', in *Industrial Archaeology Review*, XXII, no. 1 (2000), PP. 31-35.

poorly while still making big profits, but who nevertheless, often ended up bankrupt by ignoring the declining market and overstretching themselves. Recently this view has been revised. Baer has pointed out that cities would not have been built as quickly as they were if there were no speculative builders, delays would have occurred in commissioning builders in the customary way, and the survival of considerable numbers of these dwellings over 150 years or more indicates that they were not all badly built.⁴²¹

In the four case company communities, housing was built much later and consisted mostly of long terraces of byelaw housing. However, there were exceptions. In 1872, Courtauld built four bedroomed, three storied terraces, one of six dwellings and one of ten, designed by John Birch, adjoining their factory in Factory Lane East.⁴²² A more architecturally satisfying terrace of ten dwellings was built in 1882-83 with a semi-detached block at one end and the company's dining hall at the other. They were built in a Queen Anne style, designed by George Sherrin and situated alongside the River Colne, see Appendix 4.⁴²³ At Earls Colne, Reuben Hunt built a pair of large elaborate houses for managers and also fourteen pairs of semi-detached houses in long rows along the Halstead Road, in a simple Art and Crafts, 'garden suburb' style, with extensive gardens.⁴²⁴ Thus there were some attempts, albeit in a small way, to produce distinctive housing to raise the communities' dwellings above the level of standard speculative byelaw types. The motivation behind this appears unclear. It may have been that to attract effective managers, pleasant housing was needed as an incentive, but it could also be that George Courtauld and Reuben Hunt felt the need to create artistically

⁴²¹ William C. Baer, 'Is speculative building underappreciated in urban history?' in *Urban History*, 34, no. 2 (2007), p. 315.

⁴²² Crosby, Garwood and Corder-Birch, 'Workers' housing in Essex', p. 115.

⁴²³ Bettley and Pevsner, *The buildings of England, Essex*, p. 444.

⁴²⁴ Crosby, Garwood & Corder-Birch, 'Workers' housing in Essex', pp. 114-15; Bettley and Pevsner, *Essex*, p. 333.

pleasing buildings to add prestige to their communities, similar to those being constructed at Letchworth or Bournville. Because they were working within existing towns, none of the entrepreneurs was able to create the same unified architectural symmetry as Salt did at Saltaire, Reckett at Hull, Lever at Port Sunlight, Rowntree at New Earswick or Cadbury at Bournville. The town plans show where some of this housing was sited, but with rate books having no detailed addresses, it was difficult to gauge where the majority of houses were situated. With the Garretts, another difficulty was that the majority of dwellings owned by the family and company were not extensive and were single dwellings scattered all over the town.

Churches and Chapels.

One aspect of this urbanisation in the late Victorian period was the construction of a number of mainly nonconformist churches and chapels. Hughes has noted how nonconformist sects in early Welsh workers' settlements became wealthier, more assertive and, fired by successive religious revivals, built and rebuilt their chapels purposely in an Italian Renaissance style, in contrast to the gothic style of the established church. The nonconformist chapels built by the companies, however, were also in the same classical style, but were distinguished by being larger and more elaborate.⁴²⁵ The 1851 religious census was a watershed by showing the support each church or chapel was receiving in comparison to other sects at national, regional and local level. Much debate has been generated as to the cause and effect of this census.⁴²⁶ Whatever the arguments were, there was also an increase in church and chapel

⁴²⁵ Stephen Hughes, 'Institutional buildings in workers settlements', in *Industrial Archaeology Review*, XXII (2005), p. 159.

⁴²⁶ Recently set out by Reid, 'Playing and praying', in Daunton, *Cambridge Urban History* Britain, pp. 785-93.

attendance in the second half of the nineteenth century, but whether this matched the rapid increase in population is open to question. The building spree occasioned by the increase of congregations was mainly concentrated in the urban areas, but was not inconsiderable in the rural landscape.

Halstead, although stagnating in population growth between 1851-1911, nevertheless managed to increase the number of its religious establishments from nine to eleven. However, one was a Unitarian church, probably built at the Courtauld's family request⁴²⁷ and another was a Salvation Army Citadel.⁴²⁸ In Haverhill the five churches and chapels recorded in 1851 were, by 1912, reduced by one with the loss of the Quakers from the town, but there was also the addition of a Methodist chapel, Congregationalist church and another Salvation Army Citadel.⁴²⁹ Also, there was enough prosperity within the town for an extensive restoration of the parish church and for the rebuilding of two large nonconformist chapels.⁴³⁰ The extensive demographic growth of Leiston was not matched by much religious building, probably due to the Garrett family being Anglicans so perhaps there was not the same dynamic leadership in creating extra nonconformist chapels. However, the parish church in 1853 was completely rebuilt in a distinctive style⁴³¹ and in 1858 a Congregational church and a Methodist chapel were constructed.⁴³² Earls Colne, although showing little demographic growth, nevertheless, through its urban institutions, acquired town status by 1901. But

⁴²⁷ Samuel Courtauld III and most of the rest of his family and dynasty were Unitarians.

⁴²⁸ This was probably built to increase the Army's presence in East Anglia rather than there being a desperate local need for it.

⁴²⁹ *Kelly's Directory of Suffolk* (1908).

⁴³⁰ It should be noted that the splitting up of what was to become the two largest nonconformist congregations in the town was due to ideological reasons rather than lack of space.

⁴³¹ The architect was E.B. Lamb and Pevsner described it as '...undauntedly and frantically original as this remarkable architect's other churches.' N. Pevsner (revised by E. Radcliffe), *The buildings of England, Suffolk* (New Haven and London, 2002), p. 329.

⁴³² *Kelly's Directory of Suffolk* (1908).

this did not extend to an increase in religious buildings, although the town had engendered enough prosperity for the restoration of its parish church in 1862-64, 1882 and 1908.⁴³³

Schools.

School provision was another important feature of urbanisation, but which at first was left to private incentive. The evolution of schools in the early South Wales workers' settlements was started by the provision of Sunday Schools, which were held in the nonconformist chapels. As these schools grew in size, separate buildings were provided and these evolved into day schools. However, a moral duty was felt by businessmen to educate the children of their workers, the children that worked for them and the pauper apprentices they employed and housed.⁴³⁴ After the 1870 compulsory education act, schools were increasingly coming under local/state control. There were concerns that the hotchpotch of volunteer run National and British schools on the one hand, and the more professional school boards on the other, were not creating consistently high standards of education amongst all the pupils.⁴³⁵ By bringing all these schools under the single control of the county boroughs and county councils, in 1902, it was felt that the national government would not only be able to ensure that standards were kept high, but also that the education system was still within local hands.⁴³⁶ There was, however, a political motive as the conservatives, who formed the government at

⁴³³ Kelly's *Directory of Essex* (1910).

⁴³⁴ Hughes, 'Institutional buildings in workers settlements', *Industrial Archaeology Review*, p. 160.

⁴³⁵ Davis, 'Central government and the towns', Daunton, *Cambridge Urban History Britain*, p. 266.

⁴³⁶ Doyle, 'The changing functions of urban government: councillors, officials and pressure groups', Daunton, *Cambridge Urban History Britain*, p. 292.

the time, wanted education left in the hands of the rural shires where they had much more support, rather than in urban towns and cities where they had not.⁴³⁷

The four case study communities tackled the need and expense of providing places for children of school age in different ways. In 1851, Halstead had five schools, which by 1901 had increased to eight, though two of these were specialised establishments. One was a Technical Art School, possibly used for training Courtauld's design workforce, and the other an Industrial School for delinquent girls.⁴³⁸ To increase place numbers after 1870, the town built one new school and enlarged most of the others. In 1912 there were places for over 1,350 children.⁴³⁹

Table 5.6. Index number showing the percentage of school places for the four case study communities c1911.⁴⁴⁰

	Halstead	Haverhill	Leiston	Earls Colne
Population	6,540	4,862	4,359	1,871
School places	1,362	950	410	338
Percentage of school places	20.83	19.54	9.41	18.06

Sources: 1911 Census. *Kelly's Directory of Essex* (London, 1912), p. 245; *Kelly's Directory of Norfolk and Suffolk* (1908), pp. 170 & 288; *Kelly's Directory of Essex* (London, 1910), pp. 197-98. Without knowing the number of school age children in these four communities, these figures becomes meaningless and here they are just used as an index to compare the different towns.

Haverhill, on the other hand, went down a different road. The strength and influence of its nonconformist inhabitants, especially the Gurteen family, forced the

⁴³⁷ Davis, 'Central government and the towns', Daunton, *Cambridge History Modern Britain*, p. 272.

⁴³⁸ The provision of specialised schools for the training of the young employed was one of a series of miscellaneous services that the County Councils were developing, often in collaboration with local employers. Davis, 'Central government and the towns', Daunton, *Cambridge Urban history Britain*, p. 292.

⁴³⁹ *Kelly's Directory of Essex* (London, 1912).

⁴⁴⁰ Private schools, e.g. Earls Colne Grammar School, have been ignored in these figures.

town to create a School Board in 1875 whose task it was to build a Board School to accommodate virtually all children of school age.⁴⁴¹ This was an expensive option compared to simply enlarging existing schools, but it had the advantage that the school would be inter-denominational and not influenced by the established church. Also, it would be paid for by all the rate payers and not by the British or National Societies. It was enlarged over the last quarter of the nineteenth century and in 1912 had enough room for 950 children.⁴⁴²

Leiston and Earls Colne had similar experiences in providing school places. Leiston had a single elementary school which was enlarged in 1874, 1884 and 1899, when there was enough room for 250 boys and girls and 160 infants. Earls Colne had a public elementary school for boys in Park Lane, which was built in 1843 and enlarged in 1875. A girls and infant section had been built in 1871 and enlarged in 1893 when there were 272 school places. A mixed school in Coggeshall Road had also been built in 1860 for 66 children. There was also a Grammar School, founded in Elizabethan times and closed in 1884, but reopened in 1893 in a new purpose built building which was extended in 1909. By 1910 this had been recognised by the Essex Education Authority as a secondary school.⁴⁴³

Contrasts in the four case study communities' ability to provide school places for their school age children is shown in Table 5.6. Halstead, Haverhill and Earls Colne

⁴⁴¹ The vice chairman was Daniel Gurteen III, the chairman was William Wakelin Boreham, an astronomer and member of the Royal Astronomical Society. *Kelly's Directory of Norfolk and Suffolk* (1908).

⁴⁴² This was also a potential area of conflict between members of the Anglican church, who had

to pay for a school that was not run on establish church lines and the nonconformists who were only paying a portion. In the other case study towns, each church paid for its own school be it run by the National or British Societies.

Daniel Gurteen III, was pragmatic about education. He welcomed it, maintaining that girls coming straight from school to work in his factory took as many weeks to learn the skills as had taken months for girls who had not been to school.

⁴⁴³ *Kelly's Directory of Norfolk and Suffolk* (1908); *Kelly's Directory of Essex* (London, 1910).

were remarkably similar with just over two and a half percentage points between them. The Board School option at Haverhill made no difference in providing a goodly number of school places and neither did the fact that Halstead was the largest town of the four and Earls Colne the smallest. Without the knowledge of the number of children of school age, too much must not be made of these figures. However, Leiston was the exception with a figure below 10 per cent. This would indicate that there was a shortage of school places and this was at least partly because the population was expanding faster, in this period, than the East Suffolk County Council Education Authority was able to provide school places.

Cemeteries

With the rapid population expansion, churchyards in urban areas, particularly small city ones, were filled up. Partly decomposed bodies were often brought to the surface when fresh graves were dug. This was known to create serious health risks and towns were obliged to seek new cemeteries. Julia Rugg has shown that this often led to conflict, not only as to whether these cemeteries were to be publicly controlled or commercial ventures, but also between the Established Church, who wanted the clergy to continue to retain their burial fees, and the Nonconformists who resisted paying them.⁴⁴⁴ Rugg has pointed out that there were several solutions, ranging from cemeteries run by limited liability companies, extensions of existing graveyards, and local authority cemeteries paid for from the rates. What choice each community made depended on how powerful the different parties were. In Haverhill the nonconformists held a strong position and a locally run public cemetery option was adopted, which was

⁴⁴⁴ J. Rugg, 'Ownership of the place of burial: a study of early nineteenth century urban conflict in Britain', in, R. J. Morris and R.H. Trainor (eds) *Urban Governance Britain and beyond 1750* (Aldershot, 2000).

controlled by a Burial Board.⁴⁴⁵ An area of land was obtained in 1866 and a burial ground laid out.⁴⁴⁶ This was divided into two, with the Anglicans being buried on the east side and the Nonconformists on the west. There were even two adjoining cemetery chapels. Leiston, being a strong Anglican Church parish, extended its original churchyard, while Halstead also adopted a publicly financed cemetery and, according to the evidence of the 25 inch Ordnance Survey map, each of Earls Colne church and chapels had its own cemetery.⁴⁴⁷

Other Institutions.

Between 1850 and 1914, the four urbanised areas created many institutions that reflected their growing character. Halls of different kinds were built to hold formal and leisure activities, public meetings and concerts. Mechanics institutes to cater for the artisans were common in many small towns. Most of these were provided by the companies in a paternalistic way. Hughes had traced the evolution of these institutions in Wales from the foundation of the ‘Society for the diffusion of useful knowledge’ in the early 1800s.⁴⁴⁸ By 1825 there were mechanics institutes in all the major industrial towns. However, not all entrepreneurs agreed with their philosophy. Salt built a working mens’ club, whose premises included a large concert hall, besides providing classes in arts and science. These clubs were seen as more for entertaining the working man and

⁴⁴⁵ Bury St Edmunds Record Office, EF 511/2/1-43. The burial boards were a much more informal organisation and it is possible only limited number of records were kept. Not enough to be certain whether the four case study companies had any control.

⁴⁴⁶ Many of these cemeteries were laid out as parks, and people would promenade round them on a Sunday, one of the few occupations that was considered proper within strict Sunday observance.

⁴⁴⁷ Ordnance survey maps, 25 inches to the mile, Essex sheet XXVII, North West, (1925).

⁴⁴⁸ S. Hughes, ‘Institutional buildings in workers settlements’, *Industrial Archaeology Review*.

keeping him out of public houses, rather than educating him.⁴⁴⁹ Halstead had a town hall and a mechanics institute in place by 1851. In Haverhill a lecture society had been formed whose library held 1,200 books, and a reading room was opened in 1852. In 1883-84, in commemoration of his golden wedding, Daniel Gurteen III built a town hall for the community. This building housed a panelled hall on the first floor which could accommodate 800 people and had been constructed with choral concerts in mind, the stage having curved, raked seating leading up to a large piped organ. Although this had the appearance of philanthropy, the main hall had been constructed solely for the Gurteen's love of music, the raked seating restricted what could take place on the stage, and this was clearly a Gurteen rather than a town building.⁴⁵⁰ Nevertheless the building was one the town was justly proud, not many towns of Haverhill size boasted such a building. Downstairs there were committee rooms for the Haverhill Local Board, a games room, and the library of the Haverhill Institute. Garrett had built a multipurpose building in the main street of Leiston. Part served as a dining hall for the company's workmen, another part as a drill hall for H company, the 4th Territorial Battalion, Suffolk Regiment as well as being used for social assemblies and public entertainments. The upper floor housed a mechanics institute with a library which contained 3,000 to 4,000 books. In the middle of Earls Colne was a terrace of ten dwellings with a mechanic's institute in the centre. The hall held 200 people.⁴⁵¹ The Victoria County History also mentions the Colnes United Book Society, formed in 1846, which had 100 members by 1848, and the mechanics institute, presumably housed in the 1859

⁴⁴⁹ Jack Reynolds, *The great paternalist Titus Salt and the growth of nineteenth century Bradford* (Bradford, 1983), p. 279.

⁴⁵⁰ So much so that just after the Second World War another hall was constructed within the Co-op complex in order that social and other events could take place not associated with the Gurteen family.

⁴⁵¹ *Kelly's Directory of Essex* (1910).

buildings.⁴⁵² A reading room was built in 1890 for the use of Hunt's workmen, but by 1910 had been turned into a social club.⁴⁵³ It is unclear whether Earls Colne had one or two mechanics' institutes and this is borne out by the conclusions Hughes reached in the provision of institutional building in Wales. He mentioned a clash between the enlightened employer's self interest and the movement for self improvement by the workforce themselves. This might have caused two mechanics institutes to be provided,

One by the employers and one by the workmen themselves, but the evidence in the case of Earls Colne is unclear.⁴⁵⁴

Of all the case study towns, only Halstead had a static population between 1851 and 1911, this, however, does not necessarily mean a deteriorating town. A community could still be dynamic and progressive in its outlook, without increasing its population. Waller cites the example of Wallingford in Berkshire, which had a population in 1901 of 2,808 and which had only risen to 2,848 by 1931.⁴⁵⁵ He took the view that although 'statistically stagnant, Wallingford [had] not surrendered its claims as a town.' Waller believed that, 'No urban historian can leave the Wallingfords of England out of the account.'⁴⁵⁶ In Wales, in 1851, 80 per cent of the population lived in small towns of less than 5,000 souls and, by 1891 the number was still over 50 per cent. As Julie Light maintains, 'Small should not be interpreted as insignificant when this was in fact the most common experience of urbanisation.'⁴⁵⁷ Halstead had declined from a population

⁴⁵² J. Cooper, 'Earls Colne', in J. Cooper (ed.) *Victoria County History, Essex*, X (London, 2001). pp. 89-91.

⁴⁵³ *Kelly's Directory of Essex* (1910).

⁴⁵⁴ Hughes, 'Institutional buildings in workers settlements.', *Industrial Archaeology Review*, p. 161.

⁴⁵⁵ Although later in date than this thesis, the conclusions are still valid.

⁴⁵⁶ Waller, *Town, City and Nation*, p. 4-6. Another example is Chelmsford, Raven, 'Chelmsford during the Industrial Revolution', *Urban History*.

⁴⁵⁷ J. Light, "'...mere seekers of fame'? Personalities, power and politics in a small town:

of 6,959 in 1891 to 6,361 in 1901, but this was in part due to boundary changes. Braintree and Bocking, the other Courtauld towns, fared little better. The population of Braintree was less than Halstead, rising 23 per cent from 1851 to 1901, but Bocking declined 13 per cent in the same period. Courtauld's business records show that, although the amount of fixed assets at the Halstead plant between 1848 and 1885, rose almost 150 per cent, the number of employees between 1857 and 1886 had risen just 44 per cent and by 1899, the period of poor trading conditions, the numbers of employees had not reached the numbers recorded in 1857. The conclusion from this was that at the turn of the century, Courtauld, a prosperous business, was installing extensive labour saving machinery that could be run with considerably fewer workers and the business had no need for recruiting extensive numbers of prospective employees.⁴⁵⁸ The town had seen major additions to its infrastructure during the time the population was stagnating. A public cemetery was laid out in 1856, the Colne Valley and Halstead Railway Company's line opened in 1860 and Halstead became its headquarters and works.⁴⁵⁹ Other industries mentioned in the 1912 Kelly's Directory, included an iron foundry that manufactured stoves and ranges including the famous 'Tortoise' range. There was also a gas works, tannery, a large brewery and a maltings. The construction of a waterworks in 1864-65, with additions in 1890, and the building of a cottage hospital in 1884, helped to establish the beginnings of a dynamic town. An Urban District Council took over from the Local Board in 1895 and built an isolation hospital. There were also units of both the Essex Yeomanry and Territorial Army.⁴⁶⁰ In the last half of the nineteenth century, although the population was not growing, the town

Pontypool and Bridgend, c1860-95.' In, *Urban History*, 32, no. 1 (2005), p. 89.

⁴⁵⁸ Coleman, *Courtaulds an economic and social history*, Table 20, p. 231.

⁴⁵⁹ R.A. Whitehead and F. D. Simpson, *The Colne Valley & Halstead Railway*, (Headington, 2nd. Ed., 1987), p. 14.

⁴⁶⁰ *Kelly's Directory of Essex* (London, 1912).

witnessed a confidence in its future through these new institutions. Although few new amenities were created, there was growth in the existing ones. This would certainly indicate a progressive, if not dynamic. town.

Haverhill nearly doubled its population from 2,535 in 1851 to 4,748 in 1911.⁴⁶¹ Like Halstead, most of its infrastructure was already in place by 1851,⁴⁶² although The Risbridge Union built a large workhouse in the neighbouring parish of Kedington in 1856 and all the poor law business was transferred there from Haverhill. Other industries that were created in the second half of the nineteenth century included a large combined brewery and maltings and Vanners erected a large three storied silk weaving factory for hand looms in 1865, next to the Haverhill South station. Stephen Walters had already constructed a silk weaving factory for hand looms at the Hamlet, Essex, end of the town in 1828, and, although it had closed by 1884, the company still continued to use hand loom weavers, albeit working in their own homes.⁴⁶³ John Atterton had started an engineering business in the town in 1875 and in 1884 moved to Walters old factory in Haverhill Hamlet and erected other buildings.⁴⁶⁴ During the later half of the nineteenth century there was a brick making industry with several brickfields being exploited.⁴⁶⁵ One of these was taken over by Mason, a large and local prosperous builder, who installed modern machinery to increase productivity. Haverhill's market had flourished, with good railway connections and a Corn Exchange was built in 1889

⁴⁶¹ There were 285 people recorded in Haverhill's workhouse in 1851 and if these are added on to the existing inhabitants then the population more than doubled.

⁴⁶² White mentions '...many of its thatched houses have given place to neat slated buildings during the last twenty years', indicating a prosperous town replacing its housing stock. White, *Directory of Suffolk*, 1844.

⁴⁶³ *Kelly's Directory of Norfolk and Suffolk* (1908). For the silk industry see P. Crouch, 'Silk weaving in Haverhill' in, *Haverhill Historian*, 7 (1980), pp. 12-16.

⁴⁶⁴ Atterton was engaged mainly in agricultural work, but also specialised in making cranes for Barns and machinery for sharpening the newly invented lawn mowers.

⁴⁶⁵ J. Challis, 'Brick making in Haverhill about the year 1850.' In, *Haverhill Historian*, 1, [1977].

to replace one converted from a private house in 1839. By 1850 Haverhill had become a County Court District and in 1912 had a combined police station and court. A gas company had been formed in 1854 and there was a drill hall for the volunteers of the 5th Battalion Suffolk Regiment (G Company), which by 1912 had a lieutenant and a colour sergeant based there.⁴⁶⁶ Thus the town was truly progressive and dynamic. Although these industries gave the town a diversity of commercial activity, Gurteen, company and family still dominated the community.

Between 1851 and 1911, Leiston experienced the largest population growth, 176 per cent, of all the four case study towns. Even in the 1840s the parish was experiencing rapid growth, and the period of the 1840s and 1850s saw 40 per cent rises for the two decades. Similarly, the 1890s and 1900s, saw a total of 67 per cent growth. This was due, in large measure, to the fortunes of Richard Garrett and Sons. A buoyant time in the 1840s and 50s was followed by poor trading conditions from the 1860s to the 1880s. However, the company expanded its workforce by 63 per cent in the 1890s and 56 per cent in the 1900s.⁴⁶⁷ It was the growth of the 1890s and 1900s that saw the major urbanisation of the town. The Garrett works were described as one of the largest and best appointed manufacturers of agricultural implements in the kingdom.⁴⁶⁸ To cope with this expansion an Urban District Council was formed in 1895 with fifteen members. Although Leiston had become a dynamic town with the exceptional increase in its population, there was virtually no other industry, apart from a brickfield which had its own railway connection, within its boundaries and the gas works which was part of Garrett's business. This meant that Leiston, as a dynamic town, relied on the fortunes of a single company.

⁴⁶⁶ *Kelly's Directory of Suffolk*, (1912).

⁴⁶⁷ See Table 4.4 page 134.

⁴⁶⁸ *Post Office Directory of Essex*, (1845).

Of the four case study towns, Earls Colne, with its slow population growth, just 23 per cent in the six decades from 1851, had a question mark over its town status. In 1851 it was an agricultural village with few urban characteristics, but by 1910 it had acquired town functions. Its industrial sector was dominated by Hunt's Atlas Foundry and Engineering Works which employed 350 men in 1912. But, Courtauld's had built a crape factory here in 1882 and by 1886 employed about 130 persons, although this had dropped to 45 after the recession within the company. Courtauld's employees were mainly women winders, weavers and drawers, ideal occupations for the wives and daughters of the men employed at the Atlas Works. The brothers T and A.J. Mann continued the timber merchant business started by their father in 1871. They used steam driven machinery for converting logs to timber and specialised in oak for railway rolling stock and willow for cricket bats.⁴⁶⁹ By 1910 brick making was also being carried on in the parish,⁴⁷⁰ and a gas works was established in 1865.⁴⁷¹ The community also became fashionable and attracted middle class people who settled here, often from neighbouring Halstead. Thus there was a certain contradiction between the needs of a small industrialised town and a favoured middle class residential suburb.⁴⁷² Although this indicated other middle class gentry housed in the town, Reuben Hunt, by sheer force of character and his philanthropic deeds was able to remain the dominant personality.

Entrepreneurs, patronage and communities.

⁴⁶⁹ When the author brought elm from this firm in the 1970s the extensive yard was provided with all manner of electrical woodworking machinery, including large band mills. Apart from the motive power, the yard would have probably been similarly equipped from the 1900s.

⁴⁷⁰ Cooper, 'Earls Colne'. *Victoria County history Essex*.

⁴⁷¹ *Kelly's Directory of Essex*, (London, 1910).

⁴⁷² Most of the industrial area was in a close neighbourhood. The Atlas Works was situated on The western end of the town, with Courtauld's crape factory and Mann's timber yard alongside the boundary road to the east. See Appendix IV.

Courtauld and Halstead.

The businessmen of the four case study companies had mixed attitudes towards their towns. The most important entrepreneurs of Samuel Courtauld and Company between 1850 and 1918 were Samuel Courtauld III, his brother George Courtauld II, his nephew George Courtauld III, and Henry Tetley. Samuel had no real interest in creating communities in any of his company's towns, although, at his wife's behest, he built schools, reading and coffee rooms in the villages where they lived, namely High Garrett and, from 1854, Gosfield.⁴⁷³ It was through George II and his son George III, that the company built housing during the time Samuel was in charge and initiated various institutions within the towns. George II's motive in creating a reading room and small library in Bocking during the 1850s, was to give his workers an alternative to the public house. His son George III, in 1873, started a workingmen's club nearby and built a new reading room for the library in 1885.⁴⁷⁴ In Halstead, an evening school had been started for the factory girls and received a government grant in the 1870s. George III, though a very poor businessman, was nevertheless the most benevolent of the Courtauld's entrepreneurs in this period. With the aid of his first wife, he built a hospital at Bocking and later, after her death, a cottage hospital at Halstead. He gave money for public baths at Halstead and for public recreation grounds at Halstead and Braintree, at which places he established a mechanics' institutes and erected drinking fountains to commemorate Queen Victoria's Jubilee. He was appointed a magistrate in 1869, became chairman of the bench and, in 1878, was elected a Member of Parliament for Maldon. He also served as Alderman on the newly formed Essex County Council and was appointed, in 1896, Sheriff of Essex, so his influence was not just tied up in his workforce or its

⁴⁷³ Coleman, *Courtaulds an economic and social history*, pp. 76, 127, 255.

⁴⁷⁴ Ibid., p. 255. Libraries and reading rooms were popular amongst the newly educated mechanics and skilled workmen.

community.⁴⁷⁵ He used all his energies on public duties, which interested him, and less on running the business. He believed in good staff relationships and instigated sporting facilities, attended cricket matches, dinners and other functions in the Workman's Hall and also organised fetes at his house for the factory employees. Although not chairman when the Chelmsford Mill was closed, he insisted that the fifty employees made redundant should be given a pound each and in 1894-95, £450 was shared amongst other old hands being discharged.⁴⁷⁶ George Courtauld III was elected as a member of Halstead Local Board of Health in 1878 and was made chairman thirteen times up to 1893. When the Halstead Urban District Council was formed in 1894, George III did not put himself forward as a candidate, but nevertheless was co-opted as chairman for almost ten years, from 1894 to 1905. This public spirited attitude was characteristic of the man. Henry Tetley, on the other hand, was not interested in company communities, but could be moved by business necessities, as at Marcus Hook in Pennsylvania, where he sanctioned the building of a company town.⁴⁷⁷

Gurteen and Haverhill.

Daniel Gurteen III and his sons, throughout this period, truly stamped their authority on Haverhill.⁴⁷⁸ The Haverhill Local Board of Health was formed in 1878 and throughout its life and that of its successor, the Urban District Council until 1918, the chairman was inevitably a Gurteen, from Daniel Gurteen IV in 1878 through to his brothers William and Jabez to 1918 and beyond. There were also other Gurteen family members on these councils during the same period; Daniel IV and William were also

⁴⁷⁵ Ibid., pp. 248-57

⁴⁷⁶ Ibid., p. 257.

⁴⁷⁷ See page 119.

⁴⁷⁸ For a family tree see appendix III.

Aldermen of the West Suffolk County Council and, with Jabez, sat as magistrates. Both William and Jabez were keen sportsmen and both served as president of the Haverhill Cricket Club; Jabez bought the cricket ground and presented it to the club. Both supported the Rovers Football Club and William was vice-president of several other clubs in and around the town.⁴⁷⁹ There were very few aspects of town life with which the Gurteen family was not intimately connected.

Garrett and Leiston.

The company of Richard Garrett and Son during the 1850s was run by Richard Garrett III. Although he was involved with national events, nevertheless he found time to concern himself with local affairs as well as being a justice of the peace and deputy lieutenant for the county of East Suffolk. He has been described by Whitehouse as providing his workmen

‘... with reasonably paid employment in an area where agriculture was on the decline, encouraged their self help in the shape of the cooperative and mutual benefit societies, promoted their physical well-being [by] building houses and the works institute, furthered their education by night schools, apprenticeships and support of the National School and fostered their self-respect by encouraging the volunteers and village societies...’⁴⁸⁰

This sums up his paternalistic attitude to his employees. That he was liked by his workmen was borne out when he was 50 years old and they presented him with a silver plated claret jug.⁴⁸¹ By 1850 there was a Mechanics Institute, and a Mutual Improvement Society founded by the company, its membership was compulsory for all

⁴⁷⁹ Obituaries in the *South West Suffolk Echo*, (21st June 1913 and 28th June 1924).

⁴⁸⁰ R.A. Whitehead, *Garrett 200 a bicentenary history of Garretts of Leiston 1778-1978* (London, 1978), p. 31.

⁴⁸¹ Although this might seem to be a way of ingratiating themselves, Whitehead believes this to be a genuine gesture of their affection. Whitehead, *Garrett 200*, p. 31.

employees. The company also helped to form a works brass band in the 1860s.⁴⁸² The Garrett family were Anglicans and perhaps content with the status quo of the ruling elite of land owners who ran the town in the first three quarters of the nineteenth century. By the end of that century the community had grown and Frank Garrett I (brother of Richard Garrett III), was a Justice of the Peace and the most prominent member of the family in the community. He was also an alderman of the East Suffolk County Council, serving as vice-chairman of its technical education committee.⁴⁸³ The town became an Urban District Council in 1895. Frank Garrett received most votes in the first election of the council and was also voted by the councillors to be their chairman, but was barred from becoming a councillor because of a rule relating to conflict of interests - his company supplied gas to the council. However, by 1900, Frank Garrett II was recorded as vice-chairman, and by 1908 was chairman.⁴⁸⁴ Also serving on the council in 1908 was his son Alfred, who, like his father and brother Stephen, all lived in the town. The company ran its own Leiston Works Athletic Association with nine acres of grounds and a club house where football, cricket, hockey, bowls, tennis and croquet were played.⁴⁸⁵ Also, Frank Garrett I was a benefactor to the town. He paid for three of the peal of eight bells in the parish church in 1883 and, eight years later, presented five acres of land within the town as a recreation ground, while his company paid for laying it out.⁴⁸⁶

Hunt and Earls Colne.

⁴⁸² Whitehead, *Garretts of Leiston*, p. 23.

⁴⁸³ Ibid., p. 21.

⁴⁸⁴ It is not clear in the sources as to which Garrett was barred from office, neither does it mention co-opting as a solution.

⁴⁸⁵ Whitehead, *Garretts of Leiston*, pp. 24-6, 147.

⁴⁸⁶ Whitehead, *Garrett 200*, pp. 145-153.

Burton-Hopkins considered that from the 1850s the Hunt family was linked with most events in Earls Colne. Reuben Hunt, being in complete charge of the business, was also influential in parish matters. He was overseer of the poor and for 40 years a Guardian of the Halstead Union and a member of the Halstead Rural District Council.⁴⁸⁷ However, there was no desire to create a Local Board of Health or Urban District Council for Earls Colne. The community was too small and the inhabitants were, arguably, more concerned with a likely increase in the rates rather than making the parish healthier.

Although Reuben Hunt and his family were Anglicans, he was a supporter of the Liberal party. But, in 1893, he changed his allegiance to the Conservative cause over Gladstone's Home Rule bill for Ireland. He became active in the local party and collaborated with George Courtauld to get a conservative candidate elected to the Maldon seat. Reuben became president of the Halstead Constitutional Club in 1904 and remained in the post for 23 years. In 1890 he was created a justice of the peace for the Halstead bench. He became president of the cricket club, chairman of the committee to relieve famine in India, president of the committee of the Four Colnes Flower and Sports Show and president of the Atlas Works Social Club. Reuben and his wife gave a stained glass window in the parish church to commemorate Queen Victoria's diamond jubilee. In 1910 he paid for the oak lychgate in memory of his son Harry, who had in 1908, given two bells out of six new ones for the church and who died, aged 41, in 1909. Reuben gave a piece of land, near the church, to be made into a park.⁴⁸⁸ Compared to the contributions of George Courtauld III, Daniel Gurteen III, and Frank Garrett II in their respective towns, this was small fry, but without the organisation and

⁴⁸⁷ Burton-Hopkins, *Hunt for machinery*, p. 47

⁴⁸⁸ *Ibid.*, pp. 96-8

platform of a Local Board or Urban District Council, it was probably as much as could be achieved. However, it was, perhaps, his funding of the local grammar school that was to elevate him to higher status as a philanthropist. He helped to save the Tudor school in 1889 and he supplied a considerable amount of financial input towards a fine new red brick Edwardian building which was erected in its own grounds in 1892. Reuben paid for a new residence for the headmaster and accommodation for 25 boarders, constructed in 1897 to commemorate Queen Victoria's diamond jubilee. In 1903-04 he also paid half the cost of a new wing comprising chemistry and physics laboratories, lecture room, balance room and art room. This brought the school into the forefront of scientific education.⁴⁸⁹ Besides being the most influential person in the parish, he also had considerable influence in the neighbouring town of Halstead.

Communities, local and state control.

Throughout the Victorian period there was continued growth of urban towns. By 1851 there was virtually the same number of people living in urban areas as there were in rural districts. After this date the urban conurbations and large towns continued to grow in population, while the smaller towns stagnated and the rural regions declined.⁴⁹⁰ These rapidly growing urban communities were characterised by a bewildering number of *ad hoc* institutions that were either already in place, or created for the control of the parish at either local, regional or state level. Large towns and cities, could take the option of becoming boroughs or county boroughs, which gave them a level of autonomy. But the parish, buffeted by the wind of change of state intervention, could not achieve the same independence. The parish controlled Old Poor Law was

⁴⁸⁹ Ibid., pp. 44-45

⁴⁹⁰ See page 155.

reorganised and regionalised in 1834, with groups of parishes formed into Unions controlled by Boards of Guardians.⁴⁹¹ The justice system was based on regional benches of magistrates, and increasingly, as the nineteenth century progressed, local industrialists and businessmen were created magistrates, thus allowing them to gain more influence.⁴⁹² However the local community was given control over the elected burial boards, school boards, local boards of health and urban district councils, when they were created.⁴⁹³ They became more representative of their communities as the franchise was extended by a sequence of nineteenth century reform acts. The system of representative elections had already been in place by the many volunteer institutions where members, who paid annual subscriptions, voted at meetings, were represented by committees and chairmen. Resolutions were proposed, debated, seconded, carried and minutes recorded. This became the backbone of the British representative systems.⁴⁹⁴ There was also *ad hoc* government departments that oversaw these organisations; the Poor Law Board for England and Wales; Education Board; Home Office for police forces and Board of Trade for municipal trading, the General Board of Health and then the Local Government Board for the Local Boards and Urban and Rural District Councils. Each of these organisations had their own way of working and their own

⁴⁹¹ Halstead and Earls Colne came under the Halstead Union, Haverhill under the Risbridge Union and Leiston under the Blything Union.

⁴⁹² Daniel Gurteen III and IV, William and Jabez Gurteen, Frank Garrett and Reuben Hunt all became Justices of the Peace. The notable exceptions were Samuel and the two Georges of the Courtauld family. It was only later in the nineteenth century with Samuel Augustine Courtauld who, later in the early twentieth century, was to become chairman of the company, was the first of the family to become a magistrate.

⁴⁹³ Burial Boards in Halstead and Haverhill, A School Board in Haverhill, Local Boards of Health in Halstead and Haverhill and Urban District Councils in Halstead, Haverhill and Leiston.

⁴⁹⁴ R. J. Morris, 'Governance: two centuries of urban growth', in, R.J. Morris and R.H. Trainor (eds), *Urban governance: Britain and beyond since 1750* (Aldershot, 2000), p. 5.

standards and rules.⁴⁹⁵ But of primary importance to them all, was that there must be a national standard that all parish authorities must reach. The Local Boards of Health and later the Urban District Councils put local improvement schemes to the Local Government Board for which, if approved, the towns could obtain loans at advantageous terms. But they were not compelled to build the project, neither was the Local Government Board able to take the initiative and suggest necessary schemes. The relationship between central government and these local institutions was of a mixed character. It is not the purpose here to describe these complex bodies, but certain areas of their influence had profound consequences for the company towns in transforming their environments into healthy communities. These state bodies were able to set standards in sanitation, building byelaws, and in generally improving the public health of these towns. However, by the end of the nineteenth century the parish was regarded as too small and lost favour as the unit of local government. By the beginning of the twentieth century the newly reconstituted county councils and borough councils, for example, took away from the parishes such duties as running the local education system. Later the government even bypassed these bodies and old age pensions were collected from post offices from 1908, and in 1911 unemployment benefit was payable from local labour exchanges.⁴⁹⁶ However, the Urban District Councils and their chairmen and councillors still remained the primary authority controlling the local community.

Barry Doyle recently asserted that, despite the excesses of urbanisation and industrialisation, the local communities should be congratulated for the amount they had done, rather than criticised for what little they had achieved. He also observed that

⁴⁹⁵ Davis, 'Central government and the towns', pp. 264-65.

⁴⁹⁶ M. Dupree, 'The provision of social services', in, M. Daunton (ed.) *The Cambridge urban History of Britain* vol. III (Cambridge, 2000), pp. 377 and 386-87.

‘...local government took on a bewildering array of powers, raised, borrowed and spent thousands of millions of pounds, and ultimately employed an army of almost one million workers.’⁴⁹⁷ Robert Millward has stressed that these local authorities created an infrastructure that was to become the ‘most dynamic element of the British economy from the 1870s to the 1930s.’ He calculated that the annual government component of investment in public health, local transport, policing, water, gas and electricity was nearly as great as the whole investment of the manufacturing industry,⁴⁹⁸ and all this was mostly carried out by locally inspired initiatives. It is against these achievements that the true worth of the part time councillors, mostly inexperienced and working in new untried local organisations, can be fully valued.

The primary reason why these local institutions were created was an urgent need to combat the recurring epidemics of diseases that were affecting the crowded urban areas. The large towns and cities with their overcrowded districts of hovels, ‘rookeries’, airless closes, damp cellar habitations and shoddily built houses for the poor, were rife for these diseases to strike and then spread to middle class areas. Early attempts by large towns and cities to come to grips with this problem initially came about through private bills,⁴⁹⁹ although in a Royal Commission on the State of Large Towns, published in 1844, Southwood Smith was arguing that any regulations should apply across the whole country.⁵⁰⁰ It was after the 1848 Public Health Act that smaller towns could apply, or were forced, to take on local board of health status. It was also possible for towns to

⁴⁹⁷ Doyle, ‘The changing functions of urban government, Daunton, *Cambridge Urban History Britain*, p. 287.

⁴⁹⁸ Millward, ‘The political economy of the urban utilities’, Daunton, *Cambridge Urban History Britain*, p. 315.

⁴⁹⁹ Examples are Newcastle upon Tyne 1837; Leeds 1842 and Liverpool also in the 1840s.

⁵⁰⁰ B.P.P. Royal Commission on the state of large Towns.

obtain the same powers through private acts of parliament before the 1848 act, but this was expensive. By 1871, 700 towns and districts had applied to become local boards.⁵⁰¹

The principal purpose of the local boards was sanitary improvements, by improving the drainage and sewage systems in the crowded urbanised towns and by the use of water closets. For towns with enthusiasm for improving their inhabitants' health, this was an expensive, but necessary option. Three components were necessary: water to sweep the contents of the water-closets through the system, and piped drainage to carry the sewage and water to the third part; some sort of sewage treatment works. A constant supply of water was needed, but it could also provide the town with drinking water, although it was expensive as bore holes, reservoirs and pumping stations were needed. The drainage system of pipes which carried the sewage via branches buried under roads and open ground, to a main sewer, was effective. The main problem was the treatment of the sewage. Chadwick's idea that by spreading human sewage on to farmland increased the fertility of the land and thus the cost of the system would pay for itself through the value of the sewage, (in effect 'town guano'), proved itself illusory.⁵⁰² It was only effective on limited soil types and it became of no practical use, but, because of its financial implications, it was continually tried. Due to high cost and the uncertainty of providing effective treatment of their sewage, many towns left out the last part of the system and discharged their raw sewage into rivers.

The four case study towns of this thesis show four different facets of working with central government, either as local boards of health, urban district councils or through rural district councils. The two case study towns that acquired Local Board of

⁵⁰¹ Davis, 'Central government and the towns' Daunton, *Cambridge Urban History Britain*, p. 267.

⁵⁰² 'After a short flair-up, each scheme had expired leaving behind an abominable smell at the works and a bill from the lawyer and engineer at the office'. J. Shail, 'Town wastes, agriculture sustainability and Victorian sewage', (1996), p. 196.

Health status, Halstead and Haverhill, were at the extremities of this system. Halstead was a pioneer as it became a Local Board in 1852, when the act had only been passed in 1848 and would have needed time to get the Local Government Board organised.⁵⁰³ The community, at this time, was not greatly industrialised. Samuel Courtauld had become a partner in the Halstead crape mill in 1825 and a new power loom factory had been built in 1832, but there was no railway connection. It was probable that the town was progressive and dynamic due to its commercial and tradesmen base, similar to Chelmsford.⁵⁰⁴ By 1864-65 Halstead was ‘thoroughly drained’ and a waterworks constructed with a 300 feet deep artesian well, and brick built reservoir capable of holding 84,000 gallons of water. This was augmented by a new well and pumping station in 1890.⁵⁰⁵ However, it is unclear what ‘thoroughly drained’ meant, nor was there much information regarding the number of water closets within the town.

Haverhill Local Board was formed 25 years later, in 1878. By this time the Gurteen factory had been established some twenty years and the railway had arrived in Haverhill some fifteen years before. So Haverhill’s councillors were working in a highly urbanised town and within a government organisation which derived much experience from other small towns. However, Haverhill’s mains water and drainage was to wait another twenty years before a well was bored and a pump house constructed in 1897. This was during the time of the successor to the Local Board, the Urban District Council, taking over. It was probable that the planning, dealing with the Local Government Board and obtaining quotes took place under the Haverhill Local Board’s

⁵⁰³ In 1854, as there were only 182 Boards of Health in the country, the scheme was regarded as failing and a further public health act of 1858 was passed. S. Martin Gaskell, *Building control, National Legislation and the Introduction of Local Bye-laws in Victorian England*, (London, BALH, 1983), p. 22.

⁵⁰⁴ Raven, ‘Chelmsford during the industrial revolution’, *Urban History*.

⁵⁰⁵ Kelly’s 1908 *directory*.

initiative.⁵⁰⁶ The town already had some form of drainage but what it consisted of and when it was constructed remains uncertain.⁵⁰⁷ What is clear is that, during the building of the water works, a more effective sewage system was installed with an efficient sewage farm and filter beds. By this time it was realised that all an effective treatment required, was for the sewage to be passed through filter beds, after which the treated water could then be discharged into rivers without polluting them. The Haverhill system was innovatory. To power the sewage air pressure pumps at the sewage works, a gas engine was installed at the council owned gas works where it could constantly be checked by the gasworks foreman. However the pumps were over a mile away and a high pressure air line was laid over the main sewer which powered the automatic sewage pumps.⁵⁰⁸

A watershed in the development of local government of towns occurred in 1894, when the Urban District Councils were formed to take the place of the local boards of health. At that date, rural district councils were also formed so that every part of the nation was covered by an up to date representative form of local government, be it the borough, county borough, county council, urban district council or rural district council. The parishes were not left out since parish councils were also created.

The example of Leiston and Earls Colne shows how central government could get its way and force the Leiston Urban District Council to equip its parish with

⁵⁰⁶ Haverhill Urban District Council minute books, EF 511/1/4, Suffolk Record Office, Bury St Edmunds.

⁵⁰⁷ There was an organisation which had been formed before the elected boards, namely the Risbridge Sanitary Authority. This was a somewhat shadowy organisation with few surviving records, but there is a 'sewage tank' shown by the river in a map of Haverhill. This may have been provided by this administration. Ordnance Survey Map, 25 inch to the mile, Essex sheet III, north west (1885).

⁵⁰⁸ This was a cheaper option as there was not the need to have a resident engineer residing in a council owned house on the site of the sewage works. 'District meeting 24th May 1890' [Haverhill], *Journal Institution of Municipal Engineers*.

efficient drainage, despite influential local opposition. At Earls Colne, lacking an Urban District Council, it was more difficult. The need for pure water and an expensive waterworks was not a contentious issue in Leiston. Garrett had an artesian well in their foundry and provided water for their own housing, and which also served three hydrants. However there was antagonism between Mrs Ogilvie, an influential landowner in the town, and Frank Garrett, the largest employer in the community who also paid a quarter of the town's rates. Mrs Ogilvie wanted the town to have an up to date sanitary system with water closets and an effective sewage disposal works while Garrett and the majority of the councillors considered this unnecessary and expensive and preferred the town to use a much cheaper system of 'dry earth closets'. The Local Government Board in London, needless to say, wanted the town to have the former and insisted on a public enquiry, which was held in 1898. Their decision for water closets and a proper drainage system was a foregone conclusion. There was no need for new waterworks as Frank Garrett agreed to supply the council from his artesian well, provided they paid for the pumping.⁵⁰⁹

Earls Colne was different. Not having Urban District Council status, it merely became one of a number of parishes under the auspices of the Halstead Rural District Council thus often having to play second fiddle to these other parishes as far as financial resources were concerned. There was also an artesian well in the Atlas Foundry which supplied water both to Hunt's houses and a water tank in the High Street, though the houses in the lower end of the town by the river were using contaminated wells. In 1907 the Medical Officer of Health submitted two alternative schemes to supply the town with mains water; both were considered too expensive and it was not until 1914 that a

⁵⁰⁹ It is unclear whether the councillors felt obliged to back their powerful and influential chairman or whether this was their unbiased view. Whitehead, *Garrett 200*, pp. 158-160.

waterworks was completed with water obtained from a borehole. In 1896 raw sewage was being discharged into the river but, again, a proposed scheme combining drainage and sewage was rejected as too expensive. A favourable report on the drainage of the town was submitted by the medical officer of health in 1904, but untreated sewage was still being discharged into the river in 1923. The County Council started legal proceedings in 1927 and a year later work started on a sewage works. An extension was underway in 1937, but was delayed by the war and it was not until the late 1940s that all Earls Colne houses had main drainage.⁵¹⁰ Thus Earls Colne, an urbanised and industrial town, albeit with a small population, suffered by not having urban district council status. The Rural District Council was catering for rural villages, often with low numbers of inhabitants, where dry earth closets were quite adequate up to and after the Second World War and even the supply of mains water was only starting to become common in the 1920s and 1930s.

Conclusions

The companies certainly dominated their communities in three ways. Firstly, by the sheer numbers of their workforces as a proportion of the working populations of the towns. Secondly, by the number of houses they owned, as compared to other property owners, although Courtauld at Halstead was an exception.⁵¹¹ And thirdly the company supplied amenities for the social, sporting and intellectual welfare of their workers.

⁵¹⁰ Janet Cooper, 'Earls Colne', *Victoria County History Essex*, p. 90.

⁵¹¹ However, in the 1920s and 1930s, after the terminal date of this thesis, Courtauld built many more houses in a distinct style, at a time when other companies had ceased constructing dwellings. Crosby, Garwood and Corder-Birch, 'Workers' housing in Essex', *Industrial Archaeology Review*, p. 115-17. Bettley and Pevsner, *Essex*, pp. 442-44.

Urbanisation went hand in hand with industrialisation. Halstead and Haverhill had acquired urban characteristics prior to 1850 which was due to the commercial nature of the market towns, and, in the case of Halstead, to its fashionable character. But the growth of all the four towns was remarkable as this expansion took place, generally, during a relative short period of a few decades, between the end of the nineteenth and beginning of the twentieth centuries. During this time a major building boom occurred and not only were dwellings, chapels and churches, schools, halls and mechanics' institutes being built on an impressive scale, but also the communities' infrastructure was being created. This was due, mainly, to the prospering economy of the family companies which was percolating its way, via the wages of the employees, to the rest of the communities.

The businessmen of these companies, by their influence and their patronage, also managed their communities. By becoming leaders of local government they stamped their control, not only over their companies, but also their towns. The major achievement of the four case study communities, as with so many other similar sized towns throughout the kingdom, was to match substantial growth in population and buildings with the creation of an infrastructure well able to control effectively in a short space of time and often at considerable expense, the problems of urbanisation. What made the four case study towns distinct was that the growth of the towns was orchestrated by their family companies who almost dictated the extent of urbanisation. Truly, company towns.

CHAPTER SIX

SUMMING UP AND CONCLUSIONS

Introduction

The title of this thesis is ‘Entrepreneurs, manufactories and small industrial communities 1850-1914’. The separation between manufactories and their communities was deliberate. An entrepreneur had to create a profitable, often extremely profitable business, to acquire the necessary financial resources to construct the housing and the rest of the built environment that made up the company’s community. The profitability of some of these companies was remarkable when extensive profits had to be ploughed back into the business to finance this growth. In almost all cases the profitable business came first before the creation of the company town. The entrepreneurs were first and foremost successful businessmen before building their communities and stamping their authority on these towns. Thus chapter four deals with the ability of the entrepreneurs to create prosperous businesses, including the ability to ride the stormy weather of severe market conditions towards the end of the nineteenth century. The concept of the family firm was important in the understanding of the critical nature of keeping the businesses prosperous to hand over to the next generation. This naturally leads to chapter five and the establishment of the company communities financed by the profits from the company, generated by years of entrepreneurial skills on the part of the businessmen who became leaders of these districts. The urbanisation of the company town was a direct result of the industrialisation of the business and was often carried through by the same entrepreneur.

The scope of companies and their communities, countrywide, has been illustrated in chapter two, not only geographically, from Cornwall to Scotland and from

Wales to Norfolk, but also in differing types of industries and variable sizes of businesses along with their communities. The conclusion is reached that from small businesses with just a few houses and amenities to extensive self contained towns with substantial factories, acres of housing, complex public buildings and extensive amounts of facilities, considerable variation existed.

Character of workforce

The provision of housing for the workforce was one of the key elements on which the companies' policies and strategies were based. But 'workforce' cannot be described as a single monolithic whole. It had a hierarchy. At the top was the supervisory staff, mainly the supervisors and foremen. Melling has shown how in Clydebank these needed to be kept away from the men they had to discipline. They were given separate superior housing, sometimes with the facilities for the purchase of their own homes as an added incentive to be on the side of the employer.⁵¹² However, other companies' strategies were for the whole workforce to work as a team and that to separate the different classes of workers was wrong. Next in the hierarchy came the skilled workers and, because of their expertise, they could be in short supply, often getting preferential treatment, high wages and housing.⁵¹³ These two classes constituted the all important 'key workers'. Lastly came the semi-skilled and unskilled labourers. The latter class frequently received wages so low that they were unable to afford company housing.

⁵¹² See pp. 53-56.

⁵¹³ The classic example in this study is skilled railway workers. See page 60.

Four case study companies

It was the businesses rather than their towns that became nationally known. Thus Courtauld was able to ignore, to a certain extent, national economic trends as their funeral crape and viscose were well known and considerable amounts were sold with high profit margins. Gurteen played an increasingly prominent role in ready made clothing, concentrated, to a greater degree, on flexible specialisation which was a major strategy of its business. Garrett had a reputation as a nationally known company with a high status for its reputable agricultural machinery. Richard Garrett III was also well known in high social circles because of his influential friends and for helping to set up the Royal Agricultural Society of England. Hunt, although remaining the smallest of the companies with a successful export business, was able to diversify profitably into non-agricultural products.

The rapid technology development of industrial manufacturing during the time span of this thesis is an issue that shows the entrepreneurs in an almost heroic light. From the era of hand spinning, hand weaving and handicraft work to proto-industrial methods, the putting out system and flexible specialisation, as typified by Gurteen in their early years, little technological changes had taken place beyond the birthplace of the industrial revolution. Even Samuel Courtauld was using hand or horse powered throwing mills when he first started his business. Garrett was still providing scythes and sickles to the local farmers and these primitive businesses could be replicated throughout the nation. But soon technology, which had been first pioneered in the industrial northern counties, began to appeal to the local entrepreneurs. George Courtauld II joined his brother Samuel and devised the metal framed power driven

looms that were to change Courtauld's fortunes, although these were powered by water, a traditional form of motive power. Richard Garrett II started to manufacture a simple but effective threshing machine invented by his father-in-law and his son, the inventive Richard Garrett III, was to devise other successful agricultural machinery, notably the seed drill. But he had not only to enlarge his premises with a foundry and engineering works, to be able to mass produce these machines, he also needed to acquire engineering knowledge and skills and mass production methods, and also obtain skilled workmen. Not content with threshers and seed drills, Richard III saw the need to keep abreast in the industry with steam engines. Here again it was not just the aim to manufacture steam engines for various purposes but to produce the most efficient. These portables were quite simple in design, just mounted on wheels so that they could be towed to where they were wanted. But they needed the inventiveness of a skilled engineer to devise and experiment to produce the best in the market for agricultural purposes. Having gained this knowledge and skill it was reasonably easy for Garrett to improve on these various forms of machinery. The firm's production of traction engines would just be an extension of the portables and even by the time of the development of steam wagons there was an effective design team in the works. Daniel Gurteen III also had to gain similar knowledge and skills for the running of his new steam driven weaving shed. A much later developer, Hunt was also devising various agricultural machinery, but with the acquisition of the Biddel's patent, Reuben Hunt was buying an existing and fully operational business. The question remains, how many businesses, particularly small ones, throughout the kingdom had the skills, resources or temperament to match these pioneering companies?

With this technological breakthrough most of the four case study companies were changed almost beyond recognition through industrialisation. The simple proto-

industrial businesses of the eighteenth and early nineteenth centuries did not differ very much from many other small towns' businesses. But from manufacturing textiles or simple tools, to the extensive manufactories covering significant areas of the towns and employing a majority of the workforce, the change was impressive. Their communities had also been transformed from mainly small towns run by the vestry and having little in the way of urban facilities, to fully fledged urbanised communities that were often dominated by these companies.

Large company communities

From 1850–1914 some of the wealthiest entrepreneurs, having created extremely profitable companies, turned their attention to establishing extensive self contained company communities, often with architectural merit. During the 1850s and 1860s Titus Salt created Saltaire and Edward Akroyd was constructing, first, Copley and then, after 1859, Akroydon. In the late 1880s William Lever started to built Port Sunlight and the Quaker, George Cadbury, developed Bournville from 1895. On Clydebank an extensive series of Scottish tenement buildings were erected by companies involved with large scale ship building in the early part of the twentieth century. This culminated with William Beardmore building a considerable number of tenement blocks between 1900 and the end of the First World War, when the company had expended over £210,000 on these developments.

These companies had also created facilities within their towns to make them self sufficient urban areas. However, each community was created for a different agenda. Saltaire was unified by its Italianate architecture, which was used throughout the town to show off Salt's power and prestige. Akroyd used gothic for the style of his town at

Copley, but he was more concerned with the welfare of the inhabitants and instigated many amenities, and tried to provide utopian conditions, That is going beyond the concept of not merely providing a company town but attempting, by political and moral agendas, to create an idealistic form of living conditions, although they were paternalistically controlled. At Port Sunlight the 'garden city' ideal of extensive amounts of green open spaces was a prominent part of the scheme, although Lever insisted on strict paternalism towards the inhabitants. The pioneering town of Bournville was provided with green open spaces, in addition to large gardens for the householders, and often set out with lawns, flower beds and vegetable plots. Cadbury wanted to create a self-help experimental community, whereas the Clydebank shipyards were inspired by ruthless paternalism.

Smaller industrial communities

It must be pointed out that the larger companies have dominated the research into these types of companies and communities. However, towns similar to Halstead, Haverhill, Leiston and Earls Colne, probably made up a majority of the number of these company communities and have been neglected in serious research. Other examples were the Price Candle Company at Bromborough Pool, in the Wirral and the Reckett's town at Hull.⁵¹⁴ There were the companies and towns in Devon set up by John Heathcoat and Cyrus Clark,⁵¹⁵ or the Welsh company colliery towns and the china clay workers' housing around St Austell and Bodmin Moor⁵¹⁶. Another example is Sir

⁵¹⁴ See pp. 49 and 53.

⁵¹⁵ See pp. 43-44.

⁵¹⁶ See pp. 38-39.

William Hartley's community at Aintree.⁵¹⁷ One of the questions thrown up by this research is how many other small industrial family businesses have been set up nationwide but which have not been recorded? The case study towns and companies of this thesis were located in remote areas. Would other businesses and communities, but not recorded, have had more of a chance of survival in more urban locations but where there was a likelihood of their records not surviving through re-development of valuable factory sites?

Location

The agricultural machinery companies were located mainly in the lowland rural areas of Southern England, in stark contrast to the rest of the engineering industry. Of the 25 companies Dewey listed as being founded between 1770 and 1825, nine were located in East Anglia, where there was an abundance of 'innovation and inventiveness'.⁵¹⁸ There was less than a quarter in counties that could be described as industrial and none in the industrialised northern counties. This questions not only the necessity of these companies to be close to the supply of raw materials, but also the viability of the agricultural engineering businesses not only being sited long distances from their raw materials but also often located inland and far from ports or inland navigations. These areas had the advantage of being in close contact to some of their customers, therefore the delivery of goods would be reasonably cheap, but this only holds good for local landowners and farmers, the market for agricultural implements

⁵¹⁷ See p. 51.

⁵¹⁸ Peter Dewey, *'Iron Harvests of the Field': The making of Farm Machinery in Britain since 1800* (Lancaster, 2008), p 17.

being nationwide.⁵¹⁹ But they were successful and even in the years of agricultural depression those businesses in poor locations in regards to their raw materials, remained remarkably buoyant and thriving. This throws into doubt the notion that a successful manufacturing company must be in close proximity to its raw materials.

By 1914, the Urban District Council of Halstead and its neighbour, the rural town of Earls Colne were located in one of the most extensive areas of rural parishes in Essex. Only Braintree and Witham to the south had Urban District Council status, although to the west was the small town of Saffron Walden, which was a Municipal Borough and to the east another but more extensive Municipal Borough, Colchester. These many square miles of agricultural land differed from the north east of the county, where there were four urban district councils grouped together in the Tendring Hundred and to the south west, where there were twelve urban district councils, associated with London and its suburbs. On the Suffolk side of the border, Haverhill was also in an extensive area of rural parishes. Its nearest Urban District Council was Glemsford, twelve miles to the east and much smaller in population. Leiston was hardly in a better position, being a coastal parish, but having the Urban District Councils of Aldeburgh to the south, Saxmundham to the west and located in the northern part of the Suffolk Sandlings. Thus these extensive urban and industrialised towns were sited in the most remote and rural parts of Essex and Suffolk. However, despite this remoteness, or perhaps because of it,⁵²⁰ these firms and their communities, in the most part, became dynamic and thriving. When they were being created the district might be regarded as remote, but thanks to the railways this isolation was illusionary. Not only was the

⁵¹⁹ By the beginning of the twentieth century Hunt's English regional markets consisted of Norfolk, Suffolk, Essex, Cornwall, Devon, Dorset, Glamorgan, Gloucestershire, Pembroke, Somerset and Wiltshire. It also included the city of Birmingham. See Table 4.7, p. 144.

⁵²⁰ Because of its isolation it was also a low wage area.

transport of raw materials to the factories and despatch of finished products efficient and reasonably cheap, but like London could be reached easily and rapidly.⁵²¹

Four case study communities

The four case study entrepreneurs, namely George Courtauld III, Daniel Gurteen III, Richard Garrett III, and Reuben Hunt, were likewise creating relatively wealthy companies and extensive communities, although on a smaller scale to the larger extensive firms. But, nevertheless, used the same amount of initiative, innovation and dynamism in an endeavour to emulate Salt, Akroyd, Lever, Cadbury and Beardmore, but they were hampered by being an enclave in an existing town. Their company housing, in the 1900s, ranged from Haverhill at 25 percent of total housing, through to Earls Colne at 18 percent, Leiston at 12 percent and Halstead with a miserly 2 percent. Thus they owned only a fraction of the town's dwellings. The amenities they provided were diverse, depending on how interested the companies were towards their communities, but tended to match in quality what the larger communities were providing. But when it came to controlling and dominating their communities, Samuel Courtauld, Daniel Gurteen and to a lesser degree Richard Garrett and Reuben Hunt were the equal to Titus Salt, Edward Akroyd, William Lever and George Cadbury.

The four case study companies dominated their communities through control of the Local Boards of Health and Urban District Councils. The electorate, often of the middle class, voted for them and the elected councillors choose them as chairmen and leaders, even, as at Halstead, co-opting George Courtauld III as chairmen without him being elected or, as at Leiston, complaining bitterly when Frank I was prevented, not only from being a councillor, but also chairman, due to a conflict of interests issue. The

⁵²¹ Daniel Gurteen IV was an enthusiastic orchestral conductor. He was able to leave Haverhill by train and attend evening rehearsals at the Crystal Palace and was still able to get back to Haverhill in the same evening.

company's entrepreneurs had the backing of the majority of the local community, there appeared to be no appreciable distrust or dislike of letting these families dominate the towns.

A question asked in chapter one was how important were these towns locally and nationally? Clark and Hosking, in their figures for small towns, 1811 and 1851, ignored Earls Colne and Leiston, while Royle's data missed out Haverhill, Leiston and Earls Colne. Haverhill's population increased over 90 percent between 1851 and 1901, and Leiston more than doubled its populace during the same period.⁵²² This shows not only the neglect these towns have endured from scholars, but also how important the communities were as fast growing towns in the second half of the nineteenth century. In 1901 their company workers made up, on average, 40 percent of the working populations, thus making the companies critical to the local employment market. Also a good part of their employee's wages found its way into the coffers of the local tradesmen and shopkeepers, thus having a decisive effect in improving the local economy.

Urbanisation

Within these smaller communities the municipal infrastructural provisions had outside governmental input. There was a necessity to create many structures in order to meet the continuously evolving urban demands, such as providing not only adequate schooling provision, law and order issues and burial demands, but also fire brigades, street lighting, pavements, sewage provisions and wholesome water. As the urbanised

⁵²² P. Clark and J. Hosking, *Population Estimates of English small Towns 1550-1851* (Leicester, 1993); S.A. Royle, 'The development of small towns in Britain,' in, M. Daunton (ed.) *The Cambridge Urban History of Britain* (Cambridge, 2000), pp. 154-55.

character of the community developed, there was the need for model bylaws, isolation hospitals, parks, sporting and social organisations and public halls, besides the provision of extra housing and churches. In an endeavour to set standard agendas for each individual towns' facilities by governmental agencies, every community tended to be similar, not only in the makeup of its councils and the methods they used to improve the community, but also in the physical structure of the townscape. New buildings, churches, chapels, schools and even shops, geared up for new methods of consumption, were built in similar styles. This was in complete contrast to the companies that remained individualistic and completely different from one to another.

By the beginning of the twentieth century, the case study communities had come of age with many more facilities for the inhabitants in their now fully urbanised towns: from the schools they attended when young; the factories where most of the working population worked; the churches and chapels where they worshipped; the police stations and courts which controlled their behaviour. Also, the local council provided their houses with running water, water closet sanitation and paved and lighted the streets, which housed the shops where they bought their basic and luxury goods. Even when they died the town often provided them with a public cemetery where they were buried.

The process of industrialisation developed during the time span of thesis. The design and manufacturing of, for example, threshing machines and steam engines required extensive knowledge, engineering skills and the facilities of extensive foundry and engineering works. It created widespread areas of factory buildings, incorporating factory chimneys, noise, air pollution, and employed considerable numbers of workers. Urbanisation was the process by which these existing environments were changed by urban amenities. The urban district councils were used to control public health and people's behaviour and it became a major policy, adopted by all the four case study

companies, that the communities, be they Urban District Councils or just a parish of the local Rural District Council, were to be fully controlled by the company. Indeed, in a majority of cases, the companies controlled a considerable amount of the town's institutions, which were often provided by the businesses themselves. The company entrepreneurs, used to controlling and managing their own businesses effectively, used similar management structures to administer the Local Boards of Health and Urban District Councils. These entrepreneurs and similar businessmen throughout the kingdom were applauded not only for creating profitable businesses, but also efficiently run communities.⁵²³ Urban management created vibrant, dynamic towns with a continuing need for buildings. The townscape was continuously changing, either as at Haverhill, an almost complete new town grafted onto the old one, or just a few new buildings fitted around existing structures in the townscape. But the resulting environment would certainly be seen to be company dominated.⁵²⁴ There is little evidence of dissent amongst the local inhabitants regarding this control by the companies.

Motivations

There is no doubt that many companies gave their key workers the chance to purchase their own home.⁵²⁵ But their motivations, be it a seemingly kindly act to give these employees the chance to mount the property ladder, or as at Clydebank where there was a much more ruthless policy, were mixed. The cost of mortgage repayments restricted these dwellings to the higher paid key workers. Akroyd was acting kindly in

⁵²³ See pp. 191-192.

⁵²⁴ See p. 197.

⁵²⁵ For the example of Cyrus Clark see p. 44, John Crossley p. 48 and Sir William Hartley p. 51.

making sure that these special workers had the money for paying the deposit.⁵²⁶ But he and other entrepreneurs were tying these workers to their towns. If they wanted to move elsewhere they were hampered by the mortgages on their homes.

The businessmen could have built the communities as an investment, but the return on the housing would have been low, particularly on dwellings often rented by poorly paid workers and money received from public halls and institutions would be negligible. However, there is evidence that some companies were selling off some of their housing in the first few decades of the twentieth century, in other words the investment was being sold off.

Power would be a better motivation, this being reinforced by the way some entrepreneurs became leaders of their towns through being chairmen of the local boards and urban district councils. They became extremely powerful men in the locality. The longevity of George Courtauld III serving as chairman on both the Halstead Local Board and Urban District Council is strong evidence of this, as is the Gurteen family controlling similar councils in Haverhill.⁵²⁷ When Frank Garrett was banned from the Leiston Urban District Council and was unable to become its chairman, which was certainly his aim, he was backed by a majority of the councillors, thus having a considerable powerbase in the community. Power is a very basic human attribute and one which most people in positions of influence would enjoy. Certainly the most successful of entrepreneurs, whether they were running extensive or much smaller businesses, had it in abundance. It was needed to control and stamp authority on their companies and communities. They were able to dominate their employees by virtue of

⁵²⁶ Akroyd, as the promoter of the Akroydon project, guaranteed the deposit money to the Akroydon Building Association who increased the repayment charges. S.M. Gaskell, 'Model housing from the Great Exhibition to the Festival of Britain,' in, G.E. Cherry and A. Sutcliffe (eds) *Studies in History, Planning and the Environment* (1986), P. 35.

⁵²⁷ See p. 185.

the raw power of ‘hire and fire’ and they expected the same sort of obedience from fellow Local Board members and Urban District councillors. This power manifested itself in creating rules that had to be obeyed by workers in the factory and living in the company’s community. Titus Salt’s rules for living in Saltaire, shown in Appendix V, is a good example, as are William Lever’s thoughts on profit sharing in his factory⁵²⁸. These show how ruthless some entrepreneurs could be in controlling their workers’ behaviour.

But perhaps the primary motivation for entrepreneurs to build their employees’ communities was paternalism. This was a system believed in and supported by the ruling middle classes in the townships. Mary Rose has stated, ‘Satisfactory industrial relations were crucial to business success during the industrial revolution as they are today.’ She also pointed out that in the early years of this so called revolution, the pioneer entrepreneurs were faced with absenteeism, lateness, sickness, rapid labour turnover and strikes on the part of their workforce.⁵²⁹ The most effective tool in dealing with this was paternalism, which was a system whereby wealth carried certain obligations, including looking after the needs of subordinates. The subordinates, as dependents, owed their benefactors loyalty and obedience. It required not only duties by each of the parties, but also responsibilities. In a company community the advantages to the employee was a decent home in a reasonable environment, often with social amenities and above all a secure job. The disadvantage was that of obedience to the patriarch for fear of not only losing a job, but a home as well. Rules for living in company towns were often intrusive on inhabitants’ lives and controlled their behaviour. However, there is much indirect evidence to suggest that generations of

⁵²⁸ See p. 50.

⁵²⁹ M.B. Rose, *The Greys of Quarry Bank: the Rise and Fall of a Family Firm 1750-1914* (Cambridge, 1986), p. 102.

families worked for the four case study companies for many years, son after father and grandfather, daughter after mother and grandmother. This would suggest that these workers were not put off by the intrusive rules or by the perceived ruthless character of some of their employers.

Today we would look with disfavour on paternalism as being patronising to the employee, but historians must always remember that ‘The past is a foreign country, they do things differently there’.⁵³⁰ Bob Morris and Jim Smyth described it as a relationship between labour and capital in which non-cash benefit, the most usual being housing, was given to the employees, but which increased the employers’ power over them. Paternalism, they claimed, worked well in isolated rural labour markets but needed sophisticated tactics in complex urban areas.⁵³¹ At the time it was regarded as a suitable basis for the relationship between employer and employee. There is no evidence that the four case study company’s entrepreneurs were as ruthless and brutal as the Clydebank shipbuilders, Salt or Lever.

Lown has shown how in Courtauld’s factories the patriarch Samuel Courtauld controlled his ‘family’ workforce. As the dominant male, he placed his female workers in secondary roles in relation to his male employees and, despite the fact that the female workforce dominated the males by sheer numbers, gave them little part in supervisory roles. However, in his perceived duty to look after the ‘family’, Samuel, in 1849, provided a hostel, called the ‘Factory Home’, mostly for young women coming from far off parishes, in which to stay during the week. It was a pleasant and airy building which contained eight bedrooms, dining room and a resident’s sitting room and there were a

⁵³⁰ L.P. Hartley, *The go-between* (London, 1985 ed.), p. 9.

⁵³¹ R. Morris and J. Smyth, ‘Paternalism as an employer strategy, 1800-1960,’ in, J. Rubery and F. Wilkinson (eds) *Employers Strategy and the Labour Market* (Oxford, 1994), pp. 196-199; D. Gilbert and Humphrey Southall, ‘The urban labour market,’ in M. Daunton (ed.), *The Cambridge Urban History of Britain*, III (Cambridge, 2000), p. 595.

flower and kitchen gardens. The charge was a shilling a week which included washing, but new tenants were also charged two pence a week till a sum of five shillings had accumulated and this sum was kept on the books to pay rent in case of illness. This was much resented by the tenants as were the rules relating to when they could and could not occupy their rooms and those that stipulated their behaviour whilst in the building. This was at odds with their 'intense love of some form of independence.'⁵³² That this venture was unsuccessful speaks much for the independence and resentment these women felt towards Samuel and his paternalistic attitude.⁵³³

Samuel Courtauld felt it right, in his own beliefs, to be paternalistic in providing lodging for his women workers. The paternalistic entrepreneurs might act kindly towards their workforce, many felt they were, but often the relationship was fraught with stress on both sides and, later in the period, would come to a head in strikes and union recognition.

Entrepreneurs and the family businesses

The entrepreneurs within the four case study companies were individualistic in their characters, life styles and ability. Samuel Courtauld III became the classic entrepreneurial businessman utterly devoted to wealth creation. He could read the markets with uncanny ability and provided himself with moneyed partners who he was able to dominate by the sheer power of his personality. Daniel Gurteen III, with the financial assets provided by the preceding generations of the family firm, was able to take the bold and decisive step to build a small steam powered weaving plant, similar to

⁵³² J. Lown, *Women and Urbanisation, Gender at Work in Nineteenth Century England* (Cambridge, 1990), p. 144.

⁵³³ *Ibid.*, pp. 141-47.

industrial Lancashire examples, but set down in rural Suffolk. But in contrast to this he exploited the advantages of flexible specialisation. The two brothers Richard Garrett IV and Frank Garrett I, were brought up in entirely different circumstances and, having dissimilar life styles, were able to complement each other running a successful and profitable business. Finally Reuben Hunt who, in spite of losing some of his entrepreneurial ability and boldness as he got older, nevertheless left his company in a reasonable condition when he died, so much so that it was to last another 50 years.

The element that united these differing entrepreneurs was the concept of the family business. This was the key and critical component as to why these companies were formed and why they were so successful. It was the constant motivation of the succeeding generations of businessmen that, whatever happened, the company must be kept prosperous to hand over to the next generation. Beside the financial side there was, equally important, the pride and prestige which held the family in high esteem, particularly in their local area.⁵³⁴

There were many known family manufacturing businesses that survived for generation after generation and, perhaps, a far greater that are unknown. These did not succumb to the 'clogs to clogs' in three generations syndrome, but controlled sizeable portions of British industry, even in the first third of the twentieth century.⁵³⁵ The importance of the entrepreneurs, their companies and communities is worthy of further

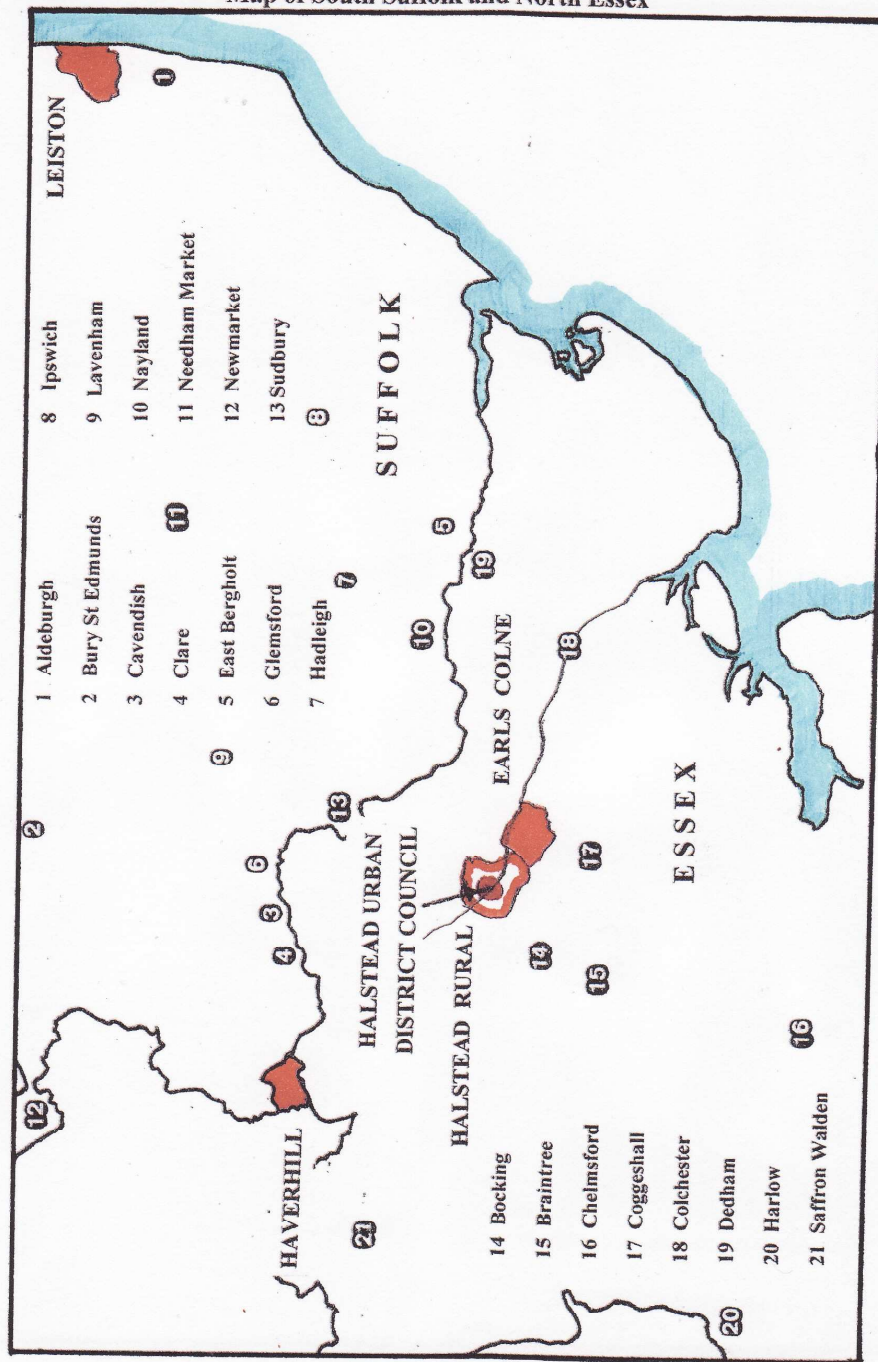
⁵³⁴ Typified by John Betjeman's father's continuing plea for him to join the family business. 'Well now, my boy, I want your solemn word to carry on the firm when I am gone: Fourth generation, John – they'll look to you. They're artist-craftsmen to their fingertips...' John Betjeman, *Summoned by Bells* (London, 1960), p. 16.

⁵³⁵ Christopher Schmitz, 'The growth of big business in the United States and Canada' (London, 1993), pp.24-25.

research at local level, to see how many compared or contrasted to the businesses portrayed within these pages.

APPENDIX I

Map of South Suffolk and North Essex



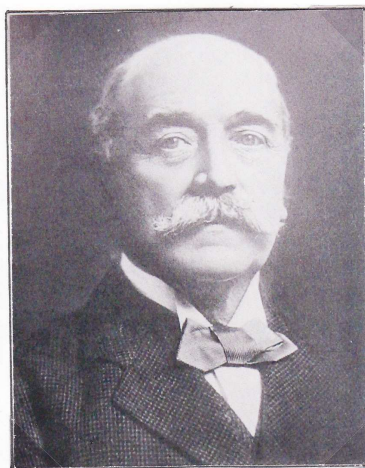
APPENDIX II
Portraits of the entrepreneurs



SAMUEL COURTAULD III
1763-1881



GEORGE COURTAULD III
1830-1920

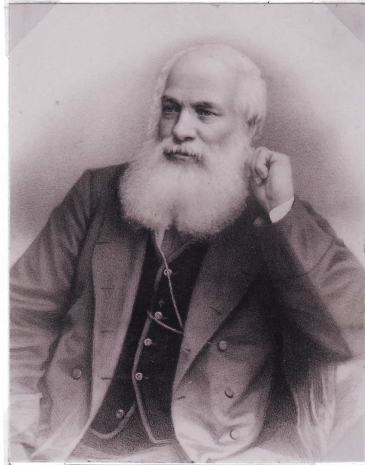


HENRY GREENWOOD TETLEY
1851-1921

**SAMUEL
COURTAULD
AND COMPANY**

Source: D.C. Coleman, *Courtaulds an Economic and Social History*, Vol. 1 (Oxford, 1969), frontispiece and plate 16. Vol. 2, frontispiece.

APPENDIX II
Portraits of the entrepreneurs



DANIEL GURTEEN III
1809-1893



DANIEL GURTEEN IV
1834-1894



WILLIAM GURTEEN
1835-1913



JABEZ GURTEEN
1843-1924

DANIEL GURTEEN AND SONS

Source: Haverhill and District Local History Group. Photographs K002-K004, K009.

APPENDIX II
Portraits of the entrepreneurs



RICHARD GARRETT III
1807-66



RICHARD GARRETT IV
1829-84

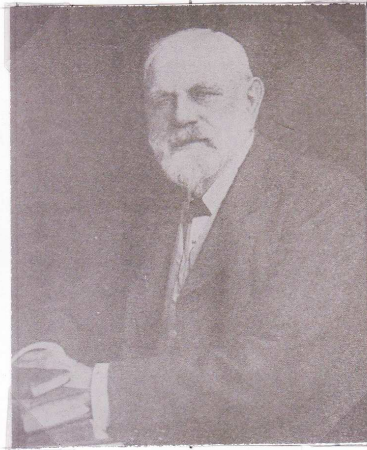


FRANK GARRETT I
1845-1918

**RICHARD
GARRETT
AND SONS**

Source: R.A. Whitehead, *Garrett 200: a Bicentenary History of Garretts of Leiston 1778-1978* London, 1978), frontispiece, plate p. 60, plate p. 183.

APPENDIX II
Portraits of the entrepreneurs



REUBEN HUNT
1836-1927

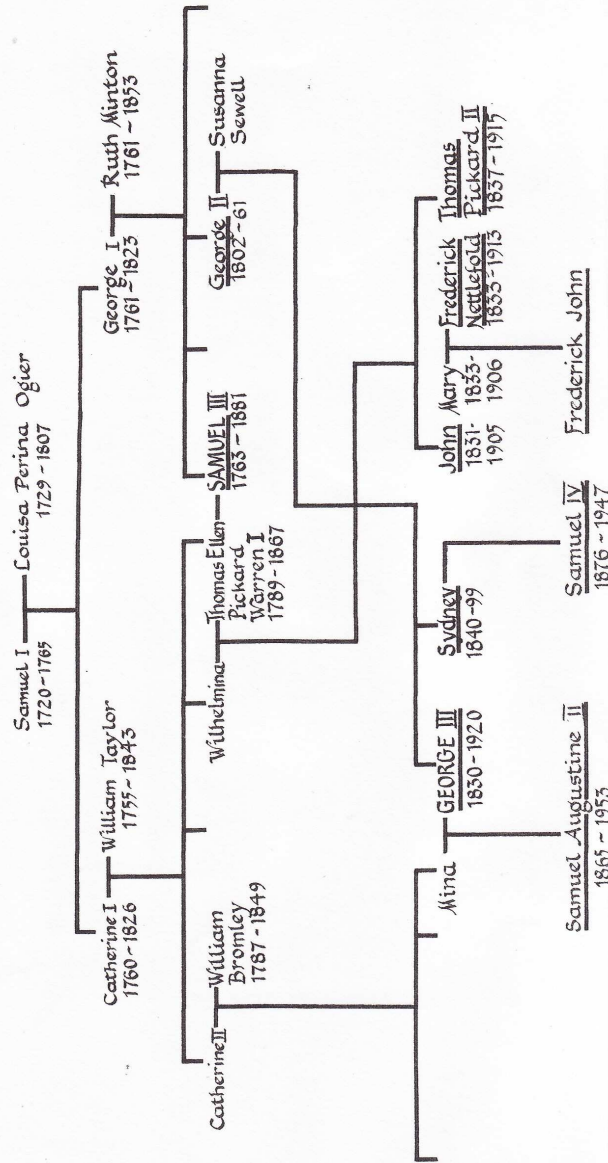
R. HUNT AND COMPANY

Source: P.J. Burton-Hopkins, *Hunt for Machinery: the Rise, Success and Demise of R. Hunt and Company Limited of Earls Colne, 1825-1988* (Halstead, 1995), Plate p. 42.

APPENDIX III FAMILY TREES

Courtauld Family Tree

Partners or directors of Samuel Courtauld & Company are underlined

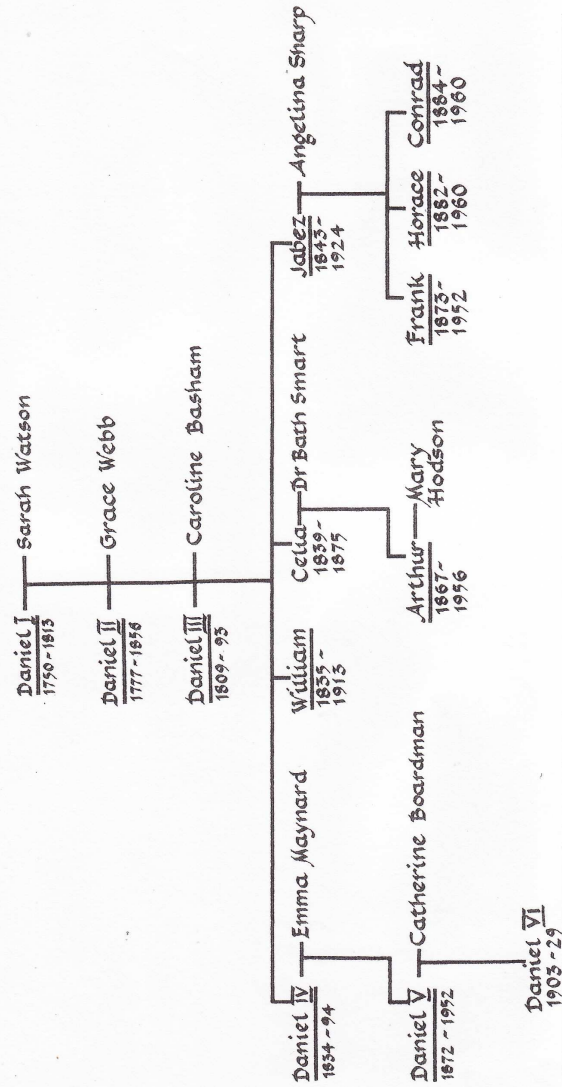


Source: D.C. Coleman, *Courtaulds an Economic and Social History*, Vol. 1 (Oxford, 1969). Table compiled from Figures 4, 17 and 27.

APPENDIX III
FAMILY TREES

Gurteen Family Tree

Partners or directors of Daniel Gurteen & Sons are underlined

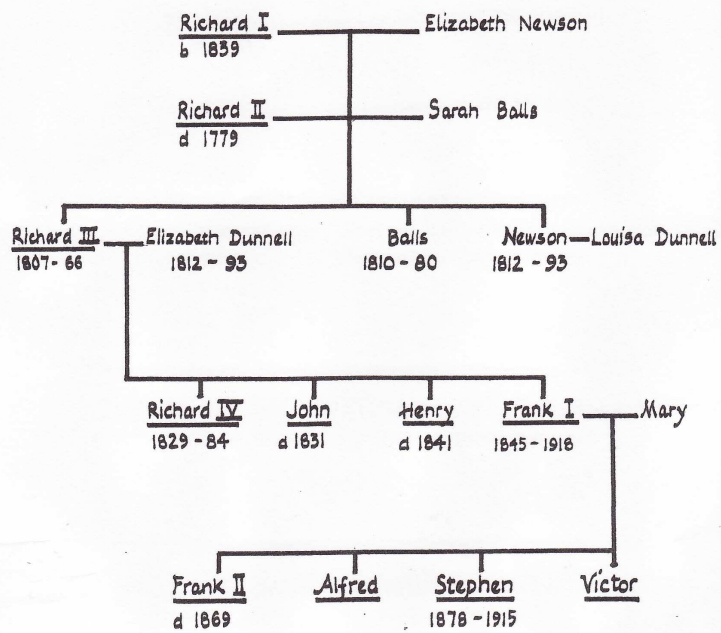


Source: Iris Smith, *Gurteen of Haverhill Suffolk*, manuscript, 1971, Haverhill and District Local History Group P/B 218.

APPENDIX III
FAMILY TREES

Garrett Family Tree

Partners or directors of Richard Garrett & Sons are underlined

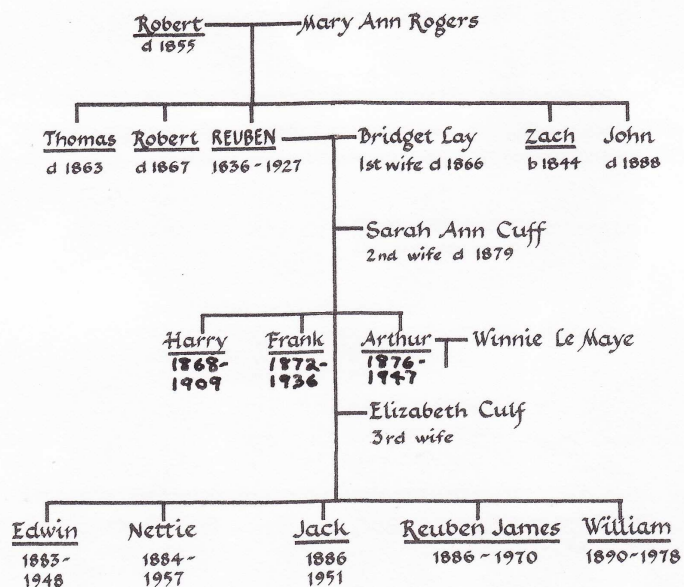


Source: Barbara Brook, *Elizabeth Garrett Anderson, 'A thoroughly ordinary woman'* (Leiston, n.d.). Table compiled from family tree p. 6.

APPENDIX III FAMILY TREES

Hunt Family Tree

Members of the family involved with the business are underlined

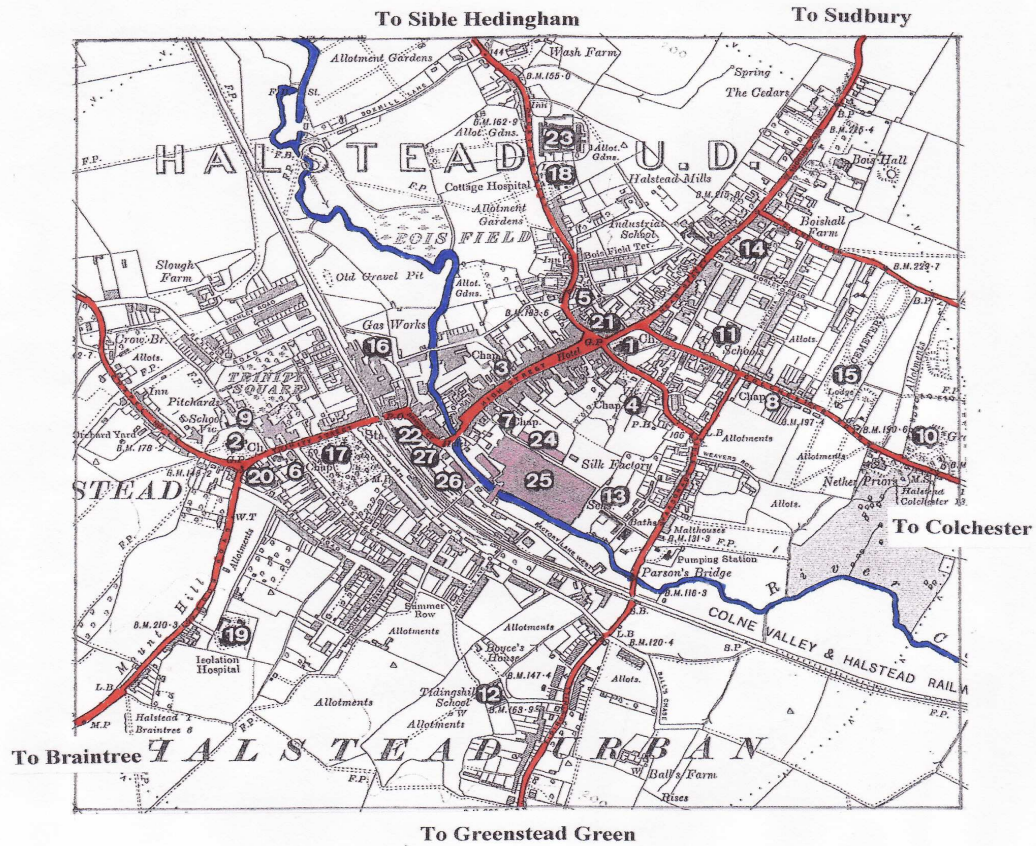


Source: P.J. Burton-Hopkins, *Hunt for Machinery: the Rise, Success and Demise of R. Hunt and Company Limited of Earls Colne 1825-1988* (Halstead, 1995). Table compiled from family tree p. 7.

APPENDIX IV
URBANISATION OF THE FOUR CASE STUDY TOWNS
MAPS c1920 AND TABLES

These four case study town maps show the extent of the towns after they had achieved full urbanisation. They are copies of the six inch to the mile ordinance survey maps. Although they are dated from the mid to late 1920s they were surveyed much earlier and most were last updated in the early 1920s. Thus they are the earliest to the terminal date of this thesis. The tables list the numbered urban features marked on the maps and some which are not. Between them they show the comprehensively urbanised extent of the towns prior to the First World War.

APPENDIX IV
Four case study towns' plans
HALSTEAD



Source: Ordnance Survey map, six miles to the inch, Essex sheet XXVI, north east, 1924 edition.

APPENDIX IV

HALSTEAD

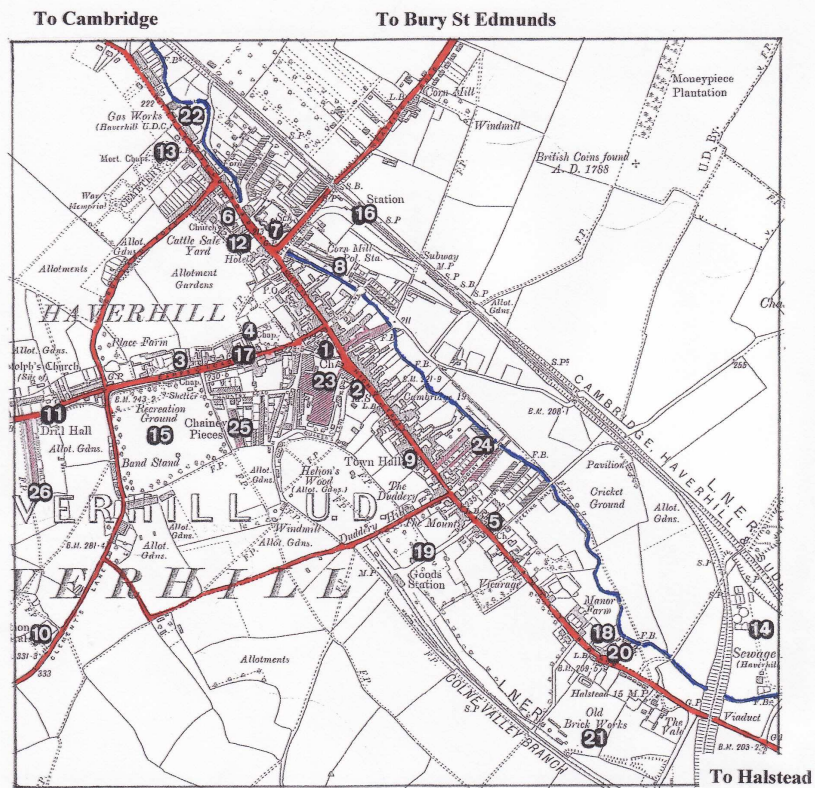
	Institution	Dates	Notes
1	St Andrews Parish Church	Restored 1849-52	
2	Holy Trinity Parish Church	143-44	New parish formed in 1844.
3	Congregational Church	1832	High Street.
4	Congregational Church	1865-66	Parsonage Lane.
5	Baptist Chapel	1868	
6	Methodist Chapel	1875	
7	Unitarian Chapel		Factory Lane.
8	Catholic Church		Church not built till the 1950s, but there is an earlier hall which served as a church.
9	Trinity School	1845	Enlarged 1881 and 1901. Accommodation for 325 pupils.
10	Grammar School	1909	For girls.
11	St Andrew's School	1876	Colchester Road. Room for 404 pupils.
12	Tidings Hill School		Built for 87 children.
13	Factory Lane School	1844	Enlarged 1891. Accommodation for 446 children.
14	Waterworks		
15	Cemetery	1856	Colchester road.
16	Gas Works	1835	Works originally in Rosemary Lane.
17	Recreation Ground	1901	Commemorates Queen Victoria's Diamond Jubilee.
18	Cottage Hospital	1884	Given by George Courtauld III in memory of his first wife.
19	Isolation Hospital	1896	Built by Halstead Urban District Council.

20	Police Station		Trinity Street.
21	Town Hall	1850	Houses Library and Mechanics' Institute.
22	Corn Exchange	1865	Was not a success and taken over by the Essex County Council for a school for technical education.
23	Workhouse	1838	Room for 350 inmates.
24	Courtauld's Housing	1872	Two terraces of three storied houses built by Courtauld, designed by John Birch.
25	Samuel Courtauld and Company's Factory	From 1825	The earliest part is the converted water mill which bridges the river.
26	Courtauld's Housing	1882-83	Terrace of housing in the Arts and Crafts style, designed by George Sherrin.
27	Halstead Railway Station	1860	Also the works and headquarters of the Colne Valley and Halstead Railway Company.

Other urban features not noted on the map are: Quakers Meeting house, Colchester Road, 1851; Particular Baptists Chapel, Colchester Road, 1909; Plymouth Brethren Chapel, Colchester Road, 1893. There was also a detachment of the Essex Yeomanry Territorial Force and a Company of the 5th Territorial Battalion, Essex Regiment, stationed in the town. Halstead also had its own Volunteer Fire Brigade, published two newspapers, had a County Court and Portways had a large brass and iron foundry.

Sources: Kelly's Essex Directory (1912), pp 242-45, and above pp. 160-61, 167-177.

APPENDIX IV
Four case study towns' plans
HAVERHILL



Source: Ordnance Survey map, six miles to the inch, Essex sheet III, north west, 1924 edition.

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APPENDIX IV

HAVERHILL

	Institution	Date	Notes
1	St Marys Parish Church	Restored 1867	Classic market church with little room for churchyard. Burnt out in 1667.
2	Market Hill Chapel	1839	Break away congregation from the Old Independent Church. See also 7.
3	Methodist Chapel	1874	Enlarged 1888.
4	Baptist Chapel	1828	
5	Old Independent Church	1884	Replaced earlier building of 1840 which became the Sunday School.
6	West End Congregational Church	1891-94	Complex. Sunday School, Church and Manse. Moved from Market Hill Chapel.
7	Council Schools	1876	Originally built as a large Board School. Enlarged in 1906. In 1912 there was room for 954 pupils.
8	Police Station and Court	1886	
9	Town Hall	1883-4	Paid for by Daniel Gurteen III to commemorate his golden wedding.
10	Isolation Hospital		
11	Drill Hall	c1900	Housed G Company, 5 th Battalion Suffolk Regiment, Territorial Force.
12	Corn Exchange and Livestock Sales Yard	Corn exchange 1889	
13	Cemetery	1867	Double chapel, east side for Anglicans, west for Nonconformists.
14	Sewage Works	Late 1890s	
15	Recreation Ground	1900	Given by William Gurteen.
16	Haverhill North Railway Station	1865	The Great Eastern Railway Station. The Colne Valley line was built in 1863 and from 1865 almost all their trains used this station.
17	Haverhill Brewery and Maltings	By 1844	Sold to Captain Christmas in 1894 with 36 pubs. and houses attached.
18	Walter Silk Factory	1828	Used solely for hand woven umbrella and parasol silk. Closed c1880.
19	Vanner Silk Factory	1865	Wove silk for the umbrella and parasol trade. By 1912 market conditions poor.
20	Atterton Engineering Works		Atterton took over Walter silk mill and established large engineering works.
21	Heazeworth Brick Works		
22	Gas Works	1854	Purchased by the Haverhill Local Board in 1887.
23	D. Gurteen & Sons, Chauntry D. Gurteen and	Original factory 1856	The premises included a warehouse and the original family home on the other side of the High Street.
24	Gurteen Eden road and Duddery Road Housing		
25	Gurteen Chainey Pieces Housing		

The waterworks, which is outside the area of this, map was built in 1897. The town also processed a Volunteer Fire Brigade and published a newspaper.

Sources: Kelly's Directory (1912) pp. 173-77 and above pp. 161-62, 169-78.

APPENDIX IV

Four case study towns' plans

LEISTON



Source: Ordnance Survey map, six miles to the inch, Suffolk sheets LX north east and north west, 1928 edition.

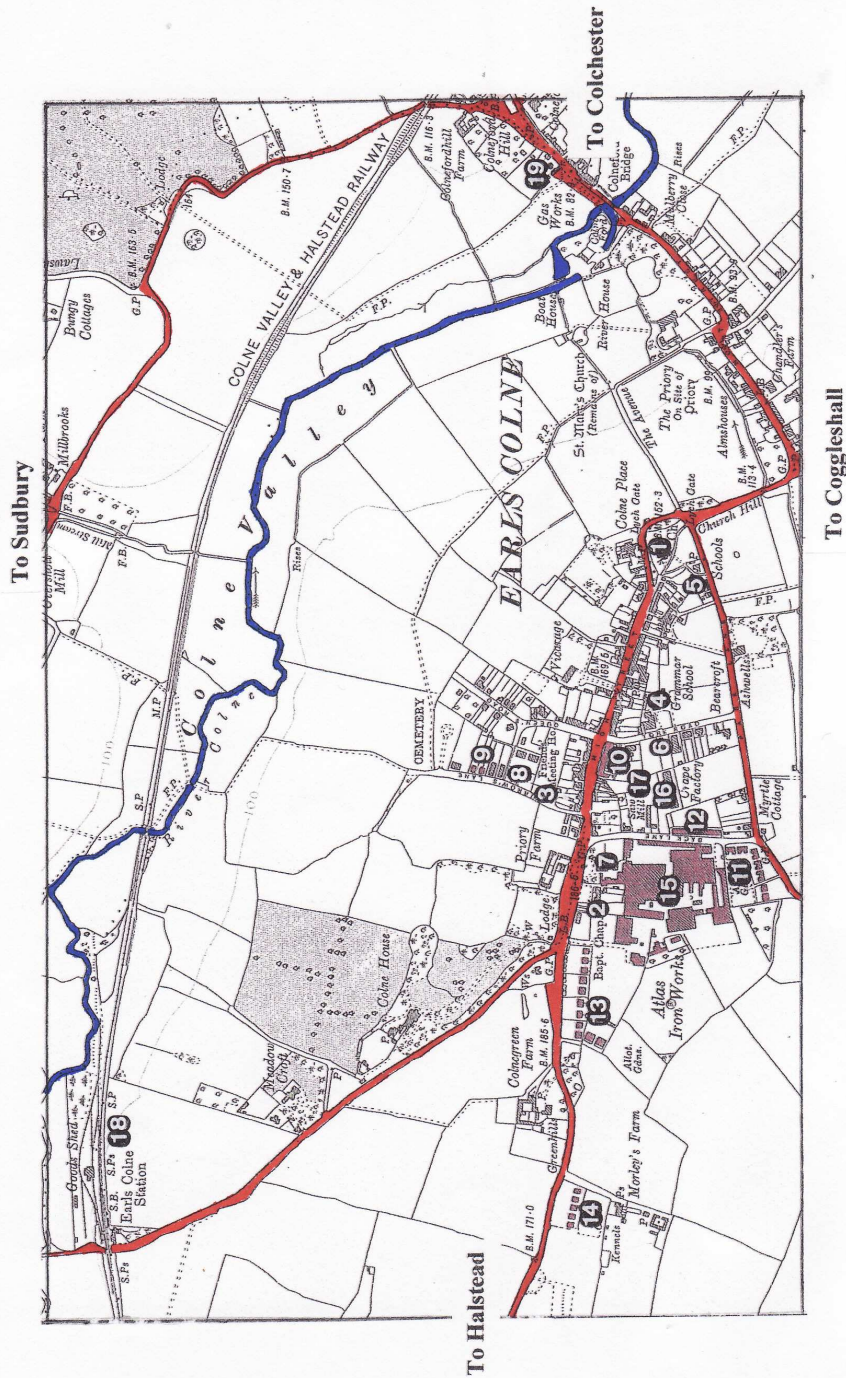
LEISTON

1	St Margarets Parish Church	1853	Church completely rebuilt.
2	Mission Chapel		Centre of town. Church quarter of mile from Dining.
3	Congregational Chapel	1858	
4	Wesleyan Methodist		
5	United Methodist		
6	Society of friends		
7	Public Elementary School	1848	Rebuilt in 1874, 1884, 1895 and 1899. In 1899 room for 610 pupils.
8	School		
9	Mechanic's Institute		Library containing between 3,000 and 4,000 volumes.
10	Recreation Ground	1891	Given by Frank Garrett, his business paid for laying it out.
11	Richard Garret and Sons extensive engineering works.	1778	Enlarged 1862. [Another extensive factory and offices erected near the station started before the First World War. This is not noted by 1908 Kelly's Directory.]
12	Richard Garrett and Sons Station Works		
13	Gas Works		
14	Railway Station		
15	Brick Field and Works		
16	Water Tower		
17	Pumping Station		
18	Sewage Works		

APPENDIX IV

Four case study towns' plans

EARLS COLNE



Source: Ordnance Survey maps, six miles to the inch, Essex sheet XXVII north west, 1925 edition.

EARLS COLNE

1	St Andrews Parish Church		Restored 1864 and 1900.
2	Baptist Chapel	1786	Rebuilt 1860.
3	Society of Friends		
4	Grammar School	1520	Re-organised 1877. New buildings erected 1893, 1897 and 1903-04.
5	Public Elementary School	1843	Park Lane for boys, enlarged 1873, Girls and infants department built 1871 and enlarged 1893. Room for 330 children.
6	Village Hall	1912	
7	Tillwicks, Reuben Hunt's House	1876	
8	Hunt's 'Homes of Rest'	1910	
9	Semi-detached houses build by Reuben.	1895	
10	Mechanic's Institute		
11	Housing built by Reuben, Hayhouse Road	1897-99	
12	Housing built by Reuben, Foundry Lane	1872-1900	
13	Housing built by Reuben, Halstead Road	1905-12	
14	Housing built by Reuben, Halstead Road	1905-12	
15	Hunt's 'Atlas Works'		
16	Courtauld's Crape Factory		
17	Mann's Sawmills		
18	Railway Station		
19	Gas Works		

There was also a Reading Room which became a Social Club for Hunt's workers and the Coggeshall Road School is just off the map.

Sources: *Kelly's Directory of Essex* (London, 1910) pp. 197-98, and above pp. 163-64, 172-80.

APPENDIX V

RULES FOR LIVING IN SALTAIRE 1853 - 1876

1. Throughout the village, cleanliness, cheerfulness and order must reign supreme.
2. Only persons who are good, obedient, honest and hardworking will be allocated a house in the village.
3. Anyone caught in a state inebriation will immediately be evicted.
4. All persons living in Saltaire will enjoy comfort utility, healthfulness and convenience. Each house and its immediate exterior is to be kept clean by, or at the expense of the occupant.
5. Any damage to any of the houses or fixtures, must be made good by the occupant otherwise the cost thereof will be deducted from the weekly wage.
6. No animals to be kept in the village including chickens, rabbits or pigeons.
7. The founder will make a periodical inspection of the village and housing.
8. No washing to be hung out to dry in front or behind any of the properties, or in the vicinity of the village.
9. The founder will recommend that all inmates wash themselves every morning, but they shall wash themselves at least twice a week, Monday morning and Thursday morning; any found not washed will be fined 3d for each offence.
10. All children living or working in the village must attend school half time, up to the age of twelve years and learn reading, writing and arithmetic.
11. None of the inmates shall underlet the tenement assigned to him or take any person to lodge or reside therein without the written permission of the founder.
12. Gathering or lotitering of more than eight persons in the streets is strictly forbidden.

By order of Sir Titus Salt, Bart.

Source: Leaflet brought in Saltaire Village Shop.

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