

National College of Art and Design LIBRARY REFERENCE ONLY

NAME:	FIONNUALA		BEVERIDGE	
FACULTY:	FASHION a	&	TEXTILES	
DEPT.,	FASHION			

CHAPTER 1	:	The History behind Silk Weaving in Dublin.
CHAPTER 2	:	What is Irish Poplin ?
CHAPTER 3	:	History of Weaving in Dublin.
CHAPTER 4	\$	The Guilds.
CHAPTER 5	:	Protective Systems.
CHAPTER 6	:	The Dublin Society.
CHAPTER 7	:	The Liberties during the Nineteenth Centu
CHAPTER 8	:	Combination of Weavers.
CHAPTER 9	:	The Elliott Firm - Equipment - Skills - S
CHAPTER 10	:	Fashion Garments made from Irish Poplin.

uring the Nineteenth Century.

- Equipment - Skills - Staff.

5

. deiner seiner anti-

INTRODUCTION



Since I printed and designed my first garment in silk, I have become deeply interested in this fabric. It is an absolutely beautiful fabric to work with. When I began to explore the origins of silk I was amazed at the quantity of silk that had been woven in the area surrounding my college and I was very interested and excited to discover that, as both my parents, my grandparents and great grandparents had been born and reared in the Liberties of Dublin, they had a great knowledge of the weavers and silk workers who lived among them. My father lived next door to one of the last of the Dublin weavers and remembers, as a child, the sound of the loom, as his next door neighbour worked long into the night and early hours of the morning. It took long hard hours of working at the loom for a man to earn enough money to provide for his family.

The properties of silk are impressive. It is considered to be one of the most visually beautiful natural fibre fabrics ever made. As a fashion designer, I feel it is important to understand fabric suitability to different type garments. I have chosen to design and print a range of silk garments for my degree and my research for my thesis will be a great help in my final choice of shape, colour and texture.

In my thesis I shall cover the history of silk weaving in the Liberties of Dublin. I feel it will be necessary to first examine the properties and the history of silk and thus to find the significance of the arrival of the weavers in Dublin. I shall discuss the major weavers, their life style and the workers involved with them and their machines. I shall also discuss the fabric itself and its uses.

This essay is primarily a study of Dublin silk, its weavers, and its uses.





The Silk Industry in Dublin was not a native Industry but was transplanted by the French. In the seventeenth century in Europe there was a great deal of religious intolerance, with little room for freedom of belief, with protestant and catholic persecuting one another. It was out of this era of intolerance that Dublin obtained a new industry, the Silk Industry.

The French Huguenots were protestant and supporters of the House of Navarre. The political opposition to the House of Navarre was from the House of Guise. The emigration of Huguenots started after the massacre of St. Bartholomew ,on 24th August, 1572, on that day some 100,000 Huguenots were put to death, in France. King Henry 1V, of France, acted as intermediory between the two Houses and enforced a famous Decree in 1598, called The Edict of Nantes.

In 1600, King Henry, was murdered and was succeeded by King Louis XIV. In 1685 a mass emigration was seen in France, with the Huguenots leaving the country because Louis XIV revoked the Edict of Nantes. The estimate of exiled people was around 700,000. They went into exile in England, Holland, Ireland and America and with them they brought valuable skills and whatever capital they could take with them. Some of the Huguenots who joined King William of Orange's Army and Navy fought at the Battle of the Boyne, after which they settled down to live in Ireland. Others came directly from France, to settle in the large towns of Ireland. The majority settled in one area of Dublin known as the Liberties. The oldest part of Dublin was known as the Liberties of the Earl of Meath, it was one of the largest of the five Liberties in Dublin; it was also a densely populated area of the city during the seventeenth and eighteenth century.

The Liberties had a tradition of weaving long before the Huguenots came to the Liberties. With the arrival of the Huguenots the Liberties began to experience a new lease of life.



(a)





(b)

(c)

National College of Art and Design LIBRARY





The municipal records of Dublin show that in 1681 the Common Council made a collection on behalf of the French Protestants to help them get established at their special trade. The Guilds made great exceptions in accepting them into the Liberties. They generously offered them the freedom of the city within five years of the date of their arrival in Dublin. They didn't have to pay any fines or fees, and were free of all city taxes for those five years. This gesture was twice renewed , in 1686 and again in 1693, as on both these dates more groups of Huguenots arrived in Ireland. Records show that in 1693, Abraham Tripier and Peter and James Soit, were the first Huguenot silk weavers to receive membership of the Guild.

What was France's loss was Ireland's gain. Soon the effect that the Huguenots had on Dublin would be quite evident, new employment, a new life style with its own new culture. They even developed the architecture of the Liberties. They rose to high positions in the commercial life of Dublin.

The first of August was a special day for the Guilds, it gave the Guilds the chance to display their crafts and advertise. This special festival day called "Riding the Franchises" (otherwise known as Riding the Fringes), marked the boundaries of the city of Dublin. The Festival started with a parade of city officials decked out in all their robes and paraphernalia. The masters on horse back, while the apprentices and journeymen went on foot. Each Guild had a platform, or carriage pulled by six or eight horses decked out to display their wares. The weavers were generally dressed in large wigs of wool of different colours, with coloured woven ribbons to throw to the audience or even sample patterns of their fabrics. The ceremony ended with the Lord Mayor rowing out to the end of the North Wall and into the bay and throwing a dart out as far as he could. The point where the dart fell into the water marked the boundary of the city. This display of the crafts in the Liberties is of particular interest to me, as the students in our National College of Art and Design , situated in the Liberties

hold an annual summer display of their work, which still includes weaving. I would hope that we might one day take our exhibition outside the walls of our college and parade our arts on the streets of the Liberties, and have support from our Lord Mayor and other dignitaties and thus revive the old Guild Festival of "Riding the Fringes". Just as the festival in former days was an opportunity for the weavers to show their wares, it would also bring to the notice of the public the highly skilful works of the students. This might encourage the public to start buying Irish made goods and , in turn, could be the start of new small businesses within this area, thus providing employment, and a new lease of life, to the Liberties. The sites for small workshops; are available, in abundance, in this area and there are many people who would be available to work in these small businesses. At present, the display of work which is held in the college does not in any way touch the lives of the people who live in the Liberties.

I

ADE: Was incade's large was include's run. som the clicot that the increases had an Jublic would be colle coller. Even an lowent, a now life shel with its cin can caller. Even over dovelosed the architecture of the Livertice. May runc to high an iticas in the comproved life of anticastic.



- ---- Brien E. Britien Grane 0 Vientinglin \$10 -250 R M.M.H. 1 E.



CHAPTER 2 : What is Irish Poplin?











Irish poplin is a woven cloth which consists of warp threads of silk, these threads run the length of the fabric, and fine from China, while the best quality Merino wool was imported

woollen threads in the weft, which run from selvedge to selvedge. Royal Irish Poplin is very distinct from other poplins which were woven on the Continent. This hand woven poplin, which was made in Ireland was made of a pure silk warp and a weft of pure Merino wool worsted spun. The best silk thread was imported from Australia.

The word poplin itself is a term for a kind of weave which has a cord like surface. In Europe, during the seventeenth century, there is evidence of a woven fabric composed of a worsted weft and a silk warp , the visual appearance of this fabric can be described as having a rib or cord like surface, with the silk covering the worsted weft completely. The word poplin is derived from the Italian word called "papatino", referring to the word papal. Why is poplin derived from the word papal? To explain this , if you look back in history we see that the seat of the Pope was at Avignon; this was also where the poplin fabric was woven. As the woven fabric poplin was made in the same place as the seat of the Pope it is no wonder that the fabric was very popular for use in church vestiments. The French referred to the fabric as "popelin".

Royal Irish poplin has been woven in Ireland by the French Huguenots for about 250 years. The French weavers brought with them to Ireland a great knowledge of silk and poplins. It is thought that it was David Digues La Touche and Nathaneily Kane, who first helped finance a new technique of combining silk and wool to make a woven poplin fabric in Dublin. They also set aside half of their shop in High Street, for banking. Their bank was such a success that in 1725, they were allowed to offically open a banking business in Castle Street. The name of the bank was La Touche & Kane, and is now known to us as The Bank of Ireland.



and in living an another of a first new of a contract of a contract which we have and in living as another of a farm wilk wire and a watter part wind in living an another of a farm wilk wire and a watter part wind in living the set of the test wilk there and the interact from third, this the test dility derive and the interact interaction.

.busilesi







The question of why the French Huguenots developed Irish poplin should be considered? This can only be solved by understanding the history of weaving in Ireland before the arrival of the French Huguenots.

CHAPTER 3 : History of Weaving in Dublin.





lazer

Fig.6.





The weaving Industry has long been associated with the History of Dublin, long before any other type of Industry. Domestic weaving goes as far back as agriculture, as a job occupation. In seventeenth century Ireland we began to develop our woollen Industry with Dublin as the main weaving centre. The reason for producing wool was very obvious: it was a tradition with years of skilled knowledge behind it, the raw material was cheap and the quality of the material was good. The Irish climate was very favourable to the rearing of large flocks of fine fleeced sheep.

The first change of recognition came during the reign of Charles 11, who granted a patent which allowed a woollen market to be held in the Dublin Liberties. This area is situated on the south-west bank of the river Liffey in Dublin. It was in the mid - seventeenth century that the Coombe, Pimlico, Weavers Square and Spitalfields were built. The street where the Woollen Market was held was named "New Market". The market and surrounding areas became the residence of the prosperous wealthy merchants.

With the development of a fine woollen trade, exports developed to England and the Continent. Eventually the English and Yorkshire Woollen Clothiers began to feel threathened, so they petitioned for restrictions of the woollen trade in Ireland to King William, pressure was put on the Irish Lord Justice, who persuaded the Irish Parliament to put duties on cloth. The act imposed a duty of four shillings extra on every twenty shillings worth of cloth exported and an additional two shillings on every twenty shillings worth of new drapery. The English Parliament was still dissatisfied by the move and passed their own act prohibiting the importation of Irish Woollen cloth. This had very bad repercussions on the Irish Woollen Industry. The English were only willing to take our Irish wool and woollen yarn if they could return it to us manufactured. The results of the English restrictions caused lots of job losses

and the closure of many woollen manufacturers. Many of our skilled weavers emigrated to foreign countries, where they could practise their trade economically. The Irish weavers were welcomed to Germany, Spain and France. In France the weavers were a welcomed skill as they had driven out their own industry run by the Huguenots.

The English efforts to crush competition, especially the quality and highly skilled Irish weaver, had its repercussions not only on Dublin but on the English weavers themselves. The Irish weavers built up the quality and quantity of the Continental woollen industry, so that many countries in Europe, like France and Germany were able to supply their own markets and also to compete with the English for other markets. Thus the Act had not gained more markets for England, but helped strengthen England's foreign rivals; this the English had not foreseen.

While other countries profited from the English Act, the Irish were suffering severe economic and social decay. The poverty and decay of industry is recorded in the Irish House of Commons. In 1723 the woollen drapers, weavers and clothiers presented a petition for help for the trade, but no remedy was given.

It is no wonder that with the coming of the French Huguenots new hope came to the decaying Liberties. The development of silk and mixes became a clever way of surmounting the English prohibition on our woollen cloths.

i and a long atom when any athen trees of the long to where the state of the state and the state of the state of the state of the adverter of the set time as the set of the set the set of the set of the and the second stands with building the brand in the set of the set the set and as will are out the

in any is a sure it is a structule militar to an an an and the strength of the strength of the which there are a start of the start of the start of the a beneficially on the property and the sector

. . man and the top deter was set as and the . Derts the second star of the rand

National College of Art and Design LIBRARY



CHAPTER 4 : The Guilds

and the closure of damy whitten and for the

and well and the second of the second second second second second . comes has shown in the second of the second second state . Summer and an and the same of the second and any its a only a problem at or the problem we have a consultor. The at astronyos year into a peterine aution formation t substates and allo to there is a state of the sector of the task and the notion and this information of second mathematic period .menuent for bad

. The set of the second second second



Since the reign of Queen Anne, the guilds organised all the important crafts in Dublin. The strength of the weaver's trade, in my opinion, lay in the hands of the guild. All trades and industries were run by the guilds. There were twenty five guilds in the Earl of Meath's Liberties. These guilds each has a representative on the Common Council of Dublin. The weavers guild was given its first charter in Dublin in 1448 and was named:-

" The guild of the Blessed Virgin Mary "

Some of its founders were Nicholas Woder, James Powedal, Richard FitzEustace, John Tankarde, Thomas Sawag and John Barret. The running of these guilds was left to a Master and two Wardens.

In the Book of The Royal Society of Antiquities of Ireland there is a complete record of the names of the wardens from the foundation of the guild to its disbandment.

Each guild had its own banner, and the weaver's guild had a magnificently woven banner, which was carried in all their processions and is now in the safe-keeping of the curator of the now restored Kilmainham Jail.

The weavers guild was one of the oldest and most powerful of the guilds. The power of the guild lay not only in trade and industry, but also transformed and influenced the lives of its members. It held the right to take the law into its own hands with regard to its members; it had the power to lay down rules, to judge and if the accused was found guilty, to punish the offender.

I suppose most people when asked to define a guild would assume that it was the equivalent of a modern day trade union. This assumption would be correct in one aspect, that a guild was a representative body for a particular group of craftsmen, but there was a big difference between a guild and a trade union. As

a trade union's work is solely to organise and protect the rights of workers the fraternity of the guild of weavers was empowered not only to dictate the standard of the weavers work, but also to make decisions for their private lives outside the workplace. The guild, in actual fact, set itself up as judge and law maker and even dictated actual punishments for any violation of their rules. The guild could hold property and had a common seal with the power to sue and be sued by other guilds. Their power extended from within the city of Dublin to a radius of six miles beyond the city. They had the power to fine, punish or imprison any of their craftsmen, apprentices and servants. The order to Master and Wardens of that guild.

The guild had a very readily identifiable membership among the skilled manual classes; the records of the guilds show significant repetition of family names. I have discussed this fact with several people whose families had worked in the weaving trade in the Liberties and they recalled that most families would have considered it an honour and privilege to have their sons, daughters and grandchildren, follow in the family tradition. In fact, when speaking to Patty Quinn, who was a warper in the Elliott firm, and Declan Walsh, who was a weaver in the same firm, both confirmed to me, that from the age of six years old they knew that they would follow in the family tradition of weaving and would never have considered another trade. Both these people told me that their parents, grandparents and greatgrandparents worked in the weaving trade.

The aim of the guild system was exclusiveness. In order to practise a craft you had to belong to a guild. The exclusiveness was partly to protect and preserve their craft and to ensure that the craft would remain operational for many years. Its power was strong in Dublin and remained so, even when the guilds had been abolished in Europe. It could be said that the guilds' exclusiveness was more strictly preserved than that of any

" when alwell because it is blick with "

equipado non recile dese sites to define erabic solid server no le mor que sentrient es a sedere que veste suige. Inte serverten relid te servere la con sandet. Cont a suill reserablemente boto for a partimine grade el contener, et constantes attre boto for a partimine grade el contener, et



. ADENN SDATT TAD GIAD A

the statute of a statistical as very inversion of the state and the state of the st

and of Berlink Mathemalaky

(celifeon d.J.Mebb. The odic Industry in marian.) a bine mared there raise were hat strictly suffice and some cools were able to buy that our into and apprenticedals. The lease dine approximately bid, a very large our of poses in those darm.

a life of an appreliate on more restrict to surve his marter fatantelly write his server poem he was restrict of warring. So and not to mare a test to himelf the secrets of warring. So and not to any other a code of his matter of five of lend then entarthilly to any other error. So was not alloyed to mare any marrings contracts fating error.

where is a grant difference between the remains of a modern day becausy and the may the results can their inductory in the perturbence and excelosed dentury. The respected of the start to the const of the use of the loos. The respected lifty of taking on advections will wrom the reactors the selection of the solution of the fill wrom the reactors the selection of the solution of the perturbed was not sold by the selection of the solution of the selection is a selection of the selection of the selection of the selection the selection was not sold by the selection of the selection is a selection of the selection

and when a hard ill's for the appropriate out and a rise takes

the weaver, as he not only had to pay for the rent of the loom (average of 1s.6d. per week), but had also to pay for heating. This may account for the fact that most weavers took a son or grandson as his apprentice, thus keeping the earnings within the family. The conclusion can be drawn from all this that the weaver had to be very skilled and efficient to earn a living.

The guilds were very particular about keeping a high standard of weaving and all apprentices had to prove that they were qualified enough to produce quality cloth before they could obtain the freedom of the guild. Apprentices were not the only ones to be inspected for quality work, the guild itself inspected the silk weaver's work and imposed fines for inferior work. To establish that the silk had been passed as high quality, a water seal was fixed on the cloth by the Alnage Office. The guild rules also declared that an employee in the Alnage Office who puts a seal on an inferior or faulty cloth would be punished by imprisonment. Thoroughness and quality were the requirements of the Weavers Guild , no fault went unnoticed, or unpunished.

The nature of the industry was such that there were divisions of labour between male and female. The most important work of the industry. it was stated, was weaving , and the male excelled at this. (Ref: William Cotter, Stubbs Essay on the Weavers Guild, Dublin 1446-1840). The most talented and the best known weavers in Dublin in the nineteenth and twentieth century were men like Gerald Elliot and Richard Atkinson. All the important weaving companies had men as their designers and weavers. The reason why no women became weavers or designers is quite obvious as females were barred from these two apprenticeships , expecially in Dublin, though it is recorded that in the early twentieth century a few women did succeed in becoming weavers and designers. Though the women and girls were not allowed any public recognition of how skilled they could be, they were considered good enough for less important jobs. They were trained in the skills of winding, warping



and tie-making. The working together of both male and female was permissable without any preconditions or restrictions in the more commercial departments of the industry and also the office work.

I have described the division of labour and from these divisions , rates of pay were fixed by the guild. The more difficult and skilled the work, the higher the rate of pay. The average rate of pay for a weaver was between $\pounds 1 - \pounds 2$ per week; out of this he had to pay expenses. The guilds stated that an apprentice be paid at least , one shilling by the weaver, but both weaver and apprentice were paid a piece work allowance and the weaver was entitled to a share of his apprentice's piecework earnings as a reimbursement for time spent training him. In some workshops the weaver was only paid on a piecework basis, so it was essential that he receive some of his apprentices' earnings. This ensured that the weaver did all in his power to give a first class training to his apprentice. The weaver received half of the earnings of the apprentices' piecework for the first three years, during the fourth and fifth year the apprentice was allowed to keep two thirds of the payments for his work. In the sixth year three fourths of what he earned he was allowed to keep and in the final year he was allowed five sixths of the money paid for piece work. With experience the apprentice's wages increased each year.

In the nineteenth century the women's wages ranged from five shillings to thirty five shillings, per week, depending on their skills and importance. The warping which was the most important work for the women, received a weekly wage of between twenty five shillings and thirty five shillings and girls were on a very low wage, never exceeding twelve shillings per week. The women in the tie workshop could earn from fifteen shillings to sixteen shillings a week on piecework. Though the wages of the women were low compared with that of the weavers, the earnings of both men and women in the weaving trade were similar to any other trade at the time. (Ref: Mr. Otway report on Hand-Loom Weavers in Dublin. 1838.)



bree n

F

the standardise. The corring investment of form and a me female in provisional relationships and provision itsees and and a second standard and as they concerned for the provision of the provision and a sectrice and.

REFERENCE ONLY

Fig. 7





Fig.8.





Fig.8.





Fig. 9.

.





The guild system of industry in Ireland didn't succeed in maintaining itself. The guilds' protection of trade was eventually undermined by foreign competition, financial problems and the English Parliament's power in Ireland which enforced laws that destroyed Irish Industry. The powers of the City Council and Guild was in decline during the nineteenth century. The final blow came in Dublin in 1840 with the Municipal Corporation Act which took away the power of the guild and placed the powers of governing in the hands of the burgesses, who were members of the privileged class in Dublin at that time.









Protective systems were very important to the Irish weavers,

making it possible for the Irish silk weavers to survive and develop by helping to protect Irish jobs. The protective systems helped discourage competitive imports by imposing heavy tarriffs and , if possible, banning certain imports. During the seventeenth and eighteenth centuries protective measures were used all over Europe to hold on to home industries. In Ireland , as early as 1661 a duty was put on manufactured silk cloth; it was called the "Subsidy of Poundage". The money obtained from this duty went to the revenue. A special Book of Rates was kept which dictated how much duty should be charged on certain products.

In 1705 one shilling and sixpence extra per yard was imposed on the manufactured silk cloth which was imported from Persia, China and the East Indies. An additional duty of a half-a-crown per pound weight, was charged on imported cloths in 1729.

It is in the records of the Irish Parliament, that the state of the silk industry, during the eighteenth century, can be studied.

The progress of the silk industry is also recorded by Arthur Dobbs in his published "Essay upon the Silk Trade of Ireland, in 1729" In this essay he shows the Ireland produced a little over half the domestic silk required. Between 1720-1729 he gives an average figure of silk imports:-

£37,955 worth of manufactured silk per year was imported. £21,084 worth of raw silk per year was imported £17,613 worth of thrown undyed silk per year was imported.

The conclusion from the statistics above is that £38.697 worth of silk, per year, was made up into the finished product of cloth by the Huguenot weavers in Dublin. It also tells us that some throwing of silk must have taken place in Ireland during this time.

The records of the Irish House of Commons show that in 1730 there were eight hundred looms in Dublin making silk cloth. It is estimated that for each loom at least four people gained employment. a leol at . to toto a los a bolt a del na al al a control a toto the cloth; it and called the "mount of toto acted a decine from bit date was so the controls. A fail for a bot and the size distance for the set of the set

As provins and the shirt industry in the second at the second sec



This would have brought considerable material comfort to the people of the Liberties and many found employment in the houses of the Huguenot weavers. The distinctive architecture of the French Huguenot houses, with the roof-ridge running at right angles to the street, with sometimes a cross ridge introduced giving four gables, and extra space in the lofts, suited the domestic weaving industry. Most of the weavers used these lofts for their looms. This boom in weaving would have brought welcome business to the builders, butchers, tailors and women workers.

In 1733, due to a petition by the silk weavers, a stop was put to the smuggling into the country of Persian, Chinese and East Indian manufactured silk or silk mixes. It was illegal to sell or display these imported products. With the growing competition of European silks the Dublin guild of weavers was pressed into action against imports. In 1745 four shillings per pound weight was imposed upon all velvets and manufactured silks or silk mixes imported. The only exceptions to this duty were England, Persia and East Indies, the aim of this duty being to stop rival clothiers taking over the Irish market, especially the French.

If duties were put on imports in 1745, the question arises of why the Irish weavers didn't survive? The answer is simply "smuggling". A rapid trade in smuggling of French silks into the country developed. But an even more deceptive way of getting the French silks into the country was to send them in among British silks. This way the silks avoided the heavy duties imposed on continental silks. One apparent result that comes from these threats was that it brought together the linen, silk and woollen weavers into a united and organised body.

Later the Irish Parliament increased the duty to £4 from four shillings per pound weight, but they failed to deal with the illegal and deceptive importing of French silks.

16

religerou

CHAPTER 5: Protective Systems

. . .

. 3 .

12 . . .

. 9.01 . .



If we look at the records of the weavers guild we see that in 1730 there were eight hundred looms working and by 1763 only fifty looms were in working condition. The result of the drop in weaving meant heart-break for the weavers with unemployment and poverty again for many of their employees. The threats of slumps and stagnation in the Irish

The threats of slumps and stagnation in the Irish manufacturing of silk was not only due to too many workers trying to make a living at the same trade in Europe and Eastern Countries, but also to the changes in fashion fabric trends.

The cost of a garment during the seventeenth and eighteenth centuries lay almost entirely in the cost of the fabric. Labour was cheap, so tailoring and making up of dresses cost only a fraction of the total price of an outfit. During this period fashion silhouette changes were comparatively slower than today, and in order that the wealthy could have new, original outfits, new fabric patterns were designed. In the East India Company, in London, a Directory of fabric patterns was produced in 1681. The Directory contained a variety of floral patterns and the company had a general rule that patterns should be altered each year. With the constant demands of the wealthy for new designs the company was able to bring out a yearly supply of new and fashionable silks which could claim a market throughout Europe. The wealthy families in France & England were prepared to pay twice the price for a new and unseen fabric. All over Europe the silk weavers began to follow the same rules of pattern designs. The Irish silk woven in the late 1720's and in 1730's was mostly plain silks and Royal Irish Poplin, with only a small scale of figured silk. With the setting up of fashion trends , the Irish silk manufacturers were ready for this new trend. In 1731, the new fashions were muslin and printed cottons. Wealthy women who wanted to be fashionable, bought the foreign produced cloth, thus shrinking the market for Irish silk. The pendulum of fashion swung from Calico to Silk and from Silk to Calico.

In response to the threat of Calico it was recorded that, on one Sunday, women wearing Calico were attacked for wearing foreign fabric; by the silk workers, who saw this new trend as a threat to their livelihoods.

In J.J. Webb's Essay " The Silk Industry in Dublin", published in 1913, he supplies the following account with figures of imported raw and thrown silk during the late eighteenth century which shows that the silk industry was still of considerable extent:

Year	Raw Raw (1bs)
1774	38,811
1775	29,578
1776	41,594
1777	54,043
1778	51,873
1779	29,633
1780	28,557
1781	68,609
1782	50,696
1783	33,782

The above table shows us two things: of the silk imported nearly half came in a raw state. This meant employment for throwsters in Dublin. The second is that the average amount of silk that must have been woven during these dates was 91,209 lbs.

The importation of silk yarn is also an important study as it shows how big the demand was for imported silks. The following table shows the importation of thrown silk and silk mixes during the period 1774 - 1783 :-

If at look at the rearry of the segments will be real that a 119 there serve sight headred board torking and he 1793 will fifth form term in particle contition. We reall of the drop in contine manual heart-break for the mersen with werelevent and powersy spate for easy of their exclusions.

an indestmants of allowed and character in the light antifestmant of all year not only for to be and someric state to make a living at the and trade in interior and interior fountains, and also to the charges in faction fairing social.

the field all constants are maile and related outoms. In 1731, the new faditors were maile and related outoms. eccite scores who wanted to be restingile, bought the foreirs produced cloth, thus abrinding the market for frish the. The parents of the drive striking the market for frish the in a low.

Dyed(lbs)	Thrown	(lbs)
97	36,759	
73	52,516	
174	40,807	
161	52,706	
292	46,487	
306	21,986	
201	41,652	
410	76,521	
119	61,276	
288	52,092	

Year	V	Vrought Silk	Silk Mixes
	lbs	Value	Value
1774	14,665	£43,995	€21,611
1775	13,658	£40,976	€24,234
1776	17,326	£51 , 978	£30,371
1777	24,187	€72,561	£45,411
1778	27,223	£81,671	£52,765
1779	15,794	£47,382	€30,818
1780	10,655	£31,966	£17,498
1781	22,471	£67,413	€79,422
1782	25,658	£76,974	£105,626
1783	19,749	£59 , 247	£129,170

These tables form a very interesting study and from them we can visualise what heights of production the home industry might have risen to, had it been properly protected .

١



a d.d. tobic bar " To the following to the second of the s

	0 - 6(104)		
201.02		51.2	
		617,95	
103.04			
2.1.6		54.00	
Jan, 42		51, 73	1779
322:12		27,633	
		122,15	
10,01			
		51.10	

110.22	200.232		
10.102	372.045	010.00	
576.23	ETR.IP3	17,326	
	10.5T	101.02	
- 22T. 122	170.1%	27.223	
621. Ch	016.72	25,730	
101.725	201+365	10.655	
122. 122	614,74		
395, (012	812.014		
011,2812	Tas, 202	217.22	

diopo tellos for a vor, interestar startan and area that an on vi mulico thet talents of production the tare industry .

CHAPTER 6 :

The Dublin Society.


National College of Art and Design







The Dublin Society was first established in the early eighteenth century to help encourage the growth in agriculture and Industry. It was the Dublin Society that first helped revitalize the Silk Industry. They started by building a warehouse where the Irish weavers could sell their silks. To encourage the weavers to improve quality and production they offered a ten percent cost award to those weavers whose fabrics were sold and only silks of a high quality would be accepted for sale in the warehouse. In February, 1764 the Hibernian Silk Warehouse, was opened on Parliament Street. The results were at first encouraging,many weavers built up their workshops and this helped to give employment again.

The warehouse was run by a committee of twelve noblemen as well as twelve people who were chosen annually by the weavers guild to examine and pass the silk to be sold in the warehouse. Some of the people involved in this venture were Alderman Benjamin Geale, Mr. Robert Jaffray, Mr Travers Hartley, Mr. Thomas Hickey and Mr. Edmund Reilly.

The Dublin Society decided in 1767 that it would be a great boost for the industry if they could encourage the wealthy upper classes to patronise the warehouse. They elected fifteen wealthy society ladies to be associated with the running of the warehouse; among them we find such names as, The Duchess of Leinster, Lady Louisa Connolly, Lady Dungannon, Lady Clanwilliam, Lady Anne Dawson, Lady Brandon, Mrs Clements and Mrs Tisdalle.

It was in October of 1767 that the presiding patroness, Lady Townsend accepted office. The Ladies not only helped by buying £100 worth of silk annually, but they also helped by keeping the weavers informed of pattern changes in the fashion fabric of the day. Thus the Irish silk weavers were again in demand, producing fashionable fabrics, like poplins, silks, brocades, velvets, ribbons etc.,

At first the wealthy society women wore Irish silk dresses at dances, dinners, suppers and concerts and for a time Irish silk was in great demand again.

In 1785 Lord Sheffield published an Essay upon trade in Ireland in which he praised Irish silks:- "Many of the silks manufacturers of Ireland are excellent....Her white damasks and her lustrings are very good, her silk pocket hankerchiefs are at least as good as any."

The Dublin Society did help the industry develop but in some cases it actually did more harm than good to the industry. It was given complete powers to enforce regulations, bye laws and penalties. In the Parliament of 1780 the Dublin Society, passed an Act which led partly to the downfall of the silk manufacturing trade. This Act gave a fixed rate of pay for men working in the silk trade, completely failing to take into account the difficulties and fluctuations in the trade. It was essential that during certain periods of depression, the master held the power to come to some agreement with the workers to adjust pay, and no allowance had been made for this. The Act became known as The Spitalfield Act, because this idea had already been tried out in Spitalfield, London.

Another mistake made by the Dublin Society was to set up the Silk & Woollen Warehouses, as this cut out the mercers and drapers in the selling of Irish manufactured cloth. They retaliated by buying cloth from British and Continental firms who gave them better credit facilities than the Irish firms. Thus the Irish weaver had to compete with exports for the same Dublin market. The foreign competition eventually forced the silk warehouse to close on the 25th March 1786. With £28,000 spent on the silk industry alone between 1765 and 1781, it had helped sustain and develop the industry, but it could not continue to do so. The silk industry had reached its peak in 1770's and was by the 1780's on the decline again.

b set the set of the set of

At Close the sealery scalety work work lot a sile dessee at genore, dimetry, support and corners and corners.

.....

21

. Bailing a sharp to see the to sharp it abar man had set all a la ban loop inted and in seteristand. Immedia

. 51

CHAPTER 7: The Liberties During the Nineteenth Century



The abolotion of the Irish Parliament and its transfer from Dublin to London had a damaging affect on the industry in Dublin. The industries particularly affected were those who depended on the wealthy classes, who moved to London with the transfer of Parliament.

The brilliant life of the Irish metropolis had come to an end. A new aristocracy took the place of the old one, these professionals, government officials and wealthy commercial men of Dublin were not as affluent as the old aristocracy, though they did try to emulated their predecessors in their life style.

It became quite obvious that the privileges and encouragement given by the Irish Parliament would be no more, the new Parliament , being remote from the majority of its members, could not care for or know about the Irish industries.

The period of 1801 and 1820 was one of disruption for the Irish silk trade, especially not only had it to cope with the loss of its best customers to London, but also owing to the Napoleonic Wars trade and imports of new silks were also restricted.

A record, overleaf, of raw and thrown silk imported during the Napoleonic wars, will show how the silk trade in Ireland was affected by events outside the country.

> If we compare these figures with previous figures for the eighteenth century we see the real decrease which has taken place in imports of raw and thrown silk. In 1774 -83 the amount of raw silk was nearly equal to the amount of thrown silk imported, whereas in 1820 the raw silk was only a quarter of the amount of thrown silk imported. The result of the increase of imported thrown silk as opposed to raw silk was that many Irish throwers lost their employment.

> The real effect of the Napoleonic war on the Irish silk trade followed the Berlin Decree, when supply of Italian raw silk was cut off. Raw silk became scarce and also expensive. The English manufacturers had enough capital to invest in throwing machines which were capable of throwing Indian silks; this great advantage meant not only the survival of their industry, but also more employment. Unlike the English, the Irish weavers could not afford to buy these machines and as a result many of the throwers and weavers were ruined. Many of them left for employment in

The Legitzent 115 of the latin ware of a desire the cone to the second to the second second to the second s

esodori, evenient. of rea and bernen til stran in Iraland and seoleonto trre. till anon tours, ill trade in Iraland and control be evente outside the control.

Raw (lbs)	Thrown (Lbs)
30,144	27,164
28,577	36,033
17,119	19,346
40,503	73,959
19,311	68,935
14,424	52,081
21,331	58,623
32,602	21,805
19,774	47,782
22,943	48,061
28,379	27,286
37,122	80,778
22,720	58,441
18,866	51,658
31,099	46,072
19,337	19,704
31,694	30,780
30,663	40,441
16,052	71,841

Telah B. Cont

1.1		
	172, 73	
	11.11	
550,82		
200,13	\$00.2	
	217,81	
IN.LA	EAL, SS	
	351.12	
1.		
360.85		
197.82		
	N3.16	
	16,002	



English cities like Maclesfield and Manchester to work in the silk industry there.

The Union (The joining of the Irish and English Parliaments) passed an Act on 1st. January 1801 imposing a duty of ten per cent on British silk entering Ireland in order to give the Irish silk weavers a chance to compete with their silk and vice versa. This act was only to last for twenty years. A deputation was sent to the Chancellor of the Irish Exchequer, when the Act of 1801; was drawing to a close, to appeal for the retention of the duty on English silks. The duty was abolished, the Dublin silk weavers were no longer able to compete with the English weavers and the result was the annihilation of most Dublin silk manufacturers.

As a result of free trade between Great Britain and Ireland, when a slump occurred in silk prices in England, the English manufacturers dumped their silks on the Irish market, at less than cost price and this was the final death blow to the Dublin weavers. Poverty and destitution followed for the weavers and their workers.

A report of Mr. Sisson, in 1826, about the"Irish Silk Weavers in the Liberties" is a depressing one, he tells of the "famine fever" where skilled weavers became vagabonds and scavengers, many died, and more were admitted to the poor house. What was even more distressing to the weavers was while French silks came in to Ireland , the French would not accept any Irish silk fabric in return. By 1832 the amount of working looms in the Liberties was reduced to a pitiful one hundred and fifty looms striving for their livelihood. House property owned by the weavers became valueless; whole streets in the Liberties, that once had been a hive of activity, were left desolate. Supply of property exceeded demand. The failure of the silk trade had repercussions on the other industries who depended on the earnings of the silk workers for their continued livelihood, thus throwing the Liberties into desolation and decay.

CHAPTER 8: Combination of Weavers







Another reason for the decline of the silk manufacturing industry in the Liberties was the formation of the Combination (a form of union, started by the workers to keep up the rates of wages at par with London prices). The effect of the Combination's forcefullness is recorded by a Mr. Otway. Mr. Otway, the Commissioner for hand loom weavers, in his report in 1840, wrote about the state of the silk weaving trade in Dublin:-

"It cannot be doubted that illegal and dangerous combinations amoungst the workmen have operated most injuriously on the trade, driven many of the most extensive manufacturers out of it , and deterred others from directing that capital and intelligence towards it, by which alone it could be preserved or enabled to compete with the other silk weaving districts of the Empire. If not checked, this system will speedily drive away the portion of the silk trade which now remains." (Mr. Otway's Essay "Silk Weaving Trade in Dublin 1840)

Mr. Otway recorded many events which happened around the time of the combinations and also his discussions with many of the managers who told him that they could not afford to pay the wages the workers were demanding for working the Jacquard and Hand Looms. In the recession the managers wished to limit the number of workers or alternatively their pay, but the combinations went on strike before they would consider these demands.

By 1840, the old Corporation of Weavers, was abolished and the

trade unions, of modern day type, took its place. Some of the rules of the weaving trade were carried on into the next era of the trade. During this time velvet and ribbon-making disappeared but poplin survived on into the next century. In 1870 there were, according to the old trade records, four hundred and forty three looms employed. This boom in the industry was due to the opening of the French market, after the Franco-Prussian War. Ten years later in 1880, however, the loom, in working order had



shrunk to one hundred and sixteen, and by 1890 only seventy looms were being used.

Dr. W.K. Sullivan, a very eminent Irishman and an authority upon Irish Industries, submitted the following report in 1883:-"The decay of the manufacture is, I believe, mainly due to the employers, who from want of foresight, indolence or carelessness, let their business get into a crystallised state, which no change of fashion, no competition of new fabrics, no improvements in processes or machines could influence" (Dr. W.K. Sullivan's Essay, Irish Industries Report, 1883) Dr. Sullivan reported that poplin had become too heavy for modern fashions and that the Irish silk weavers had failed to take note of the fluctuating fashions. So the silk trade of Dublin slowly decayed beneath the weight of its really

magnificent fabrics.

It was not until the early nineteenth century when Messrs. Pim started using a fine soft Australian wool, that the market for poplin began to increase again in Dublin.

By 1903, a ray of hope to the silk weavers was the coming of a lighter weight fashion poplin. There were four old firms still engaged in the making of silk and silk poplin:-

Messrs. Fry & Co., Ltd. Westmoreland Street, Dublin. Messrs. Pim & C9, Ltd. Grafton Street, Dublin. Messrs. R. Atkinson & Co.Ltd., College Green, Dublin. Messrs. Elliott & Sons, Brown St. Weaver Square, Dublin.

In terms of employment in Dublin, the textile industry in 1901, employed two hundred and seventy three people, 1.55% of the total Dublin manufacturing industry. By 1911 there was a small increase in the employment of textile workers some three hundred and eight people were then employed.

The weaving of silk was operated on a "putting out" system during the nineteenth century, this meant that the weavers were commissioned to weave the silk by firms like Elliotts,

ESTABLISHED 1820.

TOM THE ENACE

for unrivalled durability, charming colours and

IRISH POPLIN has obtained a world wide reputation graceful drapery, gained by using only the very best and purest silk and wool in its manufacture, also an advanced study of colours, as applied to the blending of these two materials, and skilful weaving.

Irish Poplin is appropriately termed "Royal Fabric" on account of the large amount of Royal Patronage received, as well as its high rank amongst the textiles of the day.

R. A. & CO. manufacture specially for a high-class family trade and beg to caution intending buyers against imitations now extensively sold.

RICHPATKINSON&Co. Irish Poplin Manufacturers, Littles Qit rate and COLLEGE GREEN, DUBLIN. TRISH POPLIN TIES IN GREAT VARIETY

Telegraphic Address" ATKINSON, DUBLIN."

SEVEN ROYAL APPOINTMENTS.

NUMEROUS PRIZE

R. ATKINSON & CO.'S

SAMPLES ON APPLICATION. PARCELS POST PAID AND INSURED. ANY LENGTH SUPPLIED.

Fig.12.





Pim, Frys and Atkinsons. The firm retained the responsibility for finishing and marketing. In the twentieth century the weavers no longer worked from their homes. Their looms were bought by the firms and the workers went out to the factories to weave. The number of working looms in 1910 was about one hundred and ninety three. The output from these looms was limited to an upper class market demand. The four named firms mentioned above, had a long tradition of weaving behind them, and they survived, despite a general decline in the silk weaving industry, because of their ability to adapt and to create new markets for poplin. Their clever market managers learned to develop with the market demands, close contact between the weavers and clothiers helped save these firms from closure. Each of the four firms developed a special area suitable for the market demands.

Messrs Fry & Co.Ltd., concentrated their business with India. The original factory started in 1741 in Westmoreland Street, then moved to Kevin Street and finally settled in Cork Street. Frys were famous for their tapestry and upholstery work, window hangings, linings for carriages and motors, and trimmings. In the Drawing Rooms of Dublin Castle are beautiful poplin curtains made by the company of Fry & Co., Ltd., In 1865 during an exhibition of Dublin industries, Messrs. Fry obtained orders for their fabrics from the Prince & Princess of Wales. Some of their purchases included gold patterned poplin on a blue ground, also a gold fern embroidered patterned poplin on a rose du Barry ground with snow crystals, and some black poplin with pattern of Lily of the Valley. In 1870 Frys had three hundred weavers employed in the weaving of silk, however, by 1876 the manager, Mr. Elliott described the industry as "not very extensive" and the firm at that time employed only fifty weavers.

The firm of Pim & Co.Ltd., was established by Richard Rim of Leicester, who came to Ireland in 1655, and set up his firm in Grafton Street. He handed on the business to his son Thomas who managed the firm between 1771 and 1855, and then Richard's great grandson Tom. Pims had six hundred handlooms making poplin

specially for the American market. It was eventually taken over by Messrs. Fry & Co., In 1864 Messrs. Pims employed 148 weavers and by the year 1871 this number had risen to two hundred and fifty weavers.

The firm of Richard Atkinson & Co., was founded in 1820. Richard opened a shop and workshop at College Green. As his sales increased he expanded his firm and opened new factories in other areas of Dublin, some of these were located at Brabagon Row, Hanbury Lane and Cork Street. To-day the factory is still in operation but has moved to Donegall Road, Belfast. Richard Atkinson is reported to have held at least one thousand patterns of cloth in stock at any one time. They also took orders for special commissions. In the nineteenth century Atkinsons were famous for Irish poplin which they used mainly for the making of dresses. The fashions of this period favoured the rich silk and silk poplin dresses. The company books show that the average dress length was twenty yards of fabric 24" wide. It was favoured for regal purposes as well as by top designers for ladies cocktail suits and evening and wedding dresses.

The number of royal and vice-regal patrons of Atkinson's silk and silk poplin was impressive. They included successive generations of the British Royal Family, including Queen Victoria , who ordered several sample lengths of fabric in 1837. These fabrics were of gold and silver silk with designs of roses, shamrocks and thistles. In 1893 another patron of Atkinsons was Princess Mary (later to become Queen Mary), she purchased quite a substantial amount of Irish poplin. Other patrons included the various members of the Vice-regal Court, in Dublin, and most of the Courts of Europe, including those of Italy, the Netherlands and Holland. Silks were also sent from Atkinsons to the Tzars of Russia. The success of Irish poplin in Russia was due to its rich appearance , its heavy weight and warmth which was very suitable to the cold Russian climate.

Atkinson's poplin was also used in ecclesiastical garments and also in the making of hats, evening bags, tobacco pouches and in the twentieth century was internationally famous for use in tie-making. National College of Art and Design LIBRARY 28

the second second days which and the . an ist not a to or set of the thirty haven a south and month diverse. She artist the the

to initiant cost a boll . Not a boar inter a cost

the sector



16bel





I have decided to devote a full chapter to the fourth weaving firm I have mentioned, Messrs. Elliott & Sons, of Brown Street, as in the course of my research on the weavers of the Liberties, I was able to trace many of their former employees. They discussed the firm with me and gave me a vast amount of information on the day to day workings of the factory.

CHAPTER 9 : The Elliott Firm - Equipment - Skills - Staff.



THE PART OF STREET STREET, ST. I. S. J. TELEGRAMS & CABLES "ELLIOTT \$1258 DUBLIN" Thomas Elliott & Sons, Ltd. BROWN STREET, WEAVERS' SQUARE, DUBLIN, 8. 19 1



In 1876 a silk weaving factory was opened at 24 - 25 Brown St, Weavers Square, Dublin, by Mr. Thomas Elliott. It was in this factory that the highly skilled weaver, Thomas Elliott, first set up his business, with his background in the weaving trade , his business venture had every chance of success. Mr. Thomas Elliott was able to trace back his family line to a Leonard Elliott. Leonard Elliott was first apprenticed to a Dublin weaver in 1638 and from this date onward the family continued its connection with the weaving trade. Mr. Thomas Elliott bought two houses in Brown Street, number 24, in which he set up his weaving factory and number 25 his family residence, and office. Elliott moved his living quarters to Catherine Ave., South Circular Road, as profits grew. He had to make some adjustments to the house in Brown Street in order to make it suitable for a workshop. He installed large glass panels into windows in order to gain maximum light for the weavers. It was essential that the weavers had the best light possible in order to work their intricate patterns and complicated weares. Thomas Elliott had two sons who continued the family business expanding and developing it, they were Thomas junior and George. They also took an interest in the welfare of their workers and introduced paid bank holidays.

George junior died when quite young, he left a son George junior, and a daughter Kathleen. Thomas continued to run the business on his own. He had a son Gerald, who was born in 1904, in Rathmines, and was educated by the Christian Brothers in Synge Street and later at Belvedere College. He joined the family business in 1922. In due course the two cousins Gerald and George joined together to run the family firm and became joint owners.

Gerald Elliott was taught how to produce fabric , deciding on technical details, design of fabric and colourings. There was no specific job as designer, he had to know how everything in the factory worked. He was surrounded by a close knit group of people who worked and understood their individual jobs. Between ent attos an teristan to produce fabric adantes and control anticip, design a fabric and colourings. There are a reside ab as feminets by had to store for everything in the adars seried. In the anti-instead by a close sait and and adars are and and and instead by a close sait and and



them they had an enormous amount of knowledge which they shared with him to produce the silk poplin - and he, in turn, had great respect and appreciation for his workers. George on the other hand took charge of the general office work and kept the books, thus there was an ideal relationship between the two cousins in the running of the firm. Gerald lived in Sandyford while George resided in Rathfarnham.

It was with great interest that I began to investigate the type of firm that developed under these two men and it was with great sadness that I discovered that they were to be the last in the family tradition and would see the end of this type of weaving in the Liberties. When I spoke to two surviving members of their staff they recalled the happy years they worked for the Elliott cousins. They remember them with loyalty and affection and cherished the memories of those happy years.

In the house at 25 Brown Street, George and Gerald organised the layout of the firm. The different rooms acted as a most convenient labour division with each room set up to cater for the varying forms of work involved in weaving. The house had three floors and a basement. The basement contained the winding room. The ground floor contained an extension to hold the weavers looms and above this on the first floor was the tie room where the poplin was cut and made up into ties, the offices were on the second floor and the third floor contained the creel and warping up machines.

Each employee was trained in a different skill and often remained within that area for the whole of their working life in Elliotts. This meant that each worker would become highly skilled and proficient within that area. The more proficient the person became, the better the output would be. Though the work must have been monotonous at times, the knowledge the employee gained was thorough and valuable, unlike the monotonous hours spent by workers on the conveyor belt machines of the present day where there is little or no skill required.







There was a disadvantage to this division of labour and that was that a person who started at weaving or as assistant weaver stayed within this category and as each department was separated, the employee's promotion could only be within his own department; thus a machinist could only become a forewoman over the machinists, an assistant weaver could become a foreman over the weavers. The private companies had inbuilt a class division of labour. The firms were managed by families and were handed down from father to son, keeping ownership within the family or close relatives.

The weaving community itself was a closeknit community and the skills and knowledge of the trade were guarded closely. This did not always work out for the best as can be seen in the example of a Mr. Cullen, who was helped to set up a dye shop, in Kevin Street, by Mr. Elliott; here he made up dye colours for silks but when he died the secret of making up the colours died with him and his immense knowledge was lost to the trade.

Maccesfield, Manchester. When Mr. Cullen organised his work-

The silk which came from China and Japan consisted of singles. A single is made up of about five strands from the silk worm with just enough twist to hold all five together; there are generally about three to four twists to each inch. During the early years of the silk industry throwing was carried out in Dublin. An account of raw silk and thrown silk, imported during the early eighteenth century "In the records of the Irish House of Commons" in the National Library, show that an average of 91,209 lbs of raw material were consumed annually by the silk manufacturers and more than half this was thrown by the Dublin throwsters. As the machinery for throwing developed, the English took over this process as they were better able to invest in the latest equipment. The English

The silks Messrs. Elliotts used came from China and Japan and the wool called merino (a very fine wool) came from Australia. The wool and silk came into the factory in skein form, already coloured. The dyeing of silk and wool was carried out in

shop, Elliotts sent the silk and wool to him for dyeing.





Fig. 16.











throwing machines cut down on labour and also increased output, thus cutting the price of thrown silk. As the Irish weavers count not afford this equipment they were unable to compete cost wise with their English counterparts and were forced to get their silk thrown in England. This caused a lot of hardship among the Irish throwsters as their means of livelihood was taken away from them. Elliotts bought the thrown silk in England and Scotland , in places like Glensford Silk Mills, Sussex and Motherwell. Thrown silk consisted of whatever thickness was required. The thickness of the rope was calculated in deniers. For example 60/66 deniers was made up of three threads of 20/22 deniers.

After the silk was thrown it had to be de-gummed before it could be dyed or coloured. In the de-gumming the silk loses weight for every pound of silk de-gummed it loses about 40zs. The degumming process consisted of removing the gum which is known as Sericin. The sericin resists dye so it has to be removed. The silk filament or staple woven by the silk worm consisted of about 80% fibron and 20% sericin. The sericin helps bind the threads of fibron together. De-gumming is usually carried out after reeling and throwing, because throwing gives an extra strength and support to the fibron's strands. To-day de-gumming is mostly done after the silk is woven.

After throwing and de-gumming, the silk threads for Elliotts were dyed in Macclesfield and later in Mr. Cullen's dye shop in Kevin Street. The Mirino wool is worsted wool and is spun to30/42counts. It is dry spun, takes the same type of dye as silk and comes in hank form.

The silk came into Messrs. Elliott's factory in coloured skein form. The skeins were brought down to the basement to the windingroom; this job was allocated to women workers. The women put the skein , which was a large loop of silk twisted into a special knot to hold it compact and neat, on a wheel the winding machine. The skeins were would onto bobbins. The bobbin was a wooden cylinder, similar in shape to a spool of thread, but with

33

deeper flanges at either end, they were made of wood. The bobbins were usually turned and made in one piece. Each bobbin had only one colour wound onto it. Another phase of the preparation for weaving was the winding of the quills which went into the weavers' shuttle for weaving the weft. The wool was wound onto bobbins also as it came in in hank form. From the bobbins it was put onto a quill by a quill winder. Both the winding and quill machines were in the basement and were operated by electricity to ensure even winding.

From the winding room, in the basement, the bobbins were brought up to the third floor to the creel room. The creel was a large upright stacking shelf for bobbins, usually with three sides. The creel was made up of rows of wooden vertical poles. The vertical poles had one fixed horizontal pole dividing them in two. The vertical poles had eight to twelve grooves above and below the horizontal bar. Into these grooves pegs of a cylindrical shape were fitted to hold the bobbins. These bobbins were manually loaded in sequence into the creel. The bobbins were arranged on the creel with each vertical row containing the same colour, to give the correct number of colours required for each fabric pattern. Mrs. Patty Walsh described to me, how she had to know the number of bobbin threads which were needed to obtain any width in a required stripe. After many years at this work, she knew exactly how many threads were required for a particular pattern. (e.g. forty four threads to an inch). The function of the creel was to hold the bobbins while allowing the threads to be wound off. Sometimes, if the bobbins were wound off too quickly they were liable to pop out of the creel, thus causing the warp thread to break or twist during the weaving. The start of each bobbin was taken in the required sequence of colour and put through eyelets on the vertical dressing machine (which is now known as a warping mill). The eyelets function was















to keep the threads from twisting and entangling during the winding of the dressing mill. The dressing mill resembled an upright reel which rotated around a central axis. At the top of the machine there were three pegs. These pegs created the division of threads for the shafts on the weavers loom. Finally, when all the threads were attached to the machine they were manually rotated downward until all the warp threads were wound into the dressing mill. The average length of the warp was forty five yards. The warp was then wound onto a wooden warp beam. This beam's function was to hold that portion of the unwoven fabric.

The warp beam was mounted on a winding roller. The threads Are from the bottom of the dressing mill were wound onto the beam with each thread lying next to each other in perfect parallel order. To provide for the holding of the threads a groove was cut across the width of the warp beam barrel. The thread ends were placed over the groove then a spline (stick) was driven down into the groove holding the threads securely in place. A handle at the side of the winding roller was manually rotated and the person operating the roller kept the threads in perfect order and under tension. The simple function the warp head performed was to keep the threads on the beam and to ensure a straight build up of warp. The amount of warp which the beam could carry was limited by the height of the heads and their distance from each other on the beams.

When the length of the warp threads was wound into the beam it was removed from the winding roller and brought down to the weaving hut.

The warp beam, now in the weavers hut was connected to the loom. The old warp ends from the previous poplin weave was joined to the new warp threads. The warp beam had counter balanced weights which were used to adjust and maintain tension. The weights prevented rotation of the warp beam during weaving. Once the complicated job of setting up this warp beam had been completed

35

.

. .



(a)

(b)



Fig. 26.

.








weaving could commence. With poplin fabric it was only necessary to change the warp beam, as the lifting of the shafts of the loom followed a constant pattern in all poplin weaving.

There could be any number of shafts within the loom. It was the combination of the various numbers of shafts lifted which formed the pattern in the fabric. There was a set distance between each shaft and this was called a geuge. The shafts were attached to Lamms which had the important function of centeralizing the upward pull thus assuring that the shafts moved straight up and down and were not pulled askew.

The lamms and shafts were operated by pedals, usually positioned at the front of the loom at floor level. There was usually two to six pedals, each pedal moved four lamms. The reed was also an important part of the loom; it was located between the shafts and the uptake roller and was used to maintain the even density of the weft. In some cases to give a lighter and more dense weave, weights were attached to the reed to give a heavier battering to the weft. The reed was operated manually by the weaver.

The shuttle was oblong , made of wood, with a hollowed out section on one side to hold the spindle type quill, which was covered with wool yarn. Its function was to pass through the warp , supplying the filling for the fabric.

In order to appreciate the extremely complex fabric that Elliotts wove, it is important to first understand the basic working of a loom. The following is a concise description of how the handloom operates. One of these looms is on display in Kilmainham Jail, in Dublin. The yarns which are dressed on a loom are collectively known as warp , while individual strands are known as "warp ends". The yarns which intersect the warp to form a fabric are known appropriately as filling (or weft) and one strand of yarn, a pick. In the hand and jacquard loom the warp ran on a horizontal plane and the





. .

(b)





"warp ends" lay side by side in colour sequence. The design of the loom allowed for the warp to be held under tension. To allow for the lifting of the warp elasticity of the yarn was an important factor and for this reason silk was used in the warp and not the weft. Silk being the strongest natural fibre - it has good elasticity and elongation. When dry it can expand about 10 - 20% and when wet as much as 30 - 35% and still more important, it has 92% elastic recovery.

The warp runs from one end of the loom, from the warp beam, over a back rest, through shafts and reeds to the opposite end where the weaver works, then onto a roller called "the uptake roller" and eventually on to the cloth roller which holds the finished fabric.

The length of the loom was carefully calculated taking into account the stretch of the yarn, and the opening of the warps to allow the shuttle to pass through. The basic structure of a loom was a cubic square. Within this cube all vertical and horizontal components for weaving were located. Elliott's looms were made of oak.

Below are the names of some of the Elliott weavers :loom) weaver)

Charles Venables (He was a highly skilled weaver of the hand Paddy Walsh(Padraig Breathnach.) (A most famous Dublin Declan Walsh (Nephew of Padraig Breathnach)

Paddy O'Loughlin. Larry Scott. Joe Malone, Albert Redmond. Nick. Grace. Albert Quinn. Tom Quinn. Timmy Murray. Willy Murray . Nick Murray . Joe Breathnach. Sam MacDonald & Tim MacDonald.



ina gaina. Maran garray i

Reenderson

Discould all a strends out ...





The most famous of these weavers was Padraig Breathnach. He was a foreman at Elliotts for many years and had started working as an apprentice weaver to his uncle at the age of thirteen. He became famous for the many hand woven cards he made and sold. An example of these cards, which was hand-woven on an old-style Jacquard Loom, in his own home, at 15, Hamilton St, Dublin, can be seen on Fig. 32 One of the old Elliott workers, kindly gave me a present of 1987 is the year of the centenary of Padraig this card. Breathnach's birth and an exhibition of his work and his loom, will be held later this year in the Tailors Hall. Below are the names of some of the Elliott women workers:-Patty Quinn (Her father and grandfather were weavers) Kathleen Daniel

Julie Kingston Lilly Kingston Josey Kingston Sarah Kingston Joan Quigley: (Daughter of Sarah).

From a study of the list of weavers and women workers, one can see just how closely guarded jobs in the weaving trade were, it was practically impossible to obtain work in any weaving firm unless one came from a weaving background.

Adare,





Fig. 33.

.



It was Gerald Elliott's love and understanding of colour which made Elliotts poplin so popular. Poplin is a type of weave and does not allow for change of pattern, but Gerald cleverly devised a way to develop variations in poplin using colours. In one example of this, recorded by Rena Flemming, in her essay Addad> on "silk weavers", she describes a particular fabric he designed, which had a black silk warp and the weft of light pinks, reds and burgandy. The black was tightly packed together but when warp threads. This very clever colour weave showed an obvious understanding of colour, taking maximum advantage of the effect light can have on a fabric. Poplins could be Joan At the top

inspected flecks of colour appeared in the space between the dushate identified by their fine cord like surface; they came in plain colours and also striped colours which were mainly used for ties. When a sample length of fabric had been designed and woven it was cut up into sample pieces and arranged in booklets for the sales representatives to bring around the world. Quigley in Elliotts office, prepared the fabric swatches. There were at least three fabric swatches on each card. of each card the number of the fabric was recorded. The fabric swatches were placed in a basket ready for the sales reps., to pick up whenever they called. Some of the sales reps., working for Elliotts were:-Mr. Power who travelled throughout the country. Mr. Billings dealt with the Dublin area. Mr. Crowley covered the French market. Myron McIntyre, helped develop the sales in the United States of America.

The sales representatives were the highest paid employees. There were two main distribution outlets for Elliotts fabrics: Direct sales to the public and sales to retail outlets.

Elliotts were famous for their woven striped ties. They got many commissions for ties some of which included Irish sporting clubs like : The Dublin & Cork golf clubs, Landsdowne R.F.C., Belvedere Unions. The Dental and Medical Associations had their emblems were woven on their ties. The Trinity College tie

south a al alterna the second of a the state a car available of the meridian and the lotter of the the second se contract and that the last to sailers are when . then the second a such as an inter and distant, bone of the sales range, balloutett

- . the atland with they place would be
- . Standard direct and shares walkers.

. 20 1220

where source no share time. The wrist of the second to

In Dublin some of their most successful outlets were:-Bests of O'Connell St. Kevin & Howlin, O'Connell St. O'Beirne & Fitzgibbons, O'Connell St. Gleesons, O'Connell St., W. J. Kelly, Grafton St.,

For vestments woven by Elliotts:-Bulls, Suffolk Street. Mary Forrest, Abbey Street. Brown Thomas, Grafton St F.X. Kelly, Grafton St.

0

For school ties :-Gorivan Brothers , Camden Street.

When we consider the number of shops that stocked Elliott's ties we can appreciate the volume of their business. Elliott poplin was not only used in ties, it was also used in the facings of hems, dinner jackets, gown hoods for university graduations, tobacco pouches, ribbons and flags in the national colours.

Another area Elliotts covered was special trimmings, ribbons for badges and medals. They were woven in specific colours. details and widths. Ribbons and trims were woven for various commemorative medals; Black & Tan General Service, Bravery Medals, The Scott Medal in Gardai, Defence Forces , Army Long & Short Service, F.C.A., Irish United Nations Service in Cyprus and Congo, Irish Red Cross & Knights of Malta. One of the most interesting and funny stories told to me about the making of the ribbons for the commemorative medals for the 1916 Rising,

```
crest was woven in sky blue, red, green on a black background.
The ties were woven for foreign customers, some of these
customers were C Laurencuis, Kurfusden damm, Grumwald, Berlin,
Germany and O.B.Linn Fabrekam, Oslo, Norway.
```

.

by a member of the Elliott staff, was as follows :-

When Elliotts had woven the ribbons for these medals, great security was involved in delivering the medals to the Elliotts workshop, they arrived under army escort and had to be stored in a secure safe. Each time they were moved from the safe to the workroom where the ribbons were sewn on , they were checked and counted. However, when the order was completed . it was discovered that they had one ribbon over, the medals were counted and recounted, the safe and workshop was searched from top to bottom but with no success, they were one medal short. Mr. Elliott had to be told and he in turn had to get in touch with the appropriate government department. In the meantime a young apprentice who heard the commotion going on, casually said to one of the workers "sure I only took one of those medals home with me to show it to my Dad". He was despatched, post haste, to his home to retrieve the medal and poor Mr. Elliott had to apologise about the mix up to the authorities. The staff were completely baffled as to how the young lad could have taken the medal with all the security measures that had been taken to guard them.

It was with sadness I learned of the death of Gerald Elliott in March 1987. He will be sadly missed by all those who had contact with him, especially his former employees.

. and the most of a network of netwo . Is financial announced

. The state sale









CHAPTER 10 : Fashion Garments made from Irish Poplin.





Fig. 35

Dressmaking and tailoring consistently employed the overwhelming majority of female industrial workers and was the largest single source of male industrial employment. Consumer industries, such as dressmaking and tailoring failed to adapt to modern standards of mass production which put an emphasis on price rather than quality. The decline in these main employment outlets can be seen from the following figures:-

1861	
1871	
1881	
1891	
1901	
1911	

Ref: (Dublin Deposed Capital) It was difficult to chart the changes in the employment in the clothing industry as most of the workers worked in small workshops or often in individual houses. The critical technological event was the invention of the sewing machine. This was in widespread use by the 1860. The sewing machine led to a new order of factories which brought workers together in large work rooms. The emergence of department stores generated the mass production of ready-made clothing. They imported large quantities of ready-made clothing and by the 1860s English made clothing was being sold in Dublin at low prices. At this stage poplin which was an expensive fabric to produced moved into an elite market. Traditionally in Ireland, tailors made clothes for both sexes, but gradually a change over to seamstresses took place. In general the swing in fashion to light-weight dresses favoured the seamstress. With growing industrial wealth, the influence of French couturiers and the availability of fashion plates, women began to demand a greater variety of fashionable clothes.

Some fine examples of Irish poplin dresses may be seen in the National Museum of Ireland, Kildare Stree, Dublin . The design of these dresses had a distinctive Irish character but also reflected the fashion shapes of Europe at this period.

14,324 - ?what is this ? 11,835 10,339 10,308 9,198 7,400

sevence souther the state the endowing

-liotus_1 witholf to



Fig · 36









•



A superb example of one of these dresses , is a day dress, about 1867-8, made up of two pieces, a bodice and skirt. The fitted bodice of cream poplin had bell shaped sleeves with machine embroidered green shamrocks. The under sleeves and collar were made of Limerick lace. The skirt was gored, pleated and lightly gathered at the back. It was also made of green Irish poplin decorated with cream shamrocks and lace. The weight of poplin during this period was very suitable for creating fullness in the skirts. Another example of these dresses in the National Museum of Ireland is a poplin day dress - dated about 1905. It is composed of a light weight poplin, thus allowing the designer to create a softer look. The dress of tan coloured Irish poplin is decorated with cream machine lace. This dress was made by (,) Todd Burns & Co. Ltd., Dublin., Tailors and Costumiers.

The use of poplin for the making of ladies dresses had been the main stay of the trade since its foundation. The amount of poplin, so used, was quite considerable. Poplin presented a showy finished appearance which was very popular with Irish ladies, both for dresses, blouses, evening coats and skirts. There was one disadvantage to poplin from a designer's point of view - this material was extremely durable; / it was said that there was no wearing out of a poplin garment and that it would outlast several silk garments and yet only cost the price of one of them. This understandibly was not to the designers advantage and eventually, over the years, they used other fibre fabrics, but not before designers like Thomas Wolfangel, Mary O'Donnell, Ib Jorgensen, Stephanie Barry, Jenni Green and Joseph Monaghan had designed some of the most beautiful gowns ever seen in the 50s and 60s. Poplin did have one disadvantage, it could not be washed, as the wool in the weft would shrink. Some gowns were made from Elliotts moire poplin. The moire poplin had a watermark design on the right side of the fabric













Fig. 42



The watermark design was obtained by passing two fabrics through two rollers under tension and temperatures of 250°F. These rollers weighed approximately three and a half tons. They were heated by gas and rotated by hand. The actual pattern was formed by the two fabrics coming together under tension and temperature. When they were removed from the rollers they had to be torn apart.

After the fire in Elliotts in 1965, Elliotts set up a workshop in Clonakilty, Co. Cork. When the first poplins came from their looms, four top Irish designers celebrated the return of Elliott poplin, with a fashion show, on May 15th, 74, in the Tailors Hall, Dublin , and a promotion in London was staged to re-establish the new poplins there. The press and public responded favourably to the return of silk poplin and the following were the discriptions, which appeared in the press the following day, of some of the garments seen at this show:-

"Duenna" Designed by Ib Jorgensen, was made of beige moire poplin. This evening dress had a frill forming the neckline and continuing round the bodice. "Oyster" Designed by Jenni Green and Stephanie Bary, was made of pink and rust moire poplin. The dress was halterneck design with a scalloped hem and collar line.

Another gown designed by Jenni Green and Stephani Bary, was a rust, ruby and orange coloured caftan dress in moire poplin, with rows of padding bordering the sleeves and hem.

The stiffness of the poplin was cleverly handled by Thomas Wolfangel, in a kingfisher blue evening suit, with short frilled sleeves , belted jacket and slightly flared skirt in moire poplin.

It is interesting to note, from the pictures and discriptions of these high fashion garments, designed by our top designers, that they reflected the fashion mood throughout Europe.



and all week .





Though everything possible had been done to keep Irish poplin on the London and Irish markets a gradual decline in demand for it took place from the late nineteen hundreds and by the early twenties the demand for Irish silk poplin, for dresses, had disappeared. Thus ended the centuries old tradition of the use of Irish

Fig. 1.	Gerald Ellic
Fig. 2.	Huguenot Hou
	(a) Old He
	(b) Old H
	(c) Pair the p are n parti
Fig. 3.	Map of Dubl
Fig. 4.	Atkinsons P
Fig. 5.	Gerald Elli
Fig. 6.	Weavers Squ
Fig. 7.	Tie Room -
Fig. 8.	Tie Room -
Fig. 8.	Passing Tie
Fig. 9.	Pressing T:
Fig.10.	Weavers Ha
Fig.11.	Map of Dub
Fig.12.	Advertisem
Fig.13.	Sample Moi
Fig.14.	Sample ,El
Fig.15.	Elliott's
Fig.16.	Winding Ro
Fig.17.	Loaded qui
Fig.18.	Quill in s
Fig.19.	Close up o
Fig.20.	(a) Warpe (b) Deta

20

The die of 17555 police is the the investor continued

ott - Moire Poplin Machine.

uses.

House in Castle Street, taken down 1813. louse in Marrowbone Lane, 1703, long demolished. of Houses in Longford Street, Dublin: plan and rere elevation are generic and not based on an accurate survey of these cular houses. lin 1811 - Taylor Directory. Poplin - National Museum . iott - Poplin Samples. uare, Dublin. Elliotts, Brown Street, Dublin. Elliotts, Brown Street, Dublin. es - Elliotts, Brown Street, Dublin. ies - Elliotts, Brown Street, Dublin. 11 - Dublin. olin 1847 - Toms Directory. ent for R. Atkinson & Co. re Poplin - Atkinson & Co. National Museum. liott's Invoice Sheet. Poplin Mill , Newmarket, Dublin. oom, Right side - quill winding. Left side - bobbin winding. 111. shuttle. of quill in shuttle. er working in front of creel. il of creel.

			Fig. 21.	(a) Warper worki
				(b) Detail of se
			Fig. 22.	Transferring sil
			Fig.23.	Winding on a ler
			Fig. 24.	Dressing Mill.
			Fig. 25.	Winding on warp (a)
	at and			(b) Detail of wa
·			Fig. 26.	(a) Warp beam in
				(b) Detail of wa
			Fig. 27.	(a) Weaver at wo
				(b) Side view of
			Fig. 28.	(a) Weaver lift:
		Hala		(b) Drawing of :
			Fig. 29.	(a) Gerald Ellio
				(b) Detail of sh
			Fig. 30.	(a) Back view of
			115° JU.	
.Arepetent for 2. summer de.	.0.30			(b) Drawing show
			Fig. 31.	Throwing shuttle
			Fig. 32.	Hand woven card
			Fig. 33.	Gerard Elliott :
	.Mr. att		Fig. 34.	Sample of Ellio
			Fig. 35.	Irish Poplin Day
			Fig. 36.	Irish Poplin Day
	· · · · · · · · · · · · · · · · · · ·		Fig. 37.	Irish Poplin Day

king in front of creel. sequence of bobbins on creel. ilk threads from creel to dressing mill. ength of warp on a dressing mill. p length from dressing mill onto warp beam warp beam. in place at back of loom. warp beam. work. of Loom. ting shafts loom showing shafts . iott working at loom. shaft. of loom. owing movement of warp length through loòm. le through warp threads. d - by Padraig Breathnach. setting up the moire poplin machine . ott poplin. ay Dress 1867-8 - Front view. (National Museum of Ireland) ay Dress 1867-8 - Back view. (National Museum of Ireland) ay Dress -about 1905 - Front view. (National Museum of Ireland)

-12

38.	Irish P
39.	Evening
40.	Evening
41.	Evening
42.	Moire M
43.	Evening
	39. 40. 41. 42.

Lawrence and the second of the

(b) workell of the manon of bolling with (d)

Principal at foreigned thereis she pateralated

. The second second second second second second

- ALLEN gallenord

. 55 . 337

. . . .

visite on same leasts from area size will dote

. Real to place an energy of seed. Arbit (1)

(c) Decell of the provide

in the state of the second states of the

· stands general model of general (s

a section of the strength of the strength of

and to raise the

Revelac abuttle through any increase.

Commit Allows with a set in a

inter forthe to the second entropy which

The faile and server have been along and t

Inter reason and their south and assess which

Poplin Day Dress - about 1905 - Side view. (National Museum of Ireland).

Dress by If Jorgensen.

Dress by Jenni Green and Stephanie Bary.

g Dress by Jenni Green and Stephanie Bary. Machine - Elliotts.

g Suit by Thomas Wolfangel.

ACKNOWLEDGEMENTS:

Kevin Etchingham (publisher). I also wish to thank the staff of :-The National Library of Ireland. The National Museum of Ireland. The National Civic Museum. Kilmainham Jail.

Trinity College Library. The Gilbert Library . A The Library (Ilac Center Dublin). Ordinance Survey Office.

```
In the course of my research I have drawn on the assistance
of a wide range of individuals to whom I now make acknowledgement.
In particular I wish to thank , Joan Quigley (ex Elliott staff),
Declan Walsh ( ex Elliott, weaver), Patty Quinn ( ex Elliott
warper,)Lilias Mitchell ( grandaughter of a weaver), Mairead
Reynolds (National Museum of Ireland), Eamonn MacThomais and
```

Berry Henry F. A History of the Royal Dublin Society. London 1915 Beveridge J.H. Warp/Weft/Sett a reference for handweavers. Van Nostrand Reinhold Co. New York 196 Broudy Eric. The Book of Looms. A History of hand- looms from ancient times to present. Studio Vista London 1979 Bunt Cyril G.E. The Silks of Lyons. F Lewis Publishers Ltd. England 1960 Craig Maurice. Dublin 1660-1860 Cahill & Co. Dublin 1969 Daly Nary E. Dublin - The Deposed Capital. A Social & Economic History - 1860 - 1914 Cork University Press. Cork 1984 Davison M.P. A Hand Weavers Pattern Book. John Spencer Inc., U.S.A.1971 Fannin Allen A. Handloom Weaving Their influence on popular Language & Literature. New York 19 Reinhold Co. New York 19 Nacmillan Maxwell Constantia. Dublin under the Georges 1714 - 1330 Gill & Macmillan Dublin 1971	Author	Title	Publisher	Place of
Royal Dublin Society.Doman 1915Beveridge J.H.Warp/Weft/Sett a reference for handweavers.Van Nostrand Reinhold Co.New York 196Broudy Eric.The Book of Looms. A History of hand- looms from ancient times to present.Studio Vista London 1979London 1979Bunt Cyril G.E.The Silks of Lyons. F Lewis Publishers Ltd.England 1960Craig Maurice.Dublin 1660-1860Cahill & Co.Dublin 1969Daly Mary E.Dublin - The Deposed Capital. A Social & Economic History - 1860 - 1914Cork University Inc.,Cork 1984Davison M.P.A Hand Weavers Pattern Book.John Spencer Inc.,U.S.A.1971Fannin Allen A.Handloom Weaving Their influence on popular Language & Literature.Van Nostrand Reinhold Co.New York 19Maxwell Constantia.Dublin under the Georges 1714 - 1830Gill & MacmillanDublin 1971MitchellIrish SpinningDundalgan Press.Dundalk 1	Torres 17	A Triatan A tri		Publication/Da
reference for handweavers.Reinhold Co.Broudy Eric.The Book of Looms. A History of hand- looms from ancient times to present.Studio Vista London 1979Bunt Cyril G.E.The Silks of Lyons. F Lewis Publishers Ltd.England 1960Craig Maurice.Dublin 1660-1860Cahill & Co.Dublin 1969Daly Mary E .Dublin - The Deposed Capital. A Social & Economic History - 1860 - 1914Cork University Inc.,Cork 1984Davison M.P.A Hand Weavers Pattern Book.John Spencer Inc.,U.S.A.1971 Inc.,Fannin Allen A.Handloom Weaving Their influence on popular Language & Literature.Van Nostrand MacmillanNew York 19 MacmillanMaxwell Constantia.Dublin under the Georges 1714 - 1830Gill & MacmillanDublin 1971 MacmillanMitchellIrish SpinningDundalgan Press.Dundalk 1	Berry henry r.	Royal Dublin		London 1915
A History of hand- looms from ancient times to present. Bunt Cyril G.E. The Silks of Lyons. F Lewis Publishers Ltd. England 1960 Graig Maurice. Dublin 1660-1860 Gahill & Co. Dublin 1969 Daly Mary E . Dublin - The Deposed Capital. A Social & Economic History - 1860 - 1914 Davison M.P. A Hand Weavers Pattern Book. John Spencer U.S.A.1971 Fannin Allen Handloom Weaving A. Technology. Van Nostrand Reinhold Co. Hume Rev.H. Spinning & Weaving. Their influence on popular Language & Literature. Maxwell Constantia. Dublin under the Georges 1714 - 1830 Mitchell Irish Spinning Dundalgan Press. Dundalk 1	Beveridge J.H.	reference for		New York 198
Publishers Ltd.England 1960Craig Maurice.Dublin 1660-1860Cahill & Co.Dublin 1969Daly Mary E .Dublin - The Deposed Capital. A Social & Economic History - 1860 - 1914Cork University Press.Cork 1984Davison M.F.A Hand Weavers Pattern Book.John Spencer Inc.,U.S.A.1971Fannin Allen A.Handloom Weaving Technology.Van Nostrand Reinhold Co.New York 19Hume Rev.H.Spinning & Weaving. Their influence on popular Language & Literature.ADublin 1971 Maxwell Georges 1714 - 1830Dundalgan Press.Dundalk 1	Broudy Eric.	A History of hand- looms from ancient	Studio Vista	London 1979
Daly Mary E. Dublin - The Deposed Capital. A Social & Economic History - 1860 - 1914 Cork University Cork 1984 Press. Davison M.P. A Hand Weavers Pattern Book. John Spencer Inc., U.S.A.1971 Fannin Allen A. Handloom Weaving Technology. Van Nostrand Reinhold Co. New York 19 New York 19 Reinhold Co. Hume Rev.H. Spinning & Weaving. Their influence on popular Language & Literature. A Dublin under the Georges 1714 - 1830 Gill & Macmillan Mitchell Trish Spinning Dundalgan Press. Dundalk 1	Bunt Cyril G.E.	The Silks of Lyons.		England 1960
Deposed Capital. Press. A Social & Economic History - 1860 - 1914 Davison M.P. A Hand Weavers Pattern Book. John Spencer U.S.A.1971 Pattern Book. Inc., Fannin Allen Handloom Weaving Van Nostrand A. Technology. Reinhold Co. Hume Rev.H. Spinning & Weaving. A Literature. A Dublin under the Gill & Dublin 1979 Maxwell Dublin under the Gill & Dublin 1979 Nitchell Irish Spinning Dundalgan Press. Dundalk 1	Craig Maurice.	Dublin 1660-1860	Cahill & Co.	Dublin 1969
Pattern Book.Inc.,Fannin Allen A.Handloom Weaving Technology.Van Nostrand Reinhold Co.New York 19 Reinhold Co.Hume Rev.H.Spinning & Weaving. Their influence on popular Language & Literature.AMaxwell Constantia.Dublin under the Georges 1714 - 1830Gill & MacmillanMitchellIrish SpinningDundalgan Press.	Daly Mary E .	Deposed Capital. A Social & Economic History - 1860 -		7 Cork 1984
A. Technology. Reinhold Co. Hume Rev.H. Spinning & Weaving. Their influence on popular Language & Literature. A Maxwell Constantia. Dublin under the Georges Gill & Macmillan Dublin 1979 Macmillan Mitchell Irish Spinning Dundalgan Press. Dundalk 1	Davison M.P.			U.S.A.1971
Their influence on popular Language & Literature.AMaxwell Constantia.Dublin under the Georges 1714 - 1830Gill & MacmillanMitchellIrish SpinningDundalgan Press.				New York 19
Maxwell Dublin under the Gill & Constantia. Georges Macmillan 1714 - 1830 Mitchell Irish Spinning Dundalgan Press. Dundalk 1	Hume Rev.H.	Their influence on popular Language &	Л	
Mitchell Irish Spinning Dundergen		Georges		Dublin 1979
		Irish Spinning Dyeing & Weaving.	Dundalgan Pres	s. Dundalk l
			`	

.



	Publisher	Place of Publication/Date
1	Gill & Macmillan	Dublin 1981

h & c 28	National Museum of Ireland.	Dublin A
rt	Weidenfeld & Nicolson.	London 198

Faber & Faber London 1965

Westview Colorado 1979 Press.

Publisher - Anchor Press Ltd., - London 1986.

The Encyclopaedia of Textiles - Editors of American Fabric Magazine Publisher - Doric Publishing Company - 1960

1