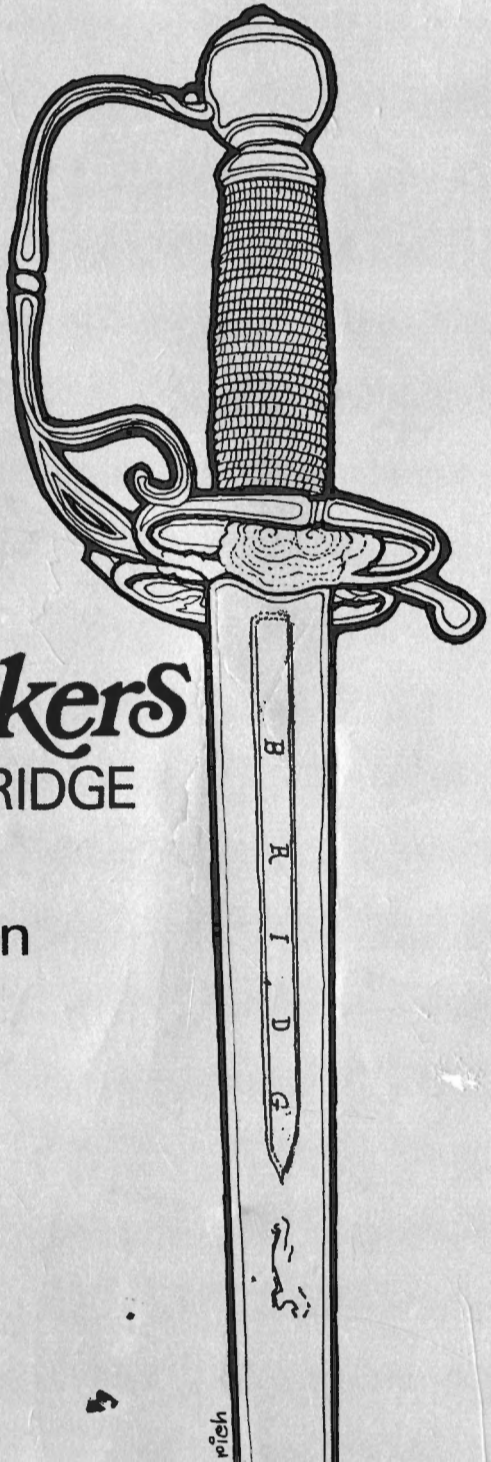

The Swordmakers OF SHOTLEY BRIDGE

David Richardson

CHAPTER ONE

About Swords

During my research and study for this book I found out so much that was new to me about swords I feel that it would be unfair to ask a reader – if he were as uninformed as I was – to read on without sharing with me this knowledge. Again, when interest is aroused in the making of a good sword and in the artistic and spiritual values attached to it, my subject should have added significance.

The making of a good sword blade was always considered a highly technical achievement. However, I was surprised to learn that in Japan intense prayer and even worship were needed for its accomplishment. Also that in Germany medieval bladesmiths believed that when they slept before the final forging 'demons' got to work on the blade to ensure success.

Away from the making and the meaning of it, no other object associated with Mankind's 'growing-up" has been so imbued with significance as the sword. Other things have merely accompanied man in his development. The sword – one cannot help feeling – goes with him into Eternity. One would imagine his closest friends, the horse and the dog, to out do a piece of metal in man's race for immortality. But no. It is the sword at his side which holds the honoured place.

Some people shiver at the sight of a naked sword and won't have one in the house. It is certainly a lethal weapon but even more so are motor cars. See how we've changed? When the 'town' sword was an indispensible part of a gentleman's dress during the seventeenth and eighteenth centuries swords in houses would be as common as umbrellas are now. Young 'bloods' of those days (and their fathers too) owned more than one sword; sometimes three, with another black hilted sword for mourning purposes. Samuel Pepes refers in his diary to his 'swords' with their silver gilt embellished hilts and mentions the cheaper sword he bought for his servant.

Those days are gone and yet the sword is still with us in a legendary and religious sense. In was Christ who said – "I bring not peace, but a sword. . . ." whilst legendary history and factual history spilling over into this present age is brimful of tales about swords.

Self-preservation could explain every motive for the existence of the sword in history. So why then, has it assumed such significance? Since the Order of the Knights of the Garter in 1347, knights have always been created by the ruling sovereign placing a sword on the shoulder of the kneeling man. Kings and Sovereigns have been created with the sword as well as the Crown. The Coronation Sword of the French Kings is traditionally the actual sword of Charlemagne (742-814) but was probably forged in the twelfth century. It was aptly named Joyeuse. Other memorable names of swords spring to mind. Excalibur, with King Arthur wielding it and defending the last remnant of Romano-British civilization from the aggressive countrymen of Beowulf. He

acquired the sword of course, by drawing it out of a stone (or was it by taking it from a hand holding it up out of a lake?). Excalibur eventually became the sword of Richard Couer-de-Lion, King of England. Durandel was the original sword (reputed to be), of Hector of Troy, and Roland won mighty battles with it. Seigfried is inconceivable without his sword – his magic Northung Sword forged with his own hands from the remnants of his father's sword in the Troll's cave under a dwarf's instructions. Attila once claimed sovereignity over all the tribes who worshipped the sword and he became the ruler of an Empire extending from the Rhine to China; all because his chieftain had proclaimed that an ancient iron sword – found half buried in the Steppe – was the true unique sword which had accidentally fallen from heaven. Again, the ancient Scythians worshipped a sword stuck upright in the earth. It was their God of War.

As mystical weapons, swords reached their peak in the age of chivalry in the twelfth and thirteenth century. They reached their peak in design and efficiency as early as the fourteenth century. The 'cruciform' hilts were used for last rights on the battlefield.

As having the power of life and death in the ages of superstition and fervent faith in God (or Gods), the hilts of swords carried relics and charms. Thus, the hilt of Charlemagne's sword contained a rivet from the lance reputed to have been used at the Crucifixion. The sword Durandel was said to have in its hilt a tooth of St. Peter. The pommel of the hilt (the real purpose of which was to balance the sword in the hand), was often hollowed out to house sacred relics such as 'the toe nail of a saint' or 'a shred of clothing' from that of the Holy Family or 'a drop of Saint's blood'. Even the grip of the hilt might have a glass front displaying a relic.

In those ages of fervent superstition 'lucky charms' could be hidden somewhere in the hilt. On Scandinavian blades runes were inscribed to endow them with killing power. Symbolic signs, known only to the wielder of the sword, were inscribed on blades of almost any nation.

As swords were mainly a slashing weapon in the early centuries the two-handed sword made its appearance in the thirteenth century. There was room for two hands on the hilt of this longer heavier blade. In Germany these swords were as big as the giants who wielded them. They were soldier specialists called – Doppelsoldner (because they drew double pay), and they advanced on foot at the head of their columns to cut down the pike shafts of the enemy. Principally they protected their high officers. They carried these weapons over their shoulders on the march. Some swords were called 'two handed' and lesser swords – 'hand and a half' swords. There was a similar sword – the Scottish Claymore – still used as late as the sixteenth century when the basket hilted broad sword was the two edged weapon of both the Scottish and English soldier; and the Welsh and Irish too we must remember.

Apart from the officer class, ranks in the navy used cutlasses; also hangers, the short swords hanging from a frog at the waist. Other short

swords popularly used (on land) were the hunting swords. Short, straight, handy to draw and use from horse-back or on foot in the hunt. They were often decorated on blades and hilts with animals of the forest and field. Another short sword never left the home. This was the pillow sword, kept near the bedside in case of night marauders. In a museum case a plug bayonet might look like just another short sword of the seventeenth or eighteenth century. Except for its tiny 'cruciform' shaped hilt; made to plug into the end of the barrel of a musket.

Most of the swords were 'cut and thrust' now with the exception of the rapier and the small sword. The rapier, a long and slender blade came from France, Italy and Spain. Purely for thrusting it was often used with a dagger in the other hand. Thus the art of Fence came into being on the continent. In Germany the art was taught by a leading Master at Arms. The very popular small sword vied with the rapier as the best thrusting weapon. It was favoured by almost all the 'gentlemen' class, high ranking officers, courtiers and Royalty. Especially if the sword was a 'hollow blade' which only Solingen could make.

The earliest swordmaking centres of Europe were at Milan, Brescia, Toledo, Strasburg, Passau and Solingen. The distribution point was Cologne. The merchants congregated there to take their percentage and send the blades on in chests or bundles to be furbished in other towns and countries. Thus the sword-cutlers (who fitted the blades with hilts, scabbards, etc.), expressed the tastes and individualities of the sword buyers whether they be army or navy chiefs or Royalty or gentlemen and even 'lads' of the town or village if they could afford them. If these 'Cologne' swords (as they were called), bore the mark of the 'Flying Fox' which guaranteed Solingen make, they were enhanced in value. The mark was not associated with any particular bladesmith (who always inscribed his own mark on the blade or tang – which is hidden in the hilt), but was granted to the Armourer's Guild at Passau by Archduke Albert in 1349 and was subsequently stamped on all Solingen blades as a mark of excellence. In those days the marking and stamping on the blades was witnessed in the market place. This 'flying fox' or 'running wolf', as it is popularly called, graces many sword blades in museums today. Approps – a 'Cologne' sword – in Shakespeare's time a sword could be nick-named a 'fox'; thus, in a Shakespeare play, a 'fox' could mean a sword.

After the fifteenth century, hilts grew very elaborate with finger protecting quillons, cup hilts and basket hilts. Swords and rapiers as well as their scabbards and the sword belts and baldrics were jewelled and embellished.

Was this a subconscious wish to compensate for the sheathed much prized hidden blade? Contrary to the impression given by the spate of sword fights in plays and films and books, the naked sword was not often seen in England after the middle ages. (With the exception, of course, of the saddle sword of the mounted soldier. It was out of its sheath for easier drawing power.) In fact, unlike France and other

Continental countries, duelling was objected to in England. At one or two periods of our history it was an offence to draw the sword.

The naked sword has always been treated with respect; apart from fear. Associated with it the words, veneration, worship, magic and mighty have been used throughout history.

Even so, it seems a mystery to me why a piece of forged steel or iron (or bronze 3,000 years ago), which is merely a cutting or thrusting weapon should have attained such significance. I believe, with Carl Jung, that as well as racial and unconscious memories, there are Archtypal memories in all of us. That is to say, a sword (or the idea of a sword), has developed in man's collective unconscious. To me, in a practical fashion this could only mean the cutting out of all evil with a sweeping gesture of my hand. Whatever the idea of a sword means to others.

The veneration for the sword as a symbol to execute justice (executioner's swords?), appears at first glance to have belonged to every nation on earth except (surprisingly enough) – China. Even before the revolution China frowned upon 'sword worship', trying to divest it of all meaning except the means of punishment. Yet it was from ancient China that the sword was first introduced to Japan. Japan has always been the opposite of China with their regard for swords. Of all nations Japan venerate and worship the sword the most. Anything offered to the Gods in Japan had to have three elements – purity, rarity and value. They believed the sword to have all of these and it was given as a votive offering. Thus the sword later became the symbol of the Samurai code. The Shogun was the head of this high military caste with their, "The girded sword is the living soul of the Samurai" as a precept.

The crime of a Samurai forgetting his sword was unthinkable, but the Samurai warrior has always carried two swords (the extra one much smaller) to make sure. The regular sword was usually a family heirloom carried into battle by men of the Japanese army and navy.

A good Samurai sword still remains the most perfect steel blade in the world. When a blade was being forged for a notable family to treasure for generations, time in the making of it and great pains was no object.

The 'Master' (bladesmith), began his task by pouring cold water over his body; his symbolic act of purification; then suitably dressed he knelt before the diety shelf of his forge and fervently prayed. Assisted by his *sakite* his practical work began by heating and pounding a piece of good iron; quenching it then breaking it into small pieces. Placed upon a spatular of the same quality iron they are again heated and pounded until the resultant piece is very solid. By now the iron would have absorbed enough carbon in the fire to become steel and from then on there were several different methods of forging a Japanese blade. One way was to pound the steel into a wide flat area and keep folding over and pounding until the rough shape of a blade was formed. This heating and pounding and folding takes place as many as thirty

times during which (between each fold), all air and dirt must be excluded from the steel. Otherwise the blade could snap in combat. A paste was then mixed – of clay, powdered grindstone, charcoal and other elements – and spread over the sword blade which is then baked for its final tempering. After reaching the exact temperature the blade is then quenched in water of a suitable temperature. Each school of sword-smiths or family of smiths in the Old Sword period kept secret their own methods and temperatures. Instructions were passed on by word of mouth from father to son, from Master to Sakite. As there were no instruments to measure hardness of steel or temperatures, instructions ran thus – "At final forging heat the steel until it is the colour of the moon beginning its journey across the heavens on a June or July evening" then again – "After the final forging plunge the sword in water which has the temperature of water in February or August". After the smith had engraved his signature on the blade (and inscribed February or August as date of forging), it was given to the polisher who, using several grades of wheels worked from one to two weeks on the sword. It was then given to the rest of the team of 'artists' who were busy on hilts, handle bindings, guards and scabbards.

If the legend is true about the peculiar shape of the Japanese sword then the swordsmith Amakuni made the first Samurai sword in A.D. 700 in the Province of Yamato. The gentle curvature of the blade was his answer to the many breakages of straight weapons in battle slashing.

In contrast to the regular gentle curvature of the Japanese sword, Indian swords follow widely differing shapes. Not only are there straight blades and sickle shaped blades and boomerang shapes but there are Indian swords with undulating curves. There are many leaf shaped and horses tail shaped blades and one has only to glance at the fantastic variety to realise that novel 'eye catching' designs took precedence over utility.

Throughout the whole sub-continent of India this fantastic variety of blade forms are accompanied by historical associations. Many volumes have been written about the history relevant to the Talwar sword; the Kanda and the Pata; the Kirach, the Kukriand, the Kora, the Ram Dao or the Sukhela.

However, there was a 'falling away from grace' among Indian swordsmiths during the eighteenth century. In a desire for vulgar display the sword became a mere ornament (where hithertoo it held spiritual and aesthetic qualities). All its unspoken messages – its real appeal – were hidden under rich ornamentation and sparkling jewels. The blades themselves happily, were still superbly forged however. Three centuries before, such was the respect and veneration for the swords that it was possible to insult someone by offering him a richly ornamented sword. This actually happened when Shah Ismail sent to the Sultan Selim I of Turkey a richly ornamented sword. The Shah, of course had just declared war upon the Sultan and this was his defiant aggressive gesture. To a Muslim then, an elegant Talwar blade was the instrument for the performance of the propagation of the Faith. The moral and religious meaning of the sword made it worthy to receive –

in its making – sincere artistic effort. Ostenation was an insult. In this Mughal period there survived the old ideal of the Persian aesthetic flawless execution of a work of art. I quote from P. S. Rawson's fully comprehensive book *The Indian Sword* – "If one is able to examine a perfect blade of the Kirk Nardaban damask pattern it is no exaggeration to say that the consummated effort of a genius is embodied before one's eyes". The writer shows how, to achieve the ideal of perfect function and expression in the Talwar, the bladesmith experienced in his work a series of decisions and actions each bent towards a clearly defined end.

In this early Mughal period any desire for ornament never impaired the functions of the sword. Recesses in the blade to rake chiselled ornament later were first done in the forging. This was to ensure that the flow lines in the metal would remain continuous. But the 'over ornamentation' of the pure Talwar happened to most Indian swords including the Kanda (the word means 'sword'), favoured by the Hindu peoples of central India. Apart from the hilts and scabbards, the blades underwent Inlay, Koftgari, Enamelling, Gilding and Chiselling.

However, all these complicated operations on the blades and the enhancing of the trappings of the swords should'nt interest us too much. In repose, the weapon is fantastically embellished but we almost forgot the sword has a function.

What is 'wootz' steel? Or Damascus steel? What is damascening? Or 'watering' a blade? What is pattern welding? What is the tempering line? What indeed is a hollow blade?

All these concern the bladesmith and in all countries he was never just a craftsman. In Japan as we already know, he is the 'Master' and in Europe he usually is the 'boss' of a workshop or the 'head' of a family of swordmakers. In the swordmaking centres of Europe there were whole streets of swordmakers, especially so in France. Bladesmiths could become internationally famous and sought after by Royalty.

A classic example of the King and the Bladesmith is that of Charles I and the famous Clemens Horn of Solingen. In Windsor Castle today there is the sword – made by Clemens Horn – which was presented to the young Charles I when he was made the first Prince of Wales by his father James I. Later, when on the throne, it was Charles I who remembered the swordmakers of Solingen. He it was who brought over to London the 'Hounslow' group who forged blades in England during the years 1628-1640 (approximately).

Each country had its select band of bladesmiths working in conjunction with blade grinders, hilt makers, blade polishers, engravers, and scabbard makers. All could be called swordmakers perhaps. The famous firm of Robert Mole and Sons, Swordmakers of Birmingham who were taken over by Wilkinson Sword Ltd., during the year 1889 was founded in Birmingham by the descendant of Hermann Mohll the sword grinder who partnered the bladesmith Adam Ohlig at Shotley Bridge.

However, it is the specialist in supple – yet hard – steel, the bladesmith, who even if his own blades are not enhanced by the processes should know all about damascending; or watering a blade; or bringing out the tempering lines. Most Persian blades were damascened. This was done by burnishing and washing with a dilute acid which brought out the patterns of strands of light and dark metal. These were inherent in the steel, due to the alternate high and low carbon content of the many foldings during forging. Any blade which has these markings can be called 'damascened'. Yet the original Persian damascening is called 'mechanical damask' or 'pattern welding'. The present development is called 'crystalline damask' and came about in the seventeenth century in India when the extraordinary properties of the Indian Wootz steel were utilised. By watering and polishing a wootz steel blade the natural beauty and deep impressions in the metal are revealed – rather like the watering mark in a bank note but infinitely more beautiful. Incredible as it seems, in the old method of damascening – or pattern welding – the whole of the pattern disclosed on the steel blade had been invented and put there by the bladesmith with his complex forging. As well as the many foldings of high and low carbon content steels he twisted, and re-arranged, and even ground and chiselled the blade. What finally became visible in the hypercarbonised wootz steel was crystalline damask. Due to the rare properties of the wootz steel, this further enhanced the foundation of the complicated forging. Yet this was only one of the benefits derived from wootz steel.

The primitive natives of Northern India were the first to make wootz steel. Their knives, tools and spears must have been, for hundreds of years, made from the same elemental 'bloomeries' as elsewhere in the world. Iron that was 'chancy' in its carbon content. Hardly to be called steel. Then, by trial and error, at last was produced wootz steel and the pattern of working was set. First, as of old, the iron ore (or iron bearing rock) was heated in a charcoal fire and blown into a fierce heat by animal bellows resulting in small lumps of pasty iron. Instead of going through the long rigmarole of hammering while red hot as hitherto the lumps were put into round clay crucibles the size of a water melon and in with the lumps would be put chopped up dried wood and leaves. The crucibles were then sealed with clay and dried in the sun. Then after the stacked up crucibles were covered with charcoal and set on fire, air was blown into the heap. After four hours of continuous heat from bellows (an exact time was known), the crucibles were opened to show that the iron lumps had melted and absorbed the carbon from the wood and leaves. An over-plus of carbon. The lumps (about two pounds each), were then heated in a normal charcoal fire for several hours to lose their unwanted carbon and also the unwanted sulphur, silicon, manganese and phosphorus. The steel lumps were now ready for forging.

These exact processes, carefully timed, resulted in the wootz steel which has always been in demand. Indeed, the whole process resembles the crucible steel making invented by Huntsman in the year 1740. Of course the furnace pit, which was part of the earth, was a primitive Catalan forge.

We know that steel is an alloy of iron and carbon and other elements with the quality of the steel depending upon the right separate amounts. Sulphur and phosphorus must be reduced to a minimum with silicon and manganese enough and no more. Ideally the most important constituant – carbon – should be one point five per cent or slightly less. Pure carbon is the fine black dust of charred wood.

It has been said that the elastic quality of Spanish Toledo blades results from beating carbon dust into red hot *iron* blades before a slow tempering.

Tempering a steel blade is not just quenching slowly or quickly in warm or cold water or in oil. It is a highly skilled and sometimes secret art. In the book – *The Samurai Sword* – (by John M. Yumoto), no less than twenty-six different tempering lines are described as they appear on the blades under high polish. Each one on each blade consciously put there by tempering. The tempered line is a straight or a wavy line running down the blade. Being the hardest part of the steel it appears white. The author's illustrations of the white cutting edges with their individually shaped patterns and their colourful names adds to the fascination of the book.

All in all, the perfection of a sword blade depends first upon the quality of the steel. Before crucible steel was invented in England we had only two forms of steel. Shear steel and blister steel. Both are forms of cemented iron.

Cemented iron (which is malleable iron with carbon entered into it), was produced in a cementation furnace. The process was as follows – bars of iron were packed into earthenware airtight boxes, bedded in charcoal and heated red for a prolonged five days or so. The result was blister steel – so called by the surface blisters caused by the carbon absorbtion. Shear steel was then produced by simply reheating the bars and forging under the hammer.

One of the last of these cementation furnaces in England still stands at Derwentcote, near Shotley Bridge. The Shotley Bridge swordmakers were said to have been the first men in the Derwent Valley to have made shear steel; whether they used the Derwentcote furnace or not.

Quantities of shear steel would be hand forged by them but water powered tilt hammers would be mostly used at 150 blows to the minute when the Derwent was in full flood.

It is hard to exaggerate the vital need there was in those early days for water power. In the twelfth and earlier centuries a windmill provided the power for all revolving machinery whether it was to grind corn or to make woollens or to work bellows for furnaces. Then the invention of the water powered fulling mill drew all labour from the towns into the country where swift flowing streams and rivers powered numberless water wheels.

Not all streams and rivers flow fast enough to turn water wheels sufficient for power. The Derwent (or the Darwent as it was called), was one of the swiftest. Legend had it that the water, being particularly

soft and radio active – attracted the Germans to settle at Shotley Bridge for reasons of blade tempering. But the swiftness of the water for power was more important.

Early in the nineteenth century a spring near the river became Shotley Spa and it attracted thousands of visitors to try the 'water cure'. Did the legends arise from this Spa and circulating freely among the 'Elite' grow into the 'reasons' the Germans chose to settle on the Derwent?

The settlers themselves and their first descendants were reticent about how and why they came to England at all. It even seemed to be a code of secrecy handed down.

Angerstein, a Swedish engineer who visited the Shotley sword mills in 1754 was told by a worker – caught off guard perhaps – that "officials of the English Government had brought the first Germans across".

Angerstein was then touring the North country researching into steel manufacture. Among the many forges he must have inspected (and smelt, for the acrid hoof burning smell of the village smithy would follow him everywhere), would be the sword mills – perhaps by that time derelict – of the original settlers of nearly a century before.

Research has shown me that the original settlers had indeed been "brought over" and once settled in Shotley Bridge they had been expected to produce the precious hollow blades.

The term 'hollow sword blade' still raises the same question today as it did in the early nineteenth century; namely, 'What is a hollow blade?' Even Southey, perhaps excusably for a poet, relies upon heresay in his letter to a member of Parliament. He asks C. W. W. Mann on 1st September, 1821 whether he had ever seen "a sword of Cromwell's time having the back of the blade hollow and the hilt loaded with quicksilver".

Southey's poetical memory had doubtless forgotten the facts but retained the fallacies about the hollow blade. No blade was ever made for the passage of quicksilver to rush to the point and add weight to the thrust. This was the fairy tale. So also was the variation of the tale: that the tube contained poison to inject into the wound.

The hollow blade was of triangular cross-section with the three flat sides hollowed down their entire length – in other words fluted – so that the blade, purely for thrust, was given a new lightness and rigidity whilst still retaining its strength. The blade was invented in Solingen during the seventeenth century and then when a Solingen blade finisher conceived and perfected the idea of rolling out the hollows by machine (instead of the laborious hand work), the blades were doubly precious. A heavy import duty was put upon the blades and there began the courtship of the workmen themselves to manufacture them in England.

In the remarks of the Shotley Bridge swordmakers to Angerstein that they were "brought over" with its hidden undertones, I can somehow sense a feeling of guilt or a sense of grievance. Perhaps there was no grievance at all but a deep sense of guilt.

INTRODUCTION

Tyneside and the North East of England is cosmopolitan – as everyone who lives there knows. We are a mixed breed. At many stages in our history has our blood been thickened, and our speech, by incursions of foreign peoples. Refugees have also sailed into our midst; immigrants have landed at the Port of Tyne and mingled and bred and become part of us.

I have always had the idea of tracing to its source one such community. These were the band of craftsmen and their families – the swordmakers of Shotley Bridge – who it was said – fled from religious persecution in Germany in the seventeenth century. I had a personal interest as well as a romantic interest because my family had partly descended from the swordmakers. Yet – so casually perhaps do we accept our ancestors – I never embarked upon my study until recent years. My maternal grandmother was Mary Ann Oley before she married Thomas Alexander Richardson and her father was Hopper Oley. He was born in Shotley Bridge in 1802. The Oley's were the principal swordmakers of the village and when the craft declined and the works abandoned most of the Oley's (my great grandfather was one) sought employment elsewhere.

So at last I began to probe the history of my German ancestors. Within the family there was no more than was generally known about the swordmakers. I had read varying reports of their origins; that they were religious refugees from Solingen in West Germany (once the renowned centre of German swordmaking); that they had been 'brought over' to make swords for the British army who were fighting the French with Germany as allies.

It seemed generally agreed that the Solingen blades were superior to the English make. The main reason why Shotley Bridge was chosen seemed to be the peculiar 'tempering' powers of the River Derwent.

Then there were the legends. The crown for the best sword which Robert Oley won in a competition in London; the irresistible tale of the blade twirled and hidden in the lining of the swordmaker's hat to win a wager in a local pub, the legend that one of the first settlers – Herman Mohll – was smuggled into this country hidden in a tub.

Then there were the vows; the vows to their Guilds in Solingen that they would not betray their secrets of sword-making on pain of death. And there were the mysteries; not least the mystery of the 'hollow' blades.

My first investigation was in libraries then at Shotley Bridge itself. I augmented this with reading books about swords. Of Shotley Bridge, books suggested that from little habitation a prosperous village had been shaped by the presence of the settlers. I also read of the decline of the village when swordmaking declined early last century. But then Shotley Spa took over and kept the district in the public eye. Charles Dickens visited the Spa when he was twenty-seven in the year 1839. So would Robert Smith Surtees presumably. He was a literary con-

temporary of Dickens and lived in Hamsterly Hall which is in the Derwent valley. The hall is now occupied by Lord Gort who is the grandson of Robert Smith Surtees and of course, the brother of Viscount Gort who died in 1946.

Shotley Spa itself declined and this left only the scenic beauty of the village remaining; with nearby Medomsley and Blackhill dominated in the distance by the steel town of Consett.

These things and little else I found out during my first investigations. Ask an old resident of Shotley about the swordmakers and he will direct you to Cutler's Hall Road where there is a sign above a doorway. It reads – CUTLERS HALL and underneath it are the letters W O A (William and Ann Oley) in the form of a triangle. The date is also there – 1787.

The resident will also tell you that Nicholas Walker Oley, the 'last of the swordmakers' died in 1964 in the Gatehouse Cottage which is just over the bridge. Almost facing the bridge, on this side, is the elevated sign of the Crown and Crossed Swords Inn.

Beyond these things there seemed little else except mystery. I had spoken with 'Nicol' Oley not long before he died and I had handled the last surviving sword in the village.

The Oley's and the Mole's and the other immigrant swordmakers had made their mark in the village and in the Derwent valley and on history, then they had – just disappeared.

Trying to keep my feet dry; stepping among the rocks in the river under the bridge, I felt strangely moved and more curious than ever. Here were the early grindstones (so I had read in one tale), where the first grinders had sharpened their blades. This had been called Schleifen (to grind) whilst a little further up the river could be seen large round holes in the rocks at the river side. Wood Street – almost on the river's edge – where the first settlers lived was now a shambles. There were apparently no sign of sword mills or forges or grinding mills to serve as monuments to the early settlers.

It seemed to me that through obeying to the letter their vows of secrecy their own extinction was made sure.

I thought so then, that through their own reticence they were no more. But now, after much research and the results of two earlier researchers put at my disposal together with hitherto undisclosed facts sent to me from Solingen I feel that there could be more than one book written about the Shotley Bridge Swordmakers.

What I want to see behind all the available facts – whether they are elevating or disappointing – is the human story of their pilgrimage and its outcome. . . .

Was it guilt at having left their homes and country of birth forever? And again – was the sense of guilt somehow wrapped up with the question of the hollow blades?

Indeed, was the whole project from beginning to end a mistake?

CHAPTER TWO

Reasons for leaving Germany – Why was Shotley Bridge chosen? – The after affects in Solingen a year later.

Before we think of condemning this immigration of nineteen families as being a mistake we must examine the historian's account and the legendary tales of the movement.

The romantic and colourful reason why these swordmakers and their families foresook their birth place –Solingen – and secretly immigrated to a foreign country in the summer of the year 1687 is that they were driven to it by religious persecution. True or false, the legend has persisted.

However, in these days of illegal immigrants being secretly landed on our shores whose sole reasons for doing so are the temptations of a better living in England, we must probe further into original motives. Certainly there were ample religious reasons for the Solingen swordmaker's families to flee. Although South Germany at that time was Catholic, North Germany – which included the Clive Berg area and Solingen with it – was partly Protestant.

These people were Lutherons, rebels in the eyes of the Pope. King Louis XIV was exerting his reign of terror throughout Europe and two years before had revoked the Edict of Nantes which until then afforded some protection to the Protestants.

Louis was therefore free to forcibly convert North Germany to Catholicism. To escape persecution the Huguenots themselves had been swarming across the Channel from France. Bringing their new machinery and their craft secrets.

Immigration to England was commonplace. Astonished immigrants at that time were known to comment after arrival – "The people here enjoy a liberty which is incredible. They follow any religion and its rites which suit them. But they all seem to hate the church of Rome. Popery is no longer for them".

So although King James II, new to the throne, was himself a Catholic and he was elevating Catholics into high positions as he was ruling a Protestant England.

In view of all this the Thames estuary or the Tyne's mouth as we shall discuss later, acted like a magnet and a harbour of refuge to the German Lutherons.

What other motives then attracted and activated the Solingen swordmakers?

Firstly, a wrangling threat of unemployment or at least of sparodic work. There is a record of a dispute among the swordmakers in the very year of their migration. In this instance – by no means the first as we shall see – hand forgers were strongly objecting to the introduction of machinery. This machinery was the 'secret' method of rolling hollows in the flats of the blades. Solingen's famous and much sought after 'hollow' blades, hitherto hollowed out labouriously and expertly by hand, were now to be produced at a fraction of the cost. These 'little wheels' – as they have been called – threatened full employment. The workmen's fear of these machines was understandable. A hundred years later we had our own Luddites wrecking machines through the same fear.

This dispute ended in an attempt in Solingen to prohibit the handling and completion of these 'goffed' blades by the guilds. Two of these were the Brotherhood of Bladesmiths and the Guild of Blade Finishers. They were craft guilds, just as in England and they exerted pressure on both worker and employer.

Apart from the subtle threat of dismissals the guilds objected to the machines because they tended to lower and debase the standard of the finished blades. The finer qualities associated with hand work would disappear.

Unfortunately for the swordmakers and the guilds no pressure could be put upon the employers at that time. This was fortunate perhaps for industrial progress as the whole of Germany was still suffering from the effects of the Thirty Year's war. The guilds, especially, were suffering through their rules being disregarded owing to slumps in trade. Not all swordmakers were guild members and quarrels arose about demarcation lines. Who should or should not perform this or that function in the making of a sword. Again, members of a guild were bound by an old rule which levelled out their income when they were fully employed. This rule was disregarded. Another source of trouble was when swordmakers who were also acting as merchants prospered while others precariously hung on to their one job.

This was the unhappy work situation in Solingen, which coupled with the ever present threat of religious persecution made 1687 a decisive year for the most courageous of the swordmakers.

After contemplating their position and after considering the offer which they secretly accepted from this country I call their decision courageous.

When the instigator of the plot moved amongst them – he was Clemens Hohemann – enticing whoever had ears to hear, then the timid souls would shrink from the risks. The risks of forfeiting all their possessions at home and the certainty that they dare not return; the risks of uprooting their families and fleeing to a friendly though foreign country; the risks of unsure employment abroad and the severance and censure from the guilds who would order the confiscation of their estates and possessions in any case. For leaving the country meant breaking their Residence Oath and the Brotherhood Vows not to betray their craft secrets.

The secrets of the machine made 'hollow' blade would be expected to immigrate with the swordmakers.

Many conjectures have been made in England about the mysterious vows. That death was the penalty if their secrets were betrayed. In the first petition for a patent to manufacture the 'hollow' blades in England, "under pain of death" was the phrase used to describe the fate of the swordmakers if they betrayed their secrets. Today Solingen deny this ultimate fate was ever threatened but admit to the confiscation of estates.

Before describing in detail the transaction which brought the swordmakers and their families to England we had better try to imagine what was passing in the minds of the ringleaders at that time. As well as trade secrets being passed down from father to son there must have been trade gossip. They must have been aware of previous movements of swordmakers to England.

The most notable immigrants discussed among them would include Peter Munsten whose blades were much prized in England. There was Clemens Horn, whom we know forged blades for English royalty and there were others.

Of the most recent immigrants there was John Kinndt and Johannes Hoppie, both members of a group who had been drawn to work in Hounslow (the Hounslow Group) in the year 1629 and with the help of English swordmakers had set up a 'manufactory' there near the army camp at the request of King Charles I. John Kinndt we know, anglicised his name to John Kennet once he seemed well established.

This passing on of familiar old names of Solingen swordmakers in England may have created a longing in the minds of the Solingen men to do likewise. So that it seems the overtures to them in the years 1686 or 1687 presented a pretty picture of prospects. However, to present a little of the other side of the picture, only fifteen years earlier than when the swordmakers were being tempted (in 1672) the *survivors* of the swordmakers of the Hounslow project had petitioned Charles II in the following words:-

> "Statement of Henry Hoppie and Peter English, swordmakers to the King. That in the years 1629 they were brought over to England by Sir William Heydon and the late King and set up their manufacturie at Hounslow. That in the wars they followed His Majesty to Oxford for which Cromwell took their mills from them and converted them into powder mills. That they only remain who know the art and foreign workmen are hard to obtain as they are obliged to swear on leaving the trade not to discover it on pain of death. That His Majesty ordered the late Colonel Legg to see them well provided for which he doubtless would have done had he lived. And that His Majesty's desire of setting up the said manufactory again in England may be performed by the said Hoppie and English if they receive His Majesty's encouragement".

Henry Hoppie was obviously the son of Johhannes Hoppie of the

Hounslow Group. Peter English was either a naturalized German or a German who had adopted an 'English sounding' name. He may have been of course one of the English swordmakers backing up the spokesman Hoppie.

What we can gather from this other side of the picture is that the hopes of the English swordmakers to learn the craft secrets from the Germans do not seem to have materialised. We hear no more of the Hounslow project and the petition to Charles II seems to have been ignored.

Under a new Monarch (James II) the same experiment was being tried again. Full expenses were to be paid by the four English business men (or merchants), and it seems obvious that secrecy was promised to the workmen during the whole movement. So much so that the hue and cry about the workmen's disappearance was never raised in official circles until a full year later in Solingen.

Judging from their subsequent working history in England the two main swordmakers among the nineteen immigrants turned out to be Adam Ohlig and Hermann Mohll. This is not to say that their status or business abilities were outstanding among the nineteen men before they left Germany. Ill fortune or untimely death may have ruined the prospects of some of them. However, whatever his ability Adam Ohlig (according to Solingen archives), had already 'Wanderlus im Blute'. Thus, in the year 1624 there was in Spain a swordsmith named Ivan Ollich. In 1659 a Jurgen Ollich worked in the Swedish Blade Works at Wira. Possibly the same man – a Jurgen Ollich – worked in Arnheim, Holland about that time. Possibly the best known member of the family (or 'clan') was the bladesmith Clemens Ollich but the most famous was out of Germany. He was Johann Ollich whose swords were on show in the Leibrustkammer, Stockholm and also in the Artillerie Museum in Paris and at one time in Dresden.

The name Ollich with the variations of its spellings appear to belong only originally to Solingen so it seems credible that the Ohlingers who live in Pennsylvania (there is an Oley Valley there), came from Solingen.

Hermann Mohll (later Mole) appears not to have been a member of a guild at all. This is surprising and an indication of the then waning power of the guilds. Of all the men who immigrated he alone dared to return to Germany and – if he was – independent of the guilds he returned with impunity.

Bertram (who bears no forename) is as mysterious a figure as the instigator of the conspiracy. He is not among the names cited as missing a year later yet at that time he was a key worker at Shotley Bridge on furnaces and forges. Later I will explore the possibility that, contrary to all previous historical accounts in England, he was not an immigrant at all.

Of course there is also the vexed question of name spelling and adopted names (to hide identity) to discuss later.

Meanwhile back in Solingen in the year 1687 and most likely in

midsummer when seas were calm and days were long, the men and their families prepared to leave Solingen forever.

This meant a cross country road journey with pack horses and probably stage waggons. The distance to their port of embarkation – Rotterdam – was 200 kilometres and it can be assumed that they travelled in groups and at different times. This would arouse the least suspicion. They may even have sailed from Rotterdam to North Shields harbour (the port of Newcastle), at different times.

Despite this 'secret' exodus of nineteen families from an important manufacturing town being furtive – and probably 'guilt ridden' – I imagine that their crime would be at first condoned.

Resistance to the French inspired persecution of Lutherons and Protestants generally would be admired in whatever form it took. Disappearances would be common at that time because at that time purges were common. Officialdom would merely close one eye. If not in sympathy then perhaps in understanding.

The transaction which brought the families to England 'at great expense' was like a political conspiracy in the sense that English soldiers were to be armed with the swords the men were expected to produce.

With the families already settled at Shotley Bridge the four merchants petitioned the government of James II for a patent granting them a monopoly in the manufacture of the famous hollow sword blades in England.

The petition used the words – "At great expense they have brought foreign workmen to England and they propose to make use of a mill unlike any other hitherto seen in His Majesty's Dominions".

Lord Dartmouth – Master of the Ordnance – referred the petition to the Master of the Cutler's company for his comments. But the Cutler's company itself was planning a petition for a patent to import, mark and sell sword blades in England.

Blades of English make were well known to be inferior to the Solingen make. This had prompted the Government to impose heavy duty upon imported blades and to encourage the sale of English blades. Two years earlier – in 1685 – Thomas Hawgood, a sword cutler who had a petition granted to import foreign blades was only allowed to bring into the country six chests of blades.

So the importation of foreign blades was discouraged and smuggling in of blades it seems was a common offence.

The petition planned by the Cutler's Company to import blades must have died in the throat of the Company for the more original petition presented by the four merchants who had imported the actual swordmakers was granted.

The names of the men were John Sandford – a Newcastle resident – John Bell – also of Newcastle – Peter Justice – a London resident – and John Parsons – also of London.

These men have been described as merchants but examining the first indentures of land leased at Shotley Bridge for the settlers and

reading the four names upon it the impression I gather is that they were gentlemen of substance embarking upon a promising gamble. This document – which is in Gateshead Library Archives – is dated 1688 and leases for a yearly rent part of the estate of Shotley Hall which adjoins the river.

What is new about this recently discovered document is that the real reason now is clear (at least to me), why the swordmakers 'chose' Shotley Bridge and not some other part of the country.

Two of the four men who brought the Germans across were Newcastle men. While the two Londoners – Justice and Parsons may have favoured Hounslow or another part of London, there were other important considerations.

These considerations were a site hidden from prying eyes and also handy for transportation of blades to London.

First conceived by the men – probably Sandford and Bell only – the Shotley Bridge site must have seemed almost too good to be true.

The swiftly flowing waters of the Derwent, providing very essential water power for the mills, flowed into the busy River Tyne at Derwenthaugh. The staithes at Dunstan on the Tyne handled many chaldrons of coal mined from the coal measures at Chopwell. Lead mines were flourishing in the Shildon area and opening out elsewhere. More important still than the traffic on the Tyne was the knowledge that among the coal measures were veins of iron ore and almost certainly untapped veins in the Shotley and Consett area.

Chopwell woods had long been providing wood for ships and houses but here was Shotley, well wooded to provide charcoal for iron smelting.

Indeed, the whole of the Derwent valley with its developing industries could nourish a swordmaking industry almost in secret.

The river itself had a rich source of grindstone grit. Holes among the rocks of the river bed testified, even then, that grindstones had been obtained, with or without the Lord's licence.

Newcastle port, with North and South Shields at its mouth, was then only second to London as a port. Among the constant sailings of ships bound for London and for other countries a trickle of chests of sword blades would hardly be noticed.

So then, all the evidence now suggests that first of all a site was prepared at Shotley Bridge (one historian's account states that as early as 1685, mills and forges were erected), and finally the indentures for the lease of the land were signed in the year 1688.

This delay from 1685 or 1686 to the arrival of the immigrants in 1687 and then to the indenture signing in 1688 is conceivable when we know that at that time land owners – and among them titled people – were heavily taxed and often in debt. The owner of the estate of Shotley Hall was then William Johnson and after money had passed from hand to hand and he watched the settling in of the Germans we

can imagine him being quietly satisfied with "gold pieces now – legality later".

There have been a few picturesque accounts of the first settlers; almost all that they were 'driven here by religious persecution'. Surtees, in his *History of the Palatine of Durham* contains the most popular account. I quote – "A colony of German sword cutlers who fled from their country for the sake of religious liberty established themselves about the reign of William III at Shotley Bridge. These quiet settlers who brought with them habits of industry and moral and religious principles easily mingled with the children of the dale and forgot the language of their forefathers".

It was actually a transaction which had brought them (it was in the reign of James II) but who indeed will quarrel with the picture Surtees presented?

Little trace remains today of the houses the first settlers occupied. Simple stone dwellings (Wood Street) so near to the water and in line with its flow that the people must surely have been called river dwellers by the curious country folk. The sword mills, forges and workshops were mostly adjoining the houses. One can visualise the swiftly flowing water diverting into its dam and the mill race with its head goit powering the water wheel then diverting through the tale goit into the river again. The water wheel for the grinding mill would revolve a long bar on which were rough to smooth grindstones. Buffing wheels too – made of wood – for polishing the blades. The wheel for the sword mill would be powering the bellows for the forge fire or working a trip (or water) hammer.

However, these mills – or manufactories – must have been erected with the supervision of a knowledgeable man on the spot. Such a man was Thomas Carnforth a Newcastle sword cutler. In the light of Carnforth's assertion (many years later), that he had known and even worked with Hermann Mohll about this time, I conceive Carnforth as the adviser on the first erections.

It is however, conceivable that while new water wheels were being built the owner of the land – William Johnson – would allow the adoption of his own corn mill with temporary alterations. Today there is a new Shotley Hall, built in 1837, but the old Hall had its back to the river a hundred yards south of the present Hall.

Carnforth probably worked in the back room of a shop in Newcastle. He may even have owned the shop. The shops which sold swords or fitted hilts and scabbards tc the blades (sword furbishers), were goldsmiths, silversmiths, jewellers, lace makers, button makers, belt makers, haberdashers or hatters, apart from sword cutlers shops. The town sword was part of a gentleman's dress, hence the variety of shops which sold swords or furbished the blades.

We can best imagine what happened first in a shop in the centre of the city – or a shop in the Side, the now historically famous steep street leading down to the quayside from the Cathedral. The year would be 1685 or a year later.

John Sandford and John Bell – local men of substance and good

appearance – sounding out the reactions of a sword cutler (Thomas Carnforth) to the suggestion that he lend his knowledge to the project of building and perhaps first supervising a new sword manufactory at Shotley Bridge.

Expense was no object and indeed their partners – Peter Justice and John Parsons of London had the interests and backing of people in high quarters. (Two years later Sir Steven Evance led the partnership.) The motive – which was altruistic and patriotic – must however be also profit making. This would follow when by means of a patent the works would produce the genuine hollow sword blades which hitherto had to be imported from Solingen under heavy duty.

The workmen, to be imported from Germany instead of the blades would be the means of making all their fortunes.

To further impress the sword cutler, Sandford and Bell might then have drawn their swords – which were of triangular cross section and with the hollows running down the three sides of the blades – and laying them on the counter go on to ask Carnforth if he would like to furbish an unlimited supply.

After this cohesion we can follow the three of them in imagination to the river side at Shotley Bridge.

Here they might have stood among the flat rocks under the old bridge and Carnforth himself would see the swiftness of the flow and would detect the abundant presence of mill stone grit.

A little further away from the bridge he may have seen the huge water wheel of the Shotley Hall corn mill revolving away.

On subsequent visits to the river sites Sandford and Bell, doling out wages to the builders of the houses (Wood Street) and the erections and handing over a 'temporary' rent to the grateful William Johnson they would be looked upon as benefactors.

However, another eccentric owner of land at Shotley, the rich Ralph Maddison ('Mad' Maddison), may well have been antagonistic.

From all accounts 'Mad' Maddison was possessed by a devil which led him to murder or cause the death of innocent people. He practised arson and burned Espershields to the ground (a local mansion). In 1678 he had burned down the house of John Raw in Benfieldshire then continued on to burn down the stable at Nun's House near Iveson. He rode about on a famous grey horse and many weird tales are handed down of his exploits. Finally, seven years after the Germans had colonised Shotley Bridge 'Mad' Maddison was hung at Durham for murdering Laird Atkinson of Cannyside Wood in a quarrel.

But then the settlers had perhaps even more mischievious opposition than Maddison's at first. Historians agree that the country around Newcastle abounded in thieving and lawlessness. The roads leading into Shotley were just cart tracks. Highwaymen would be plying a good trade on the roads leading into the Derwent valley. Superstition was rife and witches were feared.

The farmhouse of Crooked Oak which was built just before the

Germans came still stands today – a stones throw from the north bank of the river. Here it was where dwelt Jane Frizzle, the witch who cast curses on all who offended her. She was also living and cursing then when the Germans came.

A harmless superstition the settler's children may have learnt was that in a secret cavern in the Sneep (close by on the north bank), King Arthur and his knights lay sleeping, awaiting the call that would arouse them from their slumbers and place King Arthur on his throne once more.

So it can readily be imagined that although the colonists were taking up their abode in a most sylvan setting, life for them during the first years at least could be difficult.

One year after they arrived came the hue and cry in Germany itself. The immigrants of course would get to know about it. Although severed from all they held dear at home there would still exist links of knowledge. News would surely reach them, if not from relatives then from their countryman instigator of the plot – Clemens Hohemann who naturally would have provided a communication system for his proteges. The four men who financed the whole scheme would surely pass over to Shotley Bridge the news about the court order, albeit very reluctantly.

We can only imagine the feelings of the 'defectors' when the news and perhaps the exact wording was made known to them. This court order, coming to light now from the archives of Koln (Cologne), and discovered in the Mulheim Stadhouse, dated 26th September, 1688 was worded thus:-

"We, William Vassman, judge of the Solingen court, Matheus Wundes, Wilhelm Dinger, Wilhelm Voss, Johann Gansland, Peter Voess, all lay assessors of the town and parish of Solingen give recognition that Clemens Hohemann over a year ago led away to the Kingdom of England various craftsmen resident and bound by the district court, and still more had incited them to abscond and since the affair had become notorious and had been recognised as in the highest degree culpable, let him, Clemens Hohemann be charged here as a culpable seducer together with all the persons involved – Hermann Moll, Abraham Moll, Johannes Clauberg, Clement's son from Widdart, Clemens Knetchen, Peter Tiergarden, Johannes Voes, Vurckelt, Johannes Voes, Adolph Kratz, Joann Wupper zu Feld, Heinrich Wupper, Theiss' son, Johannes Wupper, Johannes son zu Hesson, Arnd Wupper, Heinrich Keuler, Adam Ohlig's son, Johannes Hartcop, Engel Schimmelbusch and Peter Kayser, Peter's son".

After this list of names the court order publishes that "Through written summon's 'ad vallas' (meaning 'on the doors'), the cited persons, each and all of them were for the first, second, third and last time decisively called upon to employ themselves in the next six weeks and three days in this same place or produce firm reasons for your refusal and defection through yourselves in person or order sufficient powers of attorney. Warning – do these things or if you do not, that thereupon after the expiry of such appointed time, upon further appeals being

calculatedly made to proceed against you, thereupon proceedings will be taken according to law".

Under the impressions of the court's and lay assessor's seals the court order was drawn up under the date of 26th September, 1688 by the clerk of the court – Johann von Marcken.

Copies of these notices were apparently posted up on the doors of the dwellings of the swordmaker's relatives in Solingen.

The first names on the court order – the judge and the lay assessors may have all been prominent swordmakers themselves. At least two names, Wilhelm Dinger and Matheus Wundes belonged to well-known bladesmiths of Solingen in the seventeenth century. Wilhelm Dinger seems to stand alone but the Wundes family had at least five bladesmiths or a succession of five.

We know that these disappearances, or defections' of swordmakers from Solingen were not uncommon and coming forward in time to 1730 and the year 1743, Solingen craftsmen defected to Strasbourg. In these cases the 'defectors' names were read out from the pulpits. Their children – if left behind – were deprived of their rights and privileges. If the 'defectors' were discovered in or around their homes they were to be 'punished on their bodies'(?) Craftsmen remaining were strongly reminded of their oaths in case they too were tempted to emigrate. All belongings would be forfeited and messengers were to be sent around the district warning that it would be an offence to help the defectors. Several important guild members had indeed gone to Strasbourg to build a blade manufactory there. Not only were they breaking their vows as guild members but by going to work in Strasbourg the charge could be treason.

No wonder these offences were more serious than going to work in the 'Kingdom of England' which was almost allied to Germany. Strasbourg had been annexed from Germany by Louis of France in 1681 and after the peace of 1714 Louis still kept Strasbourg.

However, regarding the court order of 1688 which we assume the Shotley families would become well aware of, nothing has come to light of any response to the appeal. The name of the instigator – or 'seducer' Clemens Hohemann has completely dropped out of history. His is just a name repeated on an official document. But the nineteen names which followed his are real enough. The very sound of them and the ideas they conjure up gives them all a strange vitality. And this in spite of the possibility that some may have landed in England bearing different names to hide identity.

We may assume that if the news of the court order was carried to the German settlers they would spare a short pause in their work to discuss the implications.

Would there be regrets? Perhaps remorse? Even feelings of deep guilt? Remember this court order – which was nailed up upon the doors of their dwellings or their relatives homes in Solingen – was not issued from the court until a year after their disappearance.

Their feelings I would imagine would be mixed, for after a year's settling in there would be in the village a concerted effort to manufacture duty free swords; mainly to help the British army to fight against the French.

CHAPTER THREE

Identifying the Immigrants by Name

Comparing the nineteen names cited as missing in the Koln court order with the names of the earliest Shotley Bridge swordmakers we are faced with problems. Only twelve of the 'defectives' appear to have reached Shotley and it seems that some of these are brothers or close relations.

There was Hermann Mohll (Harmann Mohll), a well-known immigrant and we should accept that Abraham Mohll was a relation. There were four different Wupper's (Wopper, Wooper), and we should accept at least three of these as we know that three of them – father and son were two – were established in 1703.

There is no doubt that Adam Ohlig (Ollig) cited as the son of Adam Ohlig makes the seventh settler and Peter Tiergarden the eighth. There was Engel Schimmelbusch and Johannes Hartcop and there were two Johannes Voes's (Voss, Voose?).

It is reasonable to accept these twelve as original settlers yet it is possible to narrow it down to ten if we only include one Voes and three Wuppers.

So then, the following men have apparently disappeared since leaving Germany. Johannes Clauberg, Knetchen, Verckelt, Kratz, Kueler and Kayser. However, in place of the missing men we have (right from the beginning it seems), Bertram, Schafe (Schaffe), Voose (Voss) and Vinting (Vintnigs, Vinten?). In later years fresh names appear such as Balfe, Busk, Ollife Grouts (Groats) Faws, William Palds, Henkells (Henschalls) Wolferts (Wofer) Beckwith and later still two English swordmakers Johnson and Leaton. Associated with the name Leaton was Blenkinsop.

Working backwards through the names I aceept it as proved that Johnson and Leaton were English and not Germans with Anglicised names or even descendants of Germans. A descendant of John Leaton – E. Leaton Blenkinsop in a letter to *Notes and Queries*, March, 1881 stated that an ancestor of his – John Leaton – possessed a sword manufactory in Shotley Bridge early in the eighteenth century by which he realised a good fortune. The correspondent's grandfather was still collecting rents from the sword mill late in the same century and travelled on horse-back to Shotley twice a year for them. The family possessed swords with a John Leaton stamp upon them. That there was a well to do Leaton family near Shotley Bridge (who would gladly have apprenticed their son to swordmaking), is proved by a Benfield-Side entry in the *Lanchester Petty Tithes' Book* – "Thomas Leaton,

Sir Vair (surveyor) keeps sixty or eighty sheep in one yeare. . . ." The entry was dated 1699. Inter-marrying could account for the double later name. There were the Blenkinsop's of Bellister, and there was a Blenkinsop part ownership of nearby estates in 1685.

Johnson's case is the same. The first land adjoining the river on which the first mills were built was owned by William Johnson who again, would gladly apprentice his son to swordmaking.

Beckwith seems to be English but the rest of the later arrivals most probably were sent for, or given work when they migrated from Germany. There is no evidence to suggest that they were under the same cloud of dis-approval from Solingen as the early settlers.

Vinting (Vintnig) appears in parish registers *before* the immigration year of 1687. Medomsley parish register states that William, son of John and Margaret Vinting was baptised on 14th November, 1685 at Ebchester. Another son was born to this family in 1688 and there are recurrent register entries to this established family away from Shotley – at Rowlands Gill, Derwentcote and Ryton. As the Vinting's were always associated with furnaces and forges and foundries further down the Derwent valley I conclude that they were never swordmakers. They may not have been Germans at all but Dutch settlers or Huguenot iron masters who in the first place taught the English the art of casting from molten metal. If they were indeed Germans then they might have been part of an earlier colony brought to Cumberland to develop the lead mines. There were lead mines at Ryton too. Germans were also brought to Keswick to work the copper mines early in the seventeenth century. So the Derwent valley scope for furnaces and forges may have attracted this second or third generation of Vintings.

Always associated with Vintings is Bertram (Bartram). Working with the swordmakers as a blast furnace expert, and even the owner of furnaces and smelt mills later, his name has always been accepted as an original immigrant. Yet there has been only legend to suggest this is so. Even in later periods, when names had been anglicised and the first generation of settlers had died out Bertram was always tied up with Oley and Mole as the three main German families. Bertram, even at the time of the immigration was a sound English name – and North country – and history tells us of notable Bertrams.

We are now left with Voose and Schafe (or Vooze and Schaffe), and we can be almost certain that they hide the identity of one or two of the following 'missing' defectives – Joannes Clauberg, Clemens Knechtgen, Verckelt, Kratz, Kueler and Kayser.

Knechtgen may well be the Schafe we know as both have Clemens as Christian names and in any case (especially in Germany), earlier generations knew only *one* name – the Christian name as we call it. The second names were added like 'nick-names'.

The name of Voose (or Vooze) can be the German Voes respelt in English as Voose. Alongside, at Shotley Bridge we also have Voss and Voes however. The first named (Voose) had here the reputation of being a trader in sword blades in Germany yet there is nothing to suggest he traded from Shotley Bridge.

There are still about four names on the court order unaccounted for, yet in spite of my name changing theory these men may still have worked at Shotley Bridge from the beginning as nonentities. Such as the labouring type or forge hands. We must allow for register clerks also innocently disguising names by spelling as they sounded to their ears.

The main point I hope to have made is that the very first swordmakers at Shotley Bridge who were *not* cited in the court order were either local residents or immigrants with new names. Fifteen years later a new situation arose regarding names when Hermann Mohll (as stated by one historian) was back in Germany to recruit more labour. He certainly was back in Germany during 1703 but before that year – when a new arrangement was made with the swordmakers – many strange things may have happened to them. For instance, what happened to the instigator Clemens Hoheman?

Little is known about this period and I call this gap of fifteen years 'the shrouded years' in Shotley Bridge.

All we can do is to imagine the lives of the swordmakers during this time against the background of social history – and because wars affected their livelihood – against the background of wars being waged.

CHAPTER FOUR

The Shrouded Years – The hollow blade mystery begins – The Royal Charter – The industrial scene – The Quayside – The famous inscriptions – Parish registers.

The livelihood of the settlers must have been assured at first because of the internal political situation.

King James II, not so much obsessed with Louis XIV's undeclared war on England and his reign of terror throughout Europe as with his own position of a Catholic King in a Protestant country, ordered for himself a huge standing army. This army – granted by the commons in 1686 – was camped on Hounslow Heath. Hence of course his assent to the importation of craftsmen to make swords.

James sought toleration for Catholics and although this was granted, events deteriorated in the following year and he felt his power weakening. With almost a civil war in Ireland over religion and his own parliament and people split into two camps he tried to cope with a sinister conspiracy. His brother-in-law William of Orange had been sounding reactions from sympathisers as to his return from Holland as King.

In all this welter of happenings which led up to the quiet revolution of 1688 James must have neglected and forgotten many routine duties. The implementing of the patent for the manufacture of hollow sword blades was one. The fact that the patent, so eagerly applied for by the four partners, was never implemented raises a significant question. Historians have it that during the political upheaval the implementation was overlooked. But the question is – was the patent held over because

the partners couldn't produce their long promised hollow blades? Reason or not, another two years without an implementation was to pass.

If Shotley Bridge had produced hollow blades the new King – William III – would surely have granted Sandford, Bell, Parsons and Justice the protection which had been expected from the deposed King James. But instead of an implementation and a monoploy of the market, there was undignified attempt to sell Shotley blades in London to anyone. Hitherto of course the obvious market would be the war office – principally broad swords for the army – for in 1689 the new king had declared war on France. And now we see an advertisement in the *London Gazette* for August 25th, 6th, 7th and 8th, 1690 as follows:-

"Whereas great industry hath been used for erecting a Manufactory for making sword blades at Newcastle by several able working men brought over from Germany which being now brought to perfection the undertakers thereof have thought fit to settle a warehouse at Mr. Isaac Hadley's at the Five Beds in New Street near Shoe Lane where callers may be furnished with all sorts of Sword Blades at reasonable rates".

Note that no mention is made of hollow blades. Yet the list might have included them.

If it did not include them we can form a reasonable picture of one or more of the partners repeating the anxious phrases over the shoulders of the 'workmen':-

"Yes indeed, these are fine blades. Supple and strong. Some long and thin and can be bent double then recoil dead straight. Some are rapiers, some army broad swords and there are hangers and other navy swords and cutlasses. Some are not swords at all. There are bayonets .... But we ask again – when are we going to have hollow blades?"

The settlers must have been sorely tried. To make hollow blades without the 'secret' machines would be pointless because it was too costly in time and labour. Doubtless they could have made some but I would imagine that the time thus spent away from their livelihood – the army swords – dare not often be risked.

However, that there was hope of the swordmakers at last satisfying the demands of the partners is evidenced by another and more ambitious project. This was much more than a petition for a patent. It was an appeal for a Royal Charter.

This petition was presented in 1690 – after the London advertisement appeared. If we have had reasons to doubt the abilities of the swordmakers to produce hollow blades then we can reverse the doubts and have reasonable faith that they could and would at last produce them. The partners had enlisted Sir Stephen Evance to champion their cause and the Royal Charter was granted on 15th September, 1691 and issued to Sir Stephen Evance and his reconstituted group as "The Governor and Company for making Hollow Sword Blades in England".

That was the title of the Charter and the signatories to it were –

Sir Stephen Evance (Knight), John Sandford, Peter Justice, Robert Peter, Abraham Dashwood, Thomas Evans.

The former partners – John Bell of Newcastle and John Parsons the Londoner are replaced by the three men last named and one wonders if it was disillusionment which made them drop out of the affair. On the other hand they may have been 'elbowed' out of it by the 'class' of the rest. In any case it seems that the blades, selling to the public in London had advertised the importance of the German immigrants.

The preamble to the Charter recites that "Our said subjects, at their great charge and management have imported from foreign parts divers persons who have exercised in their own country the said art of making hollow sword blades by the use of certain newly invented engines and mills and instruments and by the contrivance of our said subjects have been prevailed upon to expose themselves even to the hazard of their lives to impart to our said subjects the knowledge of their art and mystery".

Hopefully, clause 16 of the Charter dispenses the Company expressly from any obligation to disclose its methods or machinery. Hopefully too is the wording of the Preamble and almost naive if those concerned remembered the earlier Hownslow experiment with Solingen sword-makers and earlier still the disappoiuting summing up of the German armourers brought to Greenwich – "They proved so cunning and obstinate a disposition that they never yet would be brought to teach an Englishman the true misterie".

In the wording of the Preamble we again have the 'life hazard' used in a journalistic way for dramatic effect. We know that confiscation of estate and personal effects was the penalty.

But what about the imminent 'go getter' of the Charter, Sir Stephen Evance? He was of American origin (New England), and an important goldsmith in Lombard Street. He was knighted at Kensington in 1690 and in 1691 he received the sum of £12,000 for 'secret services'. He was also then appointed a commissioner of excise. The 'secrect services' may well have been smoothing the path to the throne of William III in 1688.

However, what we are concerned about now is the colony of swordmakers remotely under the control of Sir Stephen and quite out of his sight during these 'shrouded' years at Shotley Bridge.

As if in keeping with the awkwardness of the migration and the 'out of step' connections with the Charter, the chosen site of the promoters – Shotley Bridge – was awkwardly situated between the counties of Northumberland and Durham.

The river 'Darwent' divided the two counties and although old maps show that Shotley Bridge was in Northumberland, the houses, messuages and stables, etc., were mainly on the Durham side of the river.

Jurisdiction over the interference with the welfare and business of Shotley's inhabitants may have been awkward. Shotley parish was a mile or two away from Shotley Bridge in Northumberland as was

Shotley field. They merged into the adjacent parishes or small townships of Benfieldside, Ebchester, Meadomsley and Lanchester. Whilst Ryton parish, a few miles from them all, was later the site of a Bertram forge and the abode – apparently – of the Vintners (or Vintings) and the Bertrams.

All these parishes had religious ties in the County Palatine of Durham and bound up with them were the business practices of Bishop Crewe – later Lord Crewe. Unlike his predecessor the 'good' Bishop Cosin, Crewe made his own laws regarding his lands and estates in the Palatine. When the settlers sought the veins of iron ore with pack horses and digging tools they couldn't dig with impunity.

More important however, would be the interference from or influence of the Corporate Jurisdiction of Newcastle. Its overwhelming preoccupation was of course the Tyne traffic of coal ('sea-cole'), and other commodities shipped daily to London and the Baltic ports. The port of Sunderland was its chief competitor in coal exports and since early in the seventeenth century both towns had the advantage of wooden rails which carried the waggons (each a chaldron) from the pit heads to the staithes. Sunderland were one step ahead in that Ambrose Crowley (until 1690) had his iron industry situated there. But the formidable list of manufactured products sailing down the Tyne and out of its mouth made Newcastle by the year 1700, the most important town and port outside London.

The Hostmen – the 'Lords' of coal were by no means satisfied with the monopoly of the coal trade. Since Queen Elizabeth had granted a new Charter for Newcastle in the year 1600 the Hostmen had enjoyed a monopoly of municipal government and of ecomonic life on Tyneside. They had sprung from the Merchant Adventurers in the first place and were still bound up with them. Almost every Newcastle mayor elected since before the civil war had been a leading member of the Company of Hostmen.

In spite of the tiny industry of swordmaking being purposely hidden away in the Derwent valley and in spite of the Company (the 'Sword Blade Company') wanting to keep the traffic of sword blades a closed shop affair, I cannot believe the Hostmen would remain aloof from it.

However, nothing has come to light of any manoeuvering by the Hostmen during the 'shrouded' years. But then very few details of sales of sword from Shotley has either come to light. John Sandford, the remaining Newcastle partner at the head of the Charter, and intimately connected with the swordmakers always, it seemed, paid in addition to rent for newly acquired properties or land, one sword blade newly made and well tempered'. That is about all the evidence we have that the swordmakers were manufacturing sword blades.

The industrial scene at that time in Newcastle and principally on the quayside would be more colourful and varied than at any time since. The river was continually crowded with keels carrying coals to the colliers at Shields after being loaded at the staithes. Three-masted wooden

ships were berthed at the quayside and more were being built on the Tyne. Three large cranes as well as smaller cranes were loading and unloading the ships and remember, as well as manufactured goods the commodities from Tyneside industries included salt from the salt pans at Shields, glass (for house windows), ale, for already Newcastle ale was famous in London, and there were bricks and lime, alum, soap, tallow and candles and dyes etc. By the turn of the century there were a thousand colliers carrying coal from the mouth of the Tyne apart from other ships. Keels on the river had accordingly increased.

The next greatest industries were salt and glass and they were attracted by the coal which was cheaper than wood and not restricted as a fuel. There were eleven glass furnaces in Newcastle alone and over the skyline at Shields there hung a permanent black haze from the salt pans there. In the two counties were lead mines and smelt mills and lime making – if it can be called an industry – was supplying fertilisers. Every farm usually had its own kiln. Alum was used in the Tyneside dye industry the alum being refined at Sunderland and Hartlepool and Whitby.

The history of Newcastle and the North's industries and projects seem bound up with refugees and immigrant settlers. Italians and French taught the English glass manufacture. Early in the seventeenth century, Germans were brought over to Cumberland to work the copper mines at Keswick. Germans had also taught the English to make salt and paper and cannon founding.

But the hub of all Newcastle's river traffic and indeed the spider's web centre of it all, including the commercial centre, was the Newcastle quay and the closely populated area alongside. At the east end of the quay was a strange crowded world of people and their dwellings. Much of the town's 20,000 souls lived here. This was Sandgate with its keelmen and seamen and their families. This was their world, with all its sins and uproarousness. The press gangs found their victims here and after they were kept in the Merchant's court temporarily (being 'prest for his Majesty's service'), the windows were continually being broken and replaced.

However, we should all know that the keelmen were sentimental and bore one another's burdens cheerfully. They built the Keelman's Hospital at their own charge in 1701 and it contained sixty rooms. The Keelman's Hospital still stands today on high ground over-looking what was the old Sandgate but what is now factories and workshops and new extensions of the quay with lifeless dregs of the old Sandgate peeping through.

Sandhill was close to Sandgate yet it was worlds away. In spite of the over-looking Holy Jesus Hospital. It was the commercial centre of the town. The important people lived in the Close, in tall half timbered houses with lines of casemented windows. The Side was a succession of shops displaying saddlery, draperies and clothing; decorative ornaments and jewelry; expensive household knick-knacks and we may expect there to be at least one sword cutlers or a shop which sold

and furbished swords, for the town sword was part of a gentleman's dress.

We know that William Ramsey the elder (a Newcastle Alderman), had his own goldsmith's shop in the Side and lived in a house above it. Although he was known as the 'best goldsmith of his period' he had other activities. After 1680 he had dealt in Bills of Exchange, accommodating the Bishop of Carlisle and – significantly – a military gentleman named Strother. Ramsey was doing business with northern garrisons and there was an item in his accounts for June 1689 for 500 muskets, 240 pikes, halberds, drums, cartouche boxes, six and a half barrels of fine cornpowder, six and a half hundredweight of match 'for the service of' Colonel Beaumond's regiment at Carlisle. But there was no mention of swords or sword blades from Shotley Bridge.

From 1687 Ramsey had been the sole proprietor of lead mines at Haydon Field and Settlington Groves, leased from the Earl of Somerset. By 1690 his two former partners John Blakiston and George Morton assigned the management of the concern to him. His son, who also resided above the shop was sometimes styled 'goldsmith' but as in 1686 he had been admitted to the Merchant Adventurer's Company of Newcastle, he was properly named 'merchant'. He later held the office of Troner and Peisor in the Port. But not before his father, in the year 1691, was elected Mayor of Newcastle.

Much as I would have liked some evidence that Shotley swords passed through the hands of the quayside merchants I have to admit that only the need for the swords convinces me that in fact they must have done. It was too early for William Cotesworth the powerful Gateshead merchant to take a hand in the selling of the sword blades (he was serving his apprenticeship as a dyer in 'Gateside'), but he later married the younger Ramsey's sister so it is conceivable the Ramsey's led Cotesworth into the sword blade line of business.

During these 'shrouded' years there was both practical and political needs for sword blades. There was the demand for the small sword as an item of a gentleman's dress and there was the army needs – principally broad swords and bayonets. There were the cutlasses and hangers for the navy and there were the demands of the special and ornamental swords for the officer class and the individual blades for the aristocrat class. There was also the hushed up and secret demand for swords to arm the Jacobites.

Who can tell how many minor conspiracies concerned with blade smuggling went on during these 'shrouded' years?

As well as the common people being divided in their loyalty to Catholics or Protestants, to King James and his succession or to King William and Mary, the rulers of the common people were even more divided. Newcastle magistrates were Papists, Protestants, Conformists and Non-Conformists. In August, 1688 the Mayor and Corporation sent congratulations to King James on the birth of his son – a blessing on the Prince of Wales. But in November of the same year the Mayor and Corporation declared their allegiance to the Prince of Orange

(William III), the mob dragging a statue of James II from its base on the Sandhill and throwing it into the River Tyne.

As well as rival factions needing weapons there was almost an all out war going on in Ireland. By the middle of 1689 William was forced to turn his whole attention to Ireland. James, with French officers had reached Dublin and didn't lack money to wage war. He raised the siege of Derry and lasted 105 days, his soldiers being reduced to eating horse flesh and oatmeal. After conflicting interests between the Irish and two sets of English and French soldiers and money, both James' and William's armies massed for battle. This was in 1690 when against his cabinet's advice William had landed in Ulster with 36,000 men. This despite the French holding the channel and his main fighting front being in Flanders. With the help of Marlborough's genius, William reached the Boyne on 1st July and forced battle.

Within a week Dublin had fallen and James had fled to France. Ireland was left in a turmoil which has lasted to this day, but after the battle of the Boyne religious fanaticism seemed to be dying out in England.

However, the war against France continued unabated and William now had 100,000 men under arms. Until 1697 when the war ended with the signing of the Treaty of Ryswick the army would be buying all the broad swords offered them from Shotley Bridge. Ireland – with its continuing troubles – would need swords and the rival faction of Jacobites and those loyal to William would be scheming to buy or smuggle swords.

Frightening rumours were afloat a year before the treaty was signed in 1697. An invading fleet was expected from France to sail into the mouth of the Tyne. There were 'horses aplenty' to mount the Jacobite gentry and there were 20,000 wains and cart horses secretly recruited from coal carrying to transport the baggage of an invading army. An army which would put James back on the throne.

Nothing came of the scare or of a later one in 1708 but the rising of 1715, which lost the Earl of Derwentwater his head, proved that the Catholic gentry of the North were ever ready to join a rebellion in Scotland.

In the first years of the sword making industry there was always a real need for swords or blades, whether passed over a counter or packed in chests or smuggled from hand to hand. Most of them would find their way to the important part of the quayside (important to us), which was Sandhill.

One would have thought that the Shotley Bridge swordmakers would bound to be attached to a craft guild – a cutlers or bladesmiths – or even associated with one. The Guildhall which was on the quayside then, is still there now and the Freemen of Newcastle met there at Guild meetings three times a year. The Hostmen's Company met annually in the Mayor's chamber. They still do, to this day.

At that time – the first years of selling Shotley blades – there were still many craft guilds but their power wasn't the same since the

apprenticeship system – whereby sons of craftsmen and rich men's sons were taught – grew widespread. Later (in 1719), guilds tried to exclude Quakers as apprentices so it will be seen that the trends were a refining of the members of the guilds. It is possible, the Germans were kept out. There was a Company of Cutlers, and a Felt Makers, Curriers and Armourer's Guild whose coat of arms was three shields with crossed swords upon one shield. But I have no evidence as yet that the settlers were admitted to a guild of any sort.

Floating as it were between two counties and two countries and only associated with the iron and steel industries which never had guilds, the swordmakers delved alone for their ore bearing rock and forged their blades almost like a cottage industry. With pack horses the men explored the banks of the Derwent for veins of iron ore or perhaps were led to the sites by Bertram and Vintner.

Iron ore was worked at Consett – which had no name until the year 1839 – and delved for by the Germans leaving the delve holes, or pits, to be remembered today by the name of Delves Lane. There was also at Consett what is now known as the German Bands Seam and this was worked in the Hownes Gill area by the Oley's. Near the site is now the Hownes Gill Viaduct.

Other pits, sunk to the thin bands of iron stone were worked in different places. The pack horses, loaded with lumps of ore-bearing rock would be led to the roasting kilns nearer to Shotley Bridge. One site was on the Northumberland bank of the Derwent near Allansford in the woods near Hole House. There was a roasting furnace and three roasting kilns.

The shape of the kilns (which first reduced the ironstone), was round, narrowing towards the bottom. The shape of the furnace was hexagonal and narrowing towards the top.

To me it seems true that – as history has it – Bertram built and used these stone erections. Bertram also had a smelt mill and a forge further down the river on the opposite side. There is only a cottage there now called the Old Forge.

Further away still in the woods of Ravenside up Milkwell Burn also near Hedley-on-the-Hill are heaps of iron scoria (or slag), the remains of smelting.

Blackhall Mill was worked for iron ore and furnaces built and developed with Vintner assisting. This was three miles away from Shotley. Derwentcote with its rare cementation steel furnace stiill stands opposite Blackhall Mill. This was the furnace (or forge) where the swordmakers made the first precious shear steel known to be produced in the North.

In these first years of surface mining for the raw materials of swords, reducing the ore by roasting then forging into bar iron before they could fashion the shapes of swords, in these first years of steel making experiments, how did they live – these families of Germans? What were their conditions of life?

As few factories existed, people worked the cottage industries.

Looms and handicrafts in their own homes. Buying materials out of their wages for the following week's work. Men, women and children all worked as a team. Or people worked in the fields for the Lord of the Manor. Or worked in the Lord's mill, which was water powered and ground the corn. Or the people worked on farms for rich tenants who leased pasture land or arable land from the Bishops and knights who owned the lands. All the daylight hours were worked and some of the night hours were worked in the light of the rush lights or candles.

Food was simple but substantial. Rye bread made by each household. The grain being bought from the nearest corn mill. Cheese and butter made from low yield milk from cows. Other than low yield milk was rationed to invalids and children. Few vegetables were grown. No potatoes. The staple drink was ale. Home brewed and apparently drunk in enormous quantities by everyone. It was made from barley and if bought, it was a penny a quart. The family ale was sometimes spiced or warmed and sweetened to add variety to it. There was neither tea nor coffee. Food was eaten from pewter plates and wooden spoons.

Should much importance be attached to clothing?

Wrapt up in todays' fashions we know that clothes are as important as food to many people. The community of Germans would soon discard their own style of clothes to be 'in the fashion'.

Wills and inventories and old pictures tell us what ordinary people wore in those days. A widow left to her relatives three gowns, five petticoat skirts, a safeguard (an apron), a cloak, two hats, three waist coats, wearing linen and other necessities. In one case a woman's wardrobe was worth five times that of her husband's who was a peasant. A typical man's outfit would be a doublet, a hat, a pair of breeches (leather) a pair of woollen breeches, a jerkin, two shirts, four bands, two pairs of shoes and the total value of these changes of clothes might be ten shillings. The children would be over dressed, just in fact like miniature adults, and *never* go barefooted unless they wanted to be branded as paupers.

The dwellings of peasants and poor people in those days might look as though they had been thrown up in a few hours. Cheap wattle and plaster huts. Or felled logs and beams and strips of wood structuring local stone into house shapes with rough earth and clay cement. The stone ground floor was always the living room and the 'loft' was the sleeping quarters.

There was however, a law – not always adhered to – that each dwelling had to have four acres of land with it. This was to provide the means of keeping poultry or livestock. A cow or bullock or perhaps pigs.

When the immigrants first arrived these may or may not have been their standard of living but very soon, if we judge aright the characters of Sanford and Bell, the Wood Street houses, with their obviously solid structural building would soon be ready, with amenities and good taste in furnishing perhaps making residents slightly envious.

During the year 1691 after four years at Shotley Bridge and per-

haps after four years of doubts and recriminations, someone was inspired (perhaps a priest, or the women folk? One can only guess), to carve out prayers above the front doors of the Wood Street houses.

Being well built houses of local stone, above each door was a large coping stone with a smooth inviting surface. It naturally lent itself to the chisel and the mallet.

Two of these famous inscriptions survived in a crumbling state until recent years when the last of the Wood Street houses was demolished and the precious coping stone was taken to Consett. As the inscriptions were in German and no attempt was made to anglicise the messages, or exhortations, or indeed prayers, the meaning of the inscriptions were meant for the settlers alone.

The most famous inscription ran as follows –

DES–HERREN–SEGEM–MACHET–
REICH–OHN–ALLE–SORG–WAN–
DV–ZVGLEICH–IN–DEINEM–
STAND–TREVW–VND–FLESIG–
BIST–VND–DVEST–WAS–DIR–
BEFOHLEN–IST.

1691

There have been various translations into English meaning – "The blessing of the Lord makes you rich without care so long as you are industrious in your calling and do what is required of you".

The only other inscription to survive (incompletely) ran as follows –

DEUTSCHLAND . . . .VER VATTERLAND . . . .S . . .
SE . . .DIE. .STADT . .GE. . .HEER . . .BEHT. . .
UND. . . . EINGAN.

One historian has completed it and translated it to mean that the immigrants came from the Fatherland which was their home, in search of religious freedom. It then blesses all who may enter the door in the words of the psalm CXXI 8 – "The Lord shall preserve thy going out and thy coming in from this time forth for evermore".

Reading these inscriptions – or prayers – with a little imagination one cannot help feeling that they were inspired by a peculiar yet familiar homesickness.

Perhaps after four years of trial and error, after four years of hard work in what was probably a 'booming' industry, the immigrants were at last resigning themselves to whatever fate awaited them.

We cannot imagine that they would be concerned with the tide of National events or the re-shaping of Europe's history so much as their own immediate needs and prospects.

The end of the war against France, the Peace of Ryswick in 1697 and England's 90,000 soldiers no longer using their arms. This may have affected their lives. But earlier events and later events such as the historic Bill of Rights which still today can limit the King's army in any one year, the first founding of the Bank of England in 1694 and

in the same year the death of Mary leaving William to reign alone; the big Tory victory in the 1700 General elections; a second Grand Alliance formed against France in 1701 only nine days before the death of James II in France; in 1702 another General election and the death of William III. With Queen Anne, the younger daughter of James now ruling England the war breaking out afresh against France; the era of Marlborough who could beat any enemy in sight. . . .

Events such as these would flow over the lives of the swordmakers and their families like a tide leaving them perhaps unconcernedly, perhaps anxiously fulfilling their orders for swords.

A quiet piece of industrial news concerning the Derwent valley in the year 1690 should have interested them and given them a little satisfaction.

Ambrose Crawley moved the iron works he owned and managed at Sunderland and set up his mills, furnaces and factories at Winlaton. He had moved his works from Greenwich to Sunderland in the year 1682 and rather like chess he seemed to be playing a game of finding an ideal position for his operations.

Winlaton was a few miles from Shotley Bridge and even less populated but it offered water power and the reputed tempering quality of the Derwent. Wood for charcoal furnaces was plentiful at Chopwell. There was ample coal for his smithies and the River Tyne was navigable as far as Swalwell which was near Winlaton. In fact he very soon set up at Swalwell in addition and there he manufactured his heavier iron and steel articles such as chains, pumps, cannon carriages and ship's anchors.

At Winlaton he manufactured files, knives, saws, chisels and hammers. In time he carried on, in a big way, all the processes of iron and steel manufacture except smelting. The reason for his move to Winlaton, in the first place, before the almost ideal situation presented itself was labour troubles. We are given to understand this by historians. His original workers at Sunderland, brought from Liege were being victimised and persecuted by the catholic dominated labour force at Sunderland. The Belgians were protestants of course.

More feasible to me would be the reason that for three years he had cast envious eyes on the Derwent valley where other foreign immigrants – Germans – were mining the ore and manufacturing iron and steel to actually make sword blades.

However, small and secretive was this sword making industry I cannot believe that the iron-master Ambrose Crowley failed to notice its existence. He was operating only fifteen miles away, at the mouth of the River Wear and he was bound – before actually moving – to explore the possibilities of the Derwent valley. As an iron-master at Greenwich he had so explored the possibilities of his impending move to Sunderland that he had written out his reasons in length and presented these reasons to Parliament. He was an astute business man and fully deserved his knighthood conferred later upon him.

Why then has it not been suggested by any of his biographers or

any historians that the presence of the Germans manufacturing steel in the Derwent valley was one reason for his move to Winlaton?

In 1682 – five years before the German's arrival – he must have been completely ignorant of the Derwent valley's advantage over Sunderland for him to choose Sunderland.

Therefore it seems feasible to me, that the pioneers in the Derwent iron and steel industries were the swordmakers who were in their turn preceded by (we assume) Bertram and Vintner.

In Crowley's early days he mined and used the local ore as the Germans were doing. It was costly in labour and time to reduce to iron as it contained too much phospherous and sulphur, so both he and the Germans used imported Swedish bar iron.

The swordmakers were first buying their iron individually from Dan Hayford of Pontefract. We know that from the Cotesworth MSS which is in the Gateshead Library archives.

We don't know how long they were mining their ore and loading up their pack horses during the 'shrouded years' but we know that their output of swords would be growing because their mills, forges and shops were being extended. The Halmote Court Role of the Manor of Lanchester, which included Shotley, contains a record that in 1691 Herman Mohll, Henry Woper, Angell Schimmelbusch, Oliffe Groats and John Voss took over a cottage with a garth behind, previously in the possession of William Reed on the surrender of John Sandforth (Sandford) on 28th March that year.

Did the swordmakers extend – in the year 1694 – to Lintzford?

In that year a 'water corne milne' at Lintzford was leased to John Sandford by Christopher Hunter, a student at St. John's College, Cambridge at a yearly rent of £7 and 'one sword blade well made and tempered'.

As we know, John Sandford's business interests were the same as the swordmakers and he may have planned a conversion of the corn mill into a sword mill.

However, it seems from one record, that by the year 1703 he had turned the building into a paper mill.

If swords were being produced at this mill as at Shotley Bridge after the Peace of Ryswick in September, 1697 the output would dwindle and the mill finally grind to a halt.

An isolated item of news regarding the state of the trade was in the form of an advertisement in the *London Gazette* on July 10th/13th, 1699 when it was stated that, "it will put to the candle at Cutler's Hall, Cloak Lane, what sword blades it has finished. The blades may be seen in the Company's warehouse in New Street three days next before the sale".

The advertiser was the Company for making Hollow Sword Blades in England and we can believe that the blades left in the Company's

CHAPTER FIVE

The 1703 Agreement – Hermann Mohll's arrest – The Hollow Blade mystery again – In business with William Cotesworth and Dan Heyford – The plight of the swordmakers.

After the 'shrouded years' the activities of the swordmakers – from 1703 to about the mid-twenties – are illuminated and made alive by letters, manuscripts and documents discovered in the Keep of the Old Castle at Blackgate.

Although there were very many receipts, letters, documents etc., concerned with the swordmakers when I examined them in the Gateshead library, they formed only a tiny fraction of the whole of the 'find'. The five or six chests, packed with manuscripts, were just saved from being sent to the pulp mill by the late Professor Edward Hughes who used this material to write his book *North Country Life in the Eighteenth Century.*

First discovered in 1940 this mass of papers and books were found to have belonged to the lords of the manors of Gateshead and Whickham – which were at one time, the richest coal-bearing manors in the country. Reposing in the strong room of the Gateshead Library they are now known as the *Ellison MSS* and the *Cotesworth MSS.* The Cotesworth papers alone were sorted into 13,000 separate items and it is mostly from these I found the business of the swordmakers.

If Mr. Hughes had discovered another chest of manuscripts relating to the years preceding 1703 (the 'shrouded' years), valuable as it might have been it would hardly have provided a more dramatic contrast which this chapter has within it.

For against the background of the meteoric career of the highly successful William Cotesworth (who handled the business affairs of the swordmakers) the steady sinking of the swordmakers into gloomy defeat is contrast at its most striking.

This period of work began by the signing of an agreement between five of the swordmakers and the Chartered Company on the 27th April, 1703. The drawn up agreement was part of the *Cotesworth MSS* and the full title of the Company is used – "The Governor and Company for making Hollow Sword Blades in England".

It was signed by only five swordmakers – Henry Wopper, John Wopper, Peter Tiergarden, Adam Ohligh and William Schafe. It was signed by the secretary of the Company – John Blunt and the period of agreement was six years. There was a penalty clause which bound the swordmakers to the Company with a threatened fine of £100 for each offence. A schedule attached stipulated thirty-seven different varieties and kinds of sword blades and bayonets. The list included rapiers, cutlasses, scimiters, hangers, and sizes and descriptions of all blades including the number of hollows – whether one, two or three.

In other words – hollow blades were stipulated in the long list. However, we must not jump to the conclusion that this was proof of

hollow blade manufacture. The genuine hollow blade was very expensive to manufacture and (it has been said), would cost the maker £1 apart from the furbishing of the blade. As the highest price to the makers – on the schedule price list – was £1 10s. per dozen (for large latsons, hollow), it is unlikely that any of these 'blades with hollows' were the triangular cross section blades with the flats hollowed out. Unless of course, some of these many varieties (perhaps only two or three), actually were the much sought after 'hollow blades' which to make, were a sacrifice of time to the worker.

The complete list of tools (to be returned intact), was interesting reading because although it included spindles it did not mention machines for 'rolling hollows' in the blades. At the foot of the long list were the names of the compilers – Thomas Lake and J. Bellamy.

It seems that now, after an uneasy peace of five years, the Alliance were once more at war against France and therefore the Chartered Company were re-starting the works after a long shut down. This would explain the small number of workers involved. Unless of course, the five were representing others as well.

The absence of Hermann Mohll is surprising but it has been suggested that he was back in Germany to recruit more labour. No doubt people concerned would be aware of the reasons why such an important name was left off the document and full provision was made in the wording of the agreement for the later inclusion of other swordmakers.

Hermann Mohll was a grinder, not a bladesmith like Adam Olligh. Being a grinder and to do with the hollowing process of blades, was he on a secret mission to Solingen or was it family business?

All we have proof of is that he returned from Germany several months after the agreement was signed; that he was accompanied by his wife and two children and that he had been away from Shotley Bridge for a year.

His arrival at North Shields (the mouth of the Tyne), signalled the beginning of a series of strange and what could be called sinister happenings. The upshot of the affair was that after being arrested and imprisoned in Morpeth gaol for one month Hermann Mohll was released and allowed to join his wife and children at Shotley Bridge. The papers relating to the court case are housed in the archives of the Northumberland Record Office. They are part of the Quarter Sessions Papers and cover December, 1703 and January, 1704. The papers are the actual letters which passed between Henry Villiers, Justice of the Peace and the Earl of Nottingham and also the statements of the witnesses. The letters from Villiers to Nottingham explains why he had arrested Mohll on the information of two witnesses.

Briefly what had happened since the vessel *The Saint Ann* had berthed in Shields harbour was this – The witnesses in the case were rowing past the Dutch ship *Saint Ann* at two o'clock on Sunday morning when they were hailed by some of the mariners on board the vessel. The witnesses were then asked to take some bundles of goods into their

wherry and convey them to some place of safety in North Shields until the next tide when a member of the ship's company would go along with them up the river to Gateshead. This they did and stowed the bundles in the house of one of the watermen who was Thomas Davidson – one of the witnesses.

Acting on information received, tide waiters from the Custom House Authorities examined the bundles, finding them to contain sword blades. Hermann Mohll arrived at the house, declaring that the blades were his and he had brought them from Germany to sell them. He had intended to carry the blades to Shotley Bridge where his correspondent was Peter Rennau (the last named was a director of the Hollow Sword Blade Company).

Mohll was unable to get surities and was committed to Morpeth gaol until the next sessions of the Peace.

In answer to Justice Villier's letter to the Secretary of State, Nottingham wrote the following – "Whitehall January, 8th 1704. Sir, Your letter of the third was laid before the committee and by their directions I am to tell you that ye armies that came in ye ship from Rotterdam must remain in your custody till their further order, and that you must endeavour to seize and secure the master of that vessel and also the Scottish and Irish soldiers which were on board her and take care that Davidson be further examined regarding this matter – Your humble servant Nottingham".

It is obvious that because most of the passengers were soldiers (about twenty), a Jacobite conspiracy was suspected in high quarters and accordingly Villiers tried to obtain more evidence. He was extraordinarily successful in obtaining more evidence of smuggling for, "Fishermen at South Shields who were gathering bait near the salt pans found about thirty more sword blades which had been sunk in the river. The blades being hollow, a weapon which at this time was made nowhere else in England except at Shotley Bridge".

The case underwent the strictest examination. Sir William Blackett – as well as others – assisted Colonel Villiers in his enquiries.

The result was that Mohll's antecedents seem to have been satisfactory and no plots were uncovered. Thomas Carnforth, a sword cutler of Newcastle and Henry Wopper, a swordmaker of Shotley Bridge testified to Mohll's good character. Carnforth had known Mohll for fourteen years and had often bought from him sword blades which he believed to have been made at Shotley Bridge. Two weeks before (probably just before Mohll was arrested), Mohll had offered to sell him some of the blades in question and he had partly agreed to buy twenty dozen of them. He would have done so had they not been seized.

Henry Wopper's testimony stated that he had *wrought* with Mohll as a swordmaker at Shotley Bridge for about fifteen years, both working for a sword blade company.

He also stated that the works had been closed for about twelve months before this occurrence and Hermann Mohll had returned to Germany – his native country. Then, at the response of persons con-

cerned in the company who had re-started the works, Mohll was on his way back to resume his old occupation at Shotley Bridge.

The witness – Henry Wopper 'verily believed' Hermann Mohll to be a 'very honest man'.

The court's findings were that there was no sinister significance about the affair. It was merely a case of swords made in Germany for the British market only at this time – 'the blades were of the finest quality'.

Several surities were found for Mohll's release but nothing in the Morpeth Sessions papers hint at how the affair was finally settled and disposed of.

In this proven case of smuggling which obviously had been glossed over to investigate a sterner charge (arming Jacobites), Mohll was lucky to be freed.

One cannot avoid the thought that the big names of the Chartered Company – Peter Rennau, the Vice-Governor and the Governor himself – Sir Stephen Evance may have acted behind the scenes. John Blunt – the secretary who signed the 1703 agreement was alone powerful enough to influence the Secretary of State the Earl of Nottingham. He was – later than this – Director of the East India Company and Adviser to the Government on State Lotteries. And there was Cotesworth, of whom more later.

So much for Mohll's arrest, his month's imprisonment at Morpeth and his return after a years' absence – it seems – to Shotley Bridge.

We find that from the occurrence the mystery of the hollow blades is deepened.

Why were only the hollow blades dumped in the river?

Had Mohll, carrying these special and most expensive blades himself, and on the way to the house of Thomas Davidson, 'got wind' that he was going into a trap?

If he wanted to keep secret the fact that Shotley were selling hollow blades which were made elsewhere he might impulsively have dropped them in the river.

Remember – in the summing up of the case – the official comment about the dumped blades – "a weapon which at this time was made nowhere else in England except at Shotley Bridge".

Which of course, showed that there was respect and some fame attached to the Shotley Bridge Swordmakers.

Surprisingly however, the probability that the fished out hollow blades had sailed from Rotterdam with the forty-six bundles was ignored. Would not an unbiased judge or jury call the lot 'smuggled'? There would be duty to pay on all blades and heavy duty on the hollow blades.

Hermann Mohll himself must have been surprised and certainly must have sensed an unseen kindly hand.

But was this Mohll's first case of smuggling? It was the first time

he had been caught but had he been trafficking back and forth for years? If he had – and it is only guess-work, then Shotley would have been able to supply a limited amount of hollow blades to the company.

Safe again in his old home in Shotley Bridge with his wife and children, Hermann Mohll took his rightful place as one of the leading swordmakers.

We know now that (despite the penalty), not only were sword blades sold to the company but also to individuals such as the cutler Thomas Carnforth and John Sandford, who habitually handed over 'one sword blade well made and tempered' as part of his local rents on land and properties. And we can be fairly sure Sandford's blades would be 'hollow' to fit the town sword. The small sword, in those days, was a precious weapon as well as an item of dress.

It was still a shrouded picture of the transition period from a state of comparative inactivity to what was again a booming industry after the agreement was signed in April, 1703. Hermann Mohll would be unable to lend his aid until January, 1704 and another year was to pass before it came clear that William Cotesworth – the Gateshead merchant – was managing the sales and business for the London company.

The son of a yeoman, he had served his apprenticeship in 'Gateside' after which his boundless energy was clinching business deals in almost every commodity and in every place. Tallow and candles were his main trading interest but he and his partner Sutton were also corn merchants. And this was only the beginning of Cotesworth's spectacular career.

However, he makes his bow upon the stage when we read the earliest letter to Cotesworth regarding the swordmakers. It is dated January, 1705 and John Beardmore (for the Company), writes – "Seeing as you say Clem Schaffe is very old pray let us know if he will be able to do our work. If not we will endeavour to get one abroad, but it will be a great trouble (?) and charge for they are very stiff and proud when they know that they are wanted". P.S. Please send up invoice of four chests of blades sent 30th November".

We remember that it was *William* Schaffe who signed the agreement, not Clement, who was the original immigrant and the father of William. It seems therefore that eighteen years after coming to Shotley Bridge here we have William, apprenticed to swordmaking with his name on an agreement and with his father growing almost too old to work.

One reads with relief a bill dated 31st October, 1711 which is an account of money owing for bar iron supplied to thirteen swordmakers and both William and his father 'Clem' had bought iron to forge into blades. This was six years later.

From managing the swordmaker's business affairs, William Cotesworth, to satisfy the demand for blades apparently didn't wait upon the Shotley men. By the year 1705 it was evident he was filling up the chests with other swordmakers blades. Where these came from is a mystery. Perhaps Darlington or Cumberland. However, Cotesworth received a

letter of complaint from Henry Benson – an official of the company. It ran – "Sir, all the cutlers complain of the blades being soft and ill-tempered. There is very few of them – especially ye tukes (?) but what stand like lead. It would give great satisfaction if they were made of such steel as formerly, for our workmen, by reason of their softness cannot bring them to coller like the German blades".

The image of disgruntled cutlers furbishing these unwelcome blades springs easily to mind.

But Cotesworth at this time (and indeed at all times), was hell-bent for success. In a letter to a friend during the year 1717 he summed up his own philosophy and his recipe for success. – "You know how natural it is to pursue private interest even against that Darling Principal of a more general good. . . . It is in the interest of the Public to be served by the man that can do it cheapest though several persons are injured by it. . . ."

Apropos of this attitude, in 1710, after the six year contract was ended Cotesworth drew up an agreement (for three years), with the Shotley Bridge swordmakers for them to make blades at 6d. a dozen cheaper than before. He also made a contract two months earlier than this with John Saunthorp and partners to make sword blades at one shilling a dozen cheaper than the German blades.

For twenty years the tallow and candle business was Cotesworth's main trading interest but sandwiched between – as well as the sword blades – were dealings in dyestuffs, indigo, argol, cochineal, copperas, galls, logwood and sanderswood, fustic and woad and other expensive dyestuffs from the Indies and the Levant. He dealt in various kinds of ashes, soap and oil. He supplied sugar, tea and chocolate to landladies and clergymen in Cumberland and even tobacco (made up in fourteen pound packets). Alderman Ramsey, who was now a relation by marriage, bought the tobacco in bulk. Both Ramsey and Cotesworth regularly purchased flax, tow, madder and whale fins from Rotterdam and alum from Hamburg. Remember too, that Ramsey was a famous goldsmith with his house and shop in Sandhill. A London wine agent – as well as his usual line – advised Cotesworth on the current prices of wheat, rye, barley and beans. Some of the barley and rye for the famous 'Geordie' loaf had to be imported but then Cotesworth also imported hops for the equally famous local ale and between wars he imported from France (Bordeaux), wines, cherry brandy and prunes.

On his own doorstep – Gateshead (Gateside) were the quarries of Whickham, Gateshead Fell, Wraken Dyke (Wrekenton), which gave up their grindstones and whetstones to pass through his hands at a profit. There were eleven quarries at Wracken Dyke alone and in addition to grindlestone quarries there was a stone quarry in Quarry Close, Gateshead to add to the Gateshead merchant's paper work. Dealing in salt, he acquired salt pans at Shields and by the end of Queen Anne's reign in 1714 he claimed to be the biggest salt proprietor in the country. Shortly after that he held the contract to supply the Victualling Office and his trading turnover had reached £30,000 a year. He boasted that he could make that amount in trading.

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But this is only a small part of the success story of William Cotesworth and we must return to the story of the swordmakers at the year 1705 when Henry Benson had complained to him about a chest of blades. Many chests of blades later – in fact about a year – there was another letter of complaint. Worded rather meekly, it ran thus – "Received four chests of blades. . . . they are pretty sizeable but a little of ye weakest. Pray tell them to make them very stiff and well glazed and especially well tempered. I have a great many blades which stand like lead".

Over the years from 1705 to 1715 there are among the *Cotesworth MSS* a crop of accounts and bills which give an indication of the output of blades over separate periods. If therefore we apply the yardstick of one account for receiving 1,600 dozen blades costing £935 13s. 3½d., in the period from November, 1710 to 21st August 1712 we find that the swordmakers produced 19,200 blades in 557 days. Which is at least thirty-four blades a day.

At the most optimistic then, assuming there was a continuity of output from 1703, on a very rough average each swordmaker received four shillings daily for three blades. But remember there were other workers (forge hands, labourers, etc.), to pay out of the four shillings and out of it also had to come the cost of bar iron individually delivered to him by Den Heyford at 5d. a pound. However, this rough estimate only can be applied to the period I have quoted. The rest of the years, with their spasmodic production might vary the figures either way.

Considering the large numbers of acknowledgements of blades received there are suprisingly few complaints.

The war ended with the Peace of Utrecht in the year 1713 and Queen Anne, with a thankful prayer on her lips seemed to give way to a peaceful death – rather than to die – in August, 1714. Then, ironically for the Germans (if they could see it that way), George of Hanover came across the sea to sit on the throne in September. The new English King was a German.

This crowning and changing over from an uncertain to a certain line of Protestant succession coincided with the undoubted serious plight of the immigrant swordmakers of Shotley Bridge. Peace, for them, had its industrial problems and we begin to get hints, in all this correspondence, of hardship in the Derwent valley.

Blades, and the manufacturing of them was almost a luxury trade now. Engraving and etching embellished many blades and because of the cost of a good dress sword canes were beginning to oust them as items of dress. One of Cotesworth's friends – Joshua Geekie – writing from London commented – "Can't get a handsome sword for £5 or £6 so have ventured to £8 10s. . . . ."

However, if we examine more of the significant accounts and letters again it will be seen that even during war time the trend was always in the direction of a tip-over of the balance towards debt for the swordmakers. There are many accounts listing the individual sums of money owing to Den Heyford for bar iron supplied – "Sent to me

as per Bawdry Post. . . ." and the whole business of delivery and coercing for the payment of the iron was managed by Cotesworth. A letter to him from Heyford dated 10th May, 1712, "would consider it a great favour if you can by degree – urge payment of £49 10s. 5d., now due from the Germans. . . ."

The amount of costs of material also gives us a clue to the rate of usage. On the 31st October, 1711 all the swordmakers at Shotley (with their names appended), had settled an account for £375 4s. 10d. The names of the swordmakers (thirteen of them) also provides us with a hint of each man's capabilities.

It is a kind of league table with Adam Oley (evidently now Anglicised from Ohligh), owing £43 with Henry Wopper and the two John Woppers owing as much each, whilst the two Schaffes – William and Clemens – were at the bottom of the table owing the least. The list contains the names – Peter Tiergarden and Voose (no Christian name), John Hardcop, William Voes (or Voss), Abraham Mohll, Hermann and John Mohll. The last two Mohll's share the same bill, indicating that they are father and son. There was a *William* Mohll, absent from thebill who was mentioned a year previously. Adam Oley refers to the original Adam who was the immigrant in 1687, not his surviving son Adam (one of two in succession), who at this time was only aged fourteen.

This bill is interesting in that it shows who were the craftsmen and their sons. In the background, unmentioned would be the semi-skilled and labouring types. Among these should be Balfe, Himofan, Craggs and John Hindson. These names appear in correspondence. The important names, not on any list, are the men who are part and parcel of the whole set up – Bertram (the steel manufacturer and furnace expert), coupled with his associate Vintner.

The total amount owing on the joint account was paid eventually although it was settled in such a fashion that four of the swordmakers were shown to be in financial straights.

These were Adam Oley, John Hardcop and the two John Wupper's (father and son).

When the rest were shown to have paid their separate amounts owing, these four paid short by a total amount of £4 6s.

As can be seen, alongside on the same account is an amended settlement with the four names and shortages made up.

Quite often, during the years of 'prosperity' there are individual letters to Cotesworth about amounts owing by certain workers and it seems that Cotesworth may have had to 'hound' them to settle their debts to Den Heyford.

During the years 1712 and 1713 in particular – when trade was good – we are presented with proof, in the shape of personal letters to Cotesworth and a Covenant signed by Adam Oley, that income was not keeping pace with expenses.

The first letter, dated 8th February, 1712 is signed – John Wupper, junior and runs –

"Sir, Schaffe came to acquaint you that I have been lying very ill since New Year's day and am still not able to go to work or even go as far as the door. I humbly do ask you to send me with William Balfe forty shillings and do me this particular kindness for I. . . . (illegible), ...do not fail me for I have nothing to. . . . no more. . . . but resting, Your Humble servant".

This seems to be the first of the 'dunning' letters mentioned by Edward Hughes in his book – *North Country Life in the Eighteenth Century.*

There was no response to the letter for five days later the request was repeated stating that "he had sent William Balfe but he had not received it".

Wupper then urged in his second letter – "Sir, I wrote you about my poor condition but I have a boy who is also ill and I have had no money this month. I am very weak still. Please give forty shillings to the bearer John Himofan. Please do not fail me – Your Humble servant to command, John Wupper, junior".

This 'boy' would be the grandson of John Wupper, senior and weeks later we find the grandfather sending his own dunning letter. A long letter, difficult to make out except for one sentence – "I have an occasion for money. . . ."

Several months later John Hardcop briefly tells Cotesworth – "I have rent to make up to £1 18s. 11d. . . . ." then another figure – £5 4s. 11d. is quoted and finally the two words "fail nott".

Was the rent for his house or the only hint we have that the workers may have been charged a rent for using the works?

Always we have this problem of rents.

However, regarding these dunning letters – the last of them is dated as late as February, 1715. Like John Wupper, senior's, it is almost illegible. The word "ill" is repeated again and again and even in the last sentence with his signature (it was John Voose), the word 'ill' appears once again. The letters, in the manner of the time, are sheets of paper folded into squares so that the name and addresses are written on the outside. In some cases the letters are addressed to William Cotesworth – his shop in Gateside. The shop we know to have been in Bottle Bank (or Battle Bank).

In September of the year 1713 Adam Oley joined the other four men in a confession of not being able to make ends meet. However, Adam Oley had reached the status of being a Yeoman and was able to barter something in exchange for a loan.

Cotesworth obliged with a legally drawn up contract which was signed by Adam Oley. It can be seen that Adam Oley (described as a Yeoman), on the one hand William Cotesworth on the other hand by which, as a consideration of a loan of £5 15s. 4d., Adam Oley (Ollig),

agrees to assign over to William Cotesworth his two cows described as 'one all black and the other a hank one withall'.

At the beginning of the Covenant stands out in large type – To all Christian People – and about the middle of the many worded document in large type are the words – To Have and To Hold – meaning until the money is repaid.

Adam must have been about sixty years of age at this time. Out of the thirteen children he and his wife Mary had baptised perhaps (with the high mortality), only seven had survived. However, this is only a guess. What I can visualise are at least three of his sons serving their apprenticeships to be swordmakers. Perhaps the reason his sons do not appear on lists of names owing money to Heyford is that their father's large bill included theirs too.

However, referring back to the dunning letters – Hartcop and the Wuppers and the others who at different times asked Cotesworth for loans. How could they know Cotesworth's innumerable distractions, duties and elevated severence from Shotley's domestic affairs? One can imagine these notes of hand being read at his Gateshead shop whilst the boss was in London or across the river in Northumberland. In fact he could at any time have been anywhere in England. At that time the coal measures at Whickham and Gateside were the richest being mined in the whole country.

He was in London at about the time of the dunning letters negotiating for his brother-in-law Alderman William Ramsey the purchasing of the Manors of Gateside and Whickham.

Marrying Ramsey's sister eventually put into his possession Park House, the Gateshead mansion, as the bulk of Ramsey's fortune was left to him. However, Cotesworth hadn't time to settle there as he was often in London as secretary of the 'coal cartel' and beginning to form the first of the famous Alliances. He was (after 1716), Lord of the manors of Gateshead and Whickham and Joint-Lessee of Heaton Colliery across the Tyne. 1721 he was accused in parliament by W. Blakiston Bowes of 'endeavouring to engross all the Coal Trade himself'. Early in his career (when the swordmakers were ending theirs), he was the 'self styled' Mayor of Gateshead and when in 1719 the fortunes of the Shotley mills were in the past, he was appointed the High Sheriff of Northumberland.

One could go on and on about this remarkable man who has left his memory in place-names within Gateshead.

What could the swordmakers understand – when they sent their pleas to him – about all the other affairs to which Cotesworth was attending?

During the years 1712 and up to his death in 1716 Hermann Mohll was obviously, in his letters to Cotesworth, taking over the full authority of the Shotley works.

As early as February, 1711 a letter from him to Cotesworth said – "we have sent today by John Hindson two boxes of swords (order of the 2nd inst), mixed (?) as the description was not mentioned whether

hollow or plain required. . . . Pray keep £1 from the cost for Henry Wopper. . . ."

He ends his letter with – "A happy New Year, Your humble servant to command, Hermann Mohll".

As there was never a hint of Mohll borrowing money and because of his independent journeyings (back and forth to London as we may see later), in addition to his interests in Solingen, I imagine he alone could afford to buy or rent the Shotley works.

Although remaining aloof from writing anything but business letters for years, in 1715 – 24th May, when the works were at a low ebb – he almost begs Cotesworth's permission for "we grinders to ground Mr. Hayford's blades made by our smith here . . . . that is when we have not full employ". He then offers to make an allowance for the use of the mill (the grinding mill), which shows that the Chartered Company could never be approached except through Cotesworth.

Two weeks later Hermann Mohll showed by an almost despairing letter that Den (or Dan) Heyford had cast conspiring glances at the Shotley works and tried to buy or rent them.

Mohll's letter runs – "Sir, I hope you understand that Mr. Heyford is for the Company Works here" – and Mohll describes how his engineers measured all housing, shops and mills, taking water levels and "every thing he cut gite (get), and that if he (Cotesworth), had a kindness for the works here or for me to stop him and hold the old 'husie' back for we will all make blaides for rent and pay the rent every month. Some say he is for buying the works as they say the Company will bestow no more money here. . . ."

As can be seen by the letter Mohll grows more vehement as he proceeds and now calls Heyford 'a sliye youth', threatening to buy not one iron or steel from him.

He concludes by praying for, "a line by bearer whether I have hopes to prevent his aims" then concludes, "Your obedient servant to command, Hermann Mohll".

To me, this is an historic letter for it seems to have frustrated Den Heyford's attempts to take over the works.

William Cotesworth must after all have had 'a kindness for the works' or for Mohll because although this was Mohll's last letter (he died the following year in December), things must have remained unaltered for chests of blades continued to be sent to Sleigh.

It has been said – before the *Cotesworth MSS* were scrutinised – that throughout all this time, even from the year 1703 (the date of the agreement which has not Hermann Mohll's name upon it), that Hermann Mohll was given possession of the works for a yearly rent of forty-four dozen blades. This rent was supposed to necessitate a yearly journey down to London to deliver the blades.

Although I have found no evidence to show that this was so, it could very well be. It would agree with the theory that Mohll came back from Germany in December, 1703 to restart the works with the first

year's rent of smuggled in blades. The number of blades found as evidence – which kept him imprisoned for a month – was forty-four dozen or more. But we must remember that the Newcastle sword cutler Thomas Carnforth vouched for Mohll's character, stating that he had promised to buy most of these blades.

If the blades were the first year's rent, then Mohll's renting of the works was purposely kept secret – then and for years afterwards.

Historians have suggested that the promoters of the Charter, with Sir Stephen Evance at their head, lost interest in the swordmakers. But surely the 1703 agreement, sixteen years after bringing the settlers, disproves this? The full title of the company is stated and the agreement was to last six years.

However, if we follow the fortunes of the Governor of the company – Sir Stephen Evance, and the way he manipulated the powers of the Charter, it would seem *he* had lost interest in its swordmaking activities.

In the same year as the new agreement – 1703 – Sir Stephen sunk £20,000 of the Chartered Company's assets into the purchase of forfeited Irish Estates.

He was a London goldsmith and banker (all goldsmith's were bankers) and as early as 1698 he had been placed in a position of trust by Thomas Pitt who had sailed away to take up the Government of Madras. He gave Sir Evance the power of attorney and – later than 1703 – entrusted him with the handling of the great Pitt diamond.

By the year 1709 the Irish Parliament, afraid that the Chartered Company should become too powerful in Ireland refused to let the Company take conveyance of the land.

This was after years of the Company's efforts to enlarge its hold on the estates by attracting more capital through subscriptions and the like.

After this disastrous speculation we find that the charter was sold to a banking group headed by Sir George Caswell – Sheriff of the City of London – and Jacob Sawbridge who renamed the company The Sword Blade Bank.

We next hear of Caswell and Sawbridge attempting to found a Sword Blade Fire Office. Subscriptions were to be received at the Sword Blade Coffee house off Lombard Street.

So for the third time in fact, Sword Blade notes were issued which were in effect deposit receipts.

Unfortunately for the Sword Blade Bank, its principal customer was the South Sea Company and both Caswell and Sawbridge were directors.

In the bursting of the bubble all was irretrievably lost. In the Historical Register for 1720 came the statement:-

"The Sword Blade Company who had hitherto been the chief cash keepers for the South Sea Company, being almost drained of their ready money were forced to stop payment".

The previous year, Thomas Pitt's son Robert, suspicious of Sir Stephen Evance and his speculations had had the Pitt diamond transferred from Evance to the Bank of England and now after this new blow – the bursting of the bubble – Sir Stephen put his affairs in the hands of assignees.

Completely depressed and as he thought, bankrupt he 'shot himself in the temple with his pistol'.

After his death it was shown that he never had been insolvent after all and when his creditors had been paid in full there was still a handsome balance to his estate.

These money jugglings with the powers of a Royal Charter which primarily was to produce hollow sword blades were no doubt far above the heads of the Shotley Bridge swordmakers. However, the 'defectors', each and every one of them had been aware from the first whisperings of Clemens Hohemann in Solingen that people in high circles in England were behind the venture and providing expenses for the swordmakers to produce results.

That the settlers worked hard to produce the results they did, there is little doubt and there is also little doubt that the first generation of settlers made no fortunes for themselves. As always when the first generation, and even of subsequent generations, comes under discussion the vexed question crops up again. Did the swordmakers actually produce the hollow blades they were brought over to produce?

Because there never has been a sword with a hollow blade *on show* with the Shotley Bridge marks to identify it doubt has been cast on whether they ever made any. Mr. J. D. Aylward in his scholarly book – *The Small Sword in England*, expresses doubts because he has failed to identify a hollow sword blade as being a Shotley one. Since Mr. Aylward died – he was ninety-five – there has come to light this fresh evidence among the *Cotesworth MSS* detailing the descriptions – thirty-seven different ones – of the blades the swordmakers did produce. Again, there is enough to show in the letters and other correspondence relevant to the swordmakers that there were no disputes or differences of opinion about hollow blades.

I know that this implies that either (*a*) the men were packing their chests with the hollow blades they were expected to produce, or that (*b*) the disputes had been during the 'shrouded' years and now there was a tolerant understanding on the part of the company or even that (*c*) as no secret machines 'for rolling the hollows in the flats' had been installed at the Shotley mills there was tacit acceptance of the swordmaker's painstakingly slow 'hand hollowing' methods.

My own opinion inclines to the view that no machines were set up at Shotley Bridge and that hollow blades were nevertheless produced in *some* quantity by hand. Otherwise, if machines had been set up and hollow blades mass produced in consequence, then the fortunes would have been made of everyone concerned.

hands were being auctioned. A 'candle sale' was an auction whereby a candle stump was lit to start the bidding and the last bid before the candle went out was accepted.

After this 'grinding down' of the mills, the damping of the furnaces and perhaps the closing of the shops and works (this *recession* over a period of about four years), the outlook of the immigrants must have been bleak indeed.

It is obvious that because only five swordmakers signed the 1703 agreement to start producing in bulk again only five swordmakers were left on hand to do so.

I have no further news or items of interest concerning the 'shrouded years' except what the parish registers show.

These, however, can be more eloquent than pages of narrative or description.

In the same year that Sandford leased the mill at Lintzford one of the swordmakers died. He was Engel Schimmelbusch and he was buried on the 7th February, 1694 in Ebchester churchyard. His estate was administered by Adam Oley.

This news is the first and the last we hear of Engel Schimmelbusch (except for being one of the swordmakers who took over the 'cottage and garth' in 1691).

Adam and Mary Oley baptised a son (Adam) at Ebchester Church on 16th April, 1691 and the same child – Adam Oley was buried in Ebchester churchyard on 10th June, 1694.

On 16th November, 1693 a daughter – Elizabeth – was baptised to Adam and Mary Oley and on 26th July, 1695 a son – John – was baptised, the register stating that this was their *fourth* son.

Another *Adam* was baptised on 20th October, 1697. William was baptised on 10th October, 1699 and Nicholas was baptised on the 17th December, 1703.

Adam and Mary Oley baptised thirteen children in all, if we look beyond these 'shrouded years'.

In 1692 the first entry regarding Hermann Mohll states that a son – James – was baptised and the only other entry concerning Mohll during these years states that Catherine Mohll and John Fose (or Voss or Vose), were married in July of 1700. As there were two families of Mohll, Catherine may have been the daughter of Abraham Mohll.

On 9th August, 1701 Elizabeth, stated to be the daughter of John Voss, died. Presumably she was the first child of John Voss and Catherine Mohll. The only other entry I have found prior to the year 1704 was a son – John – born to Henry Wopper and baptised in April, 1692.

CHAPTER SIX

Last of the first settlers – End of the Sword Blade Company – Settler's sons take over – The legends – Robert Mole and Sons – Thomas Bewick, Wilkinson Sword Ltd. and the Oley's – 'Return' to Solingen – Shotley Bridge today.

During the year 1715 – according to the historic letter of Hermann Mohll's which saved the works for the swordmakers – the Chartered Company were still bestowing money for the work's upkeep. Twenty-three years after the Germans were brought over does this look like the action of a disappointed and frustrated company?

The severence did take place but it was years later and the process was gradual. Certainly the promoters had other interests to pursue under the name of the Charter and its rights but sufficient cash was spared to keep the works in being. The settlers had their own problems and their problems were intimate – from hammer to hand and from hand to mouth. There were problems of fitness for work and of growing too old to work. There were the futures of the families.

As we already know, the first immigrant to die was Angel Schimmelbusch in 1694. The second was Peter Tiergarden on 5th February, 1714 and it seems that Oliffe Grouts (Groats) must have been the third. His name appeared for the first and only time as one of the group of swordmakers who "took over a cottage with a garth behind" in 1691. As we are aware parish registers do not reveal all local deaths and he may have died away from the district.

The two years following the conclusive signing of the Peace Treaty in 1714 was highlighted by Hermann Mohll's historic letter which saved the Shotley works for the swordmakers. The year 1715 was decisive for them but their history was written out in faint lettering compared to the history being enacted within a horse's gallop of Shotley Bridge. For less than ten mile distant westward was Dilston Hall and Devil's Water.

The Rising of 1715 was centred almost on the outskirts of the village yet no whisper of conspiracy with the rebellion or against it has come out of Shotley Bridge.

The tragic Lord Derwentwater's estates did not include Shotley parish or Shotley Field but nearby Witton Stall was and many extensive miles west and north were tenanted by many devoted followers no doubt.

For who then, in their sympathies, would the German settlers take sides? Surely it seems that being makers of ready-to-hand weapons the village would be secretly besieged by followers of both sides. And the natural sympathisers of the present King – the German born George I – would surely be the swordmakers of Shotley Bridge. Yet after carefully looking for hints of a leaning of sympathy towards either side I found nothing but impartiality.

This indeed is the way sincere craftsmen, dedicated to the work in hand, should behave. Only anxieties for their loved ones competed for the energies and thoughts of the surviving immigrants.

As we have seen, Hermann Mohll, with his son William by his side hung on grimly to what remained of the sword mills and his own grinding mill. And the workshops too. All of them seemed to have come under his control in those years. He died at the end of the following year and that date (16th December, 1716), was the next notable entry in a register.

In the year 1719 the works were visited by Henrick Kalmeter, a young Swedish engineer who reported that the output of the remaining nineteen workmen was much smaller than formerly and that the steel furnace at Blackhall Mill was operated by William Bertram. It was obvious that Kalmeter had visited the works before for news from another source had said the workmen had once totalled thirty. The attraction of the North East, as well as an exchange of ideas and methods would be of course, the sale of best Swedish bar iron from Smoland. The Winlaton and Swalwell works of Ambrose Crawley of course overshadowed in importance the almost obscure sword works hidden in the Derwent valley. However, both concerns went over to using the Swedish bar iron to convert into steel by cementation.

By 1723 there was a further dwindling of workmen at Shotley Bridge and William Cotesworth added to the gloomy picture by a casual remark in a letter to a relation. He wrote:-

"Those of the Sword Blaide Company that were there concerned are all in adversity and misfortunes by haistening to be rich. . . ."

Of course he was not referring to the settler's efforts. The remark was sandwiched between a variety of business items and family matters. Knowing all about the London end of the Chartered Company he would mean their disastrous speculations and even the tragic suicide (three years before), of Sir Stephen Evance in its wake.

However, it was ironic that when the letter was written (only thirty-two years after the date 1691), the famous inscriptions above the houses in Wood Street would be almost new and clear for all people to see. The beginning of the longest inscription – invoking the help of the Lord – is almost a repeat of the seventy-second verse, tenth chapter of the book of Proverbs:-

"The blessing of the Lord it maketh rich and he addeth no sorrow with it. . . ."

By this time, in the year 1723, most of the first generation of settlers had died or moved away from Shotley Bridge. John Faws (he arrived years later than the first settlers), had died in 1721 and one of the first settlers – John Voes (Voss), died the same year. Surtees, in his history of the *County Palatine of Durham* quotes that "John Voes, sword grinder of Shotley Bridge gives his estate in Germany called Anffemhewman, County of Dusseldorf to be disposed of by his brother Johannes Smithart of Solingen for the benefit of his wife and children Johannes and Margaret, father-in-law George Jopling, Christopher Harrison and Theoph. Smith, his brothers-in-law, tutors, etc." The Will was signed by Jan Vous and witnessed by Wm. Buske and John Woffer. One hopes that with the passage of years Solingen had for-

given the 'defectors' and not after all, put into effect the 'confiscation' of estates; in this case for the benefit of the English Joplings and the rest of the swordmaker's in-laws.

By this time the first group of settlers, their families and relations (some German families intermarried), had been fully integrated into the English society around the region and it seems much further afield. Late arrivals at the forges and mills, such as William Palds, Busk, Beckwith, Henkells, Wolferts appeared briefly then disappeared.

1724 was a notable year in the history of the Royal Charter in that the death knell of the company was sounded in the House of Commons. A petition was brought before the House to renew the powers of the Charter and the petitioners were all new names. Reported in the *Journal of the House of Commons, Volume Twenty-one*, page 246 – the petitioners being Samuel Swinson, Henry Trollope, Thomas Beech, Loftus Brightwell and Henry Symonds 'and others' – proprietors in the capital stock of the Governor and Company for making Hollow Sword Blades in England – 'the question being put and brought up, it was passed in the negative'.

The rejected petition and the consequential cutting off of all help or orders from the Company and indeed of any concern or interest from its trustee – William Cotesworth didn't halt work at the forges. The swordmakers were 'forging' ahead on their own now. The same year a re-organisation took place. William Mohll in affect, handed over his grinding mill and house to Robert Oley.

The peculiar thing was that he advertised the sale. Mohll advertised in the *Newcastle Courant* (16th May, 1724) – "To be sold, a sword grinding mill with about eight acres of ground, a very good head of water situated on the Derwentwater in the County of Durham. Also a very good house etc., all now within possession of William Mohll at Shotley Bridge who will treat with anyone about the same".

Adam Oley, now probably in his late sixties, may have sagely advised his son Robert to buy the mill and house and I feel that all was cut and dried and advertising was merely a formality. As far as we know this grinding mill stood on the site of the 'Cornmill etc., by the bridge' which was sold to the Derwent Co-Operative Flour Mill Society Ltd. in 1872. It is now derelict except for part being used by Roxby Surtees, Building Contractors.

This first purchase of an entire mill and house and land and 'good head of water etc.', showed significantly that at least the swordmakers were fighting back their "own adversities and misfortunes". This too in spite of a slump in army weapons.

In the year 1726 the aged Adam Oley died and strangely enough William Cotesworth died about the same time after being confined to his room – through illness – at Park House, Gateshead.

Round about the first quarter century the Leatons and the Johnsons became established as swordmakers and owners of sword mills. As well as Johnson being a land owner so was Leaton. As I suggested earlier, the sons of the families must have been apprenticed to the craft

and at the forges worked alongside the sons of the swordmakers. Sums of money would be gladly paid by the parents and indentures drawn up. Perhaps £100 or more would change hands. Away from crafts, sons apprenticed to merchants or the professions were charged anything up to £1,000 and the fathers would be lucky to get their son's futures thus assured.

In 1731, a few years after William Cotesworth died a letter sent to Henry Carr, Esquire of Shotley Bridge from a Charles Turner, Staple Inn, London told of the sale of the Company's sword mills of Shotley Bridge to a London client who paid £200 for them. Henry Carr was Cotesworth's son-in-law and two years afterwards the matter was clarified in another letter from Carr to Harvey Ellison, Esquire at Gateshead Park, which was formerly the Cotesworth residence. It appeared that the property (mills, shops, etc.), at Shotley were copyhold in the name of William Cotesworth who was a trustee for the Company. As Ellison had married one daughter of William Cotesworth and Carr had married the other the correspondence was family business having to do with Cotesworth's estate. Never-the-less the letters show that Cotesworth managed the Shotley end of the Company's affairs quite officially and from the early days almost certainly.

We have to imagine the rivalry and the co-operation and the re-organising of the Oley's and Mohll's and the Leaton and Johnsons over the next twenty or so years. There was taking place what we now call recessions. Another Swedish engineer visited Shotley in the year 1754 – A. A. Angerstein – and he reported that the sword works at Shotley Bridge were owned by a 'Mr. Blanchenschep' of Newcastle and that only eight workers remained. The works he saw was of course the Leaton establishment referred to by the *Notes and Queries*, ancestor correspondent whose name was Leaton Blenkinsop. Angerstein also spoke of "the German laziness and arrogance", which had resulted in the dispersal of the community. Their total consumption of steel – he said – from Blackhall Mill now amounted to only four tons annually. Scythes were now being made as well as the famous hollow ground swords.

Is this all then a picture of gloom and defeatism?

Angerstein's opinion about the German "laziness and arrogance" sweepingly includes the reasons for dispersal from Shotley thirty-five years earlier when in 1719 Kalmeter made no such harsh comment. Angerstein's comment must have been his own opinion because reasons for dispersal cannot be nailed down as facts – such as the consumption of steel. As well as mentioning only one sword works and getting the name wrong (the spelling is Swedish), he omitted to state (or notice), that the sword mill he saw was only one of a few and was English, not German. Angerstein was touring the North East and in his report he added that originally the swordmakers numbered about thirty, was reduced to twelve in 1719 (when his countryman Kalmeter inspected the 'works'), and of course, the numbers dwindled to eight in 1754. I have thought seriously that it was possible Shotley Bridge was 'ready' for his visit and he was shown only the Leaton establishment.

As well as the Oley's and Mohll's there was, further down the river at Shotley Grove, the Johnson mill. At the time Angerstein looked and saw and commented these other three were geared for business by all accounts.

The orders for the army however, must have faded. There was revolution in Ireland brewing, there were series of 'little' wars in India. America and Canada were being shaped by battles and incursions and heading for a collision between the French, English and Americans and the native Indians. It seemed we were heading for war with France again, yet the English army was only 20,000 strong.

Perhaps, referring to Angerstein's mentioning of scythes, the English were turning their swords into plough shares. Certainly the Oley's and the Mohll's forged scythes and household carving knives too, for these horn handled knives have been commented upon.

There were two William Oley swordmakers – cousins – in the second half of the eighteenth century, one born in 1736 and the other in 1739. It was the older William (son of Richard Oley, son of Adam Oley), who married Ann Athey of Ryton on 5th February, 1759 and later built Cutler's Hall. The year 1767 comes into the news historically and informs us that William and Nicholas Oley were one sword manufacturing concern apart from others. Thomas Bewick in his memoirs tells us that one of the first jobs he was put to was "etching sword blades for William and Nicholas Oley, sword manufacturers of Shotley Bridge".

Thomas Bewick was the world famous engraver and he began serving his apprenticeship in the year 1767. At the age of fourteen he actually chose his own master (Ralph), from the choice of the brothers Ralph and William Beilby presented to him at Cherryburn.

As I called Hermann Mohll's letter of 1715 an historic one I am again tempted to call Thomas Bewick's choice of a master an historic one. His choice had a bearing – not upon this future fame which was assured anyhow – but upon the train of events which led to the existence of a unique glass tumbler in the boardroom of Wilkinson Sword Ltd., London. It was made by the Beilby's and it can be seen by the inscriptions on the glass that it was presented to William and Ann Oley in the year 1767. On one side of the glass is "Success to the Swordmakers" and on the other side – in the same fashion as upon the wall of Cutler's Hall – there are the initials of William and Ann Oley with the date 1767.

In the year 1787 William completed the building of Cutler's Hall which still stands today (cut up, however, into small cottages). Upon one wall is the plaque with the initials of William and Ann Oley – the same as on the glass but with the date 1787. I wonder if this prosperous successful swordmaker knew he was commemorating the first centenary of his ancestor immigrant Adam Ohlig and his companions?

It has been said, but not substantiated that the Hall served also as a meeting place for guild members. We always have the vague information about guilds. There was, during the early and mid-century a Smith's Guild in Durham City – The Blacksmith's, Lorimer's, Locksmith's, Cutler's, and Bladesmith's Guild – and the descendants of

the Schaffe family may have belonged to it. They moved to Durham early in the same century it seems and we have two generations of the name – Clement Schaffe – acting as wardens of the guild. This was in Framwellgate and it is interesting to find that many small craft industries were concentrated here on the outskirts of Durham City. By the turn of the century the name of Schaffe – like the rest of the settlers except Oley and Mole, had died out.

William and Ann Oley lived in Cutlers Hall for many years, presiding (I imagine), over the several mills and workshops and forges in and about Shotley Bridge.

William died on 13th August, 1810 three days after making his will. He left his sole possessions to his wife and in the event of her death he detailed all that would be left to his three sons – William, Nicholas and Christopher and to his daughter Mary Brown. Her share – in the case of her death – was to pass to her son, William Oley Brown. In the terms of the day and especially within the confines of a village, William Oley left a fortune. Besides houses – which were copyhold premises with workshops (three) together with land bounding up to the mill races, and a butcher's shop as well as other houses (tenanted) bordering on the Plantation he left amounts of money to each. I found the item, 'all my tools except the old bellows, which is to be shared equally' interesting and I also found most interesting, 'as well as the two old shops now in ruin'.

Were these the derelict first sword mills? Mention too is made of a 'Grinding mill and warehouse against the bridge with the ground above'. Was this – as indeed it seems to be – the mill which William Mohll advertised and sold to Robert Oley?

However, at the time of William Oley's death there were families of Mole, working in Shotley Bridge and we find that John Mole and William Mole together with a John Bell witnessed the will.

I doubt now whether the old 'Sword Inn' ever belonged to the Oley's (some say it did). The new name of course, is 'The Crown and Crossed Swords and commemorates the legend – or the truth – that Robert Oley, a nephew of William – early in the nineteenth century travelled to London to win the crown for the best sword in an all England competition. There were by now of course, a few branches of the Oley family and at least two Robert Oley's. In July, 1799 banns of marriage were read out in Ebchester church between Jean Parker of Ebchester and Robert Oley of All Saints' parish, Newcastle; proving the strong ties in Shotley Bridge but the necessity to find work wherever cutlers and smiths were needed.

There was definitely this movement away from Shotley Bridge for work and the Mole's and Oley's became scattered far and wide. From the year 1760 or thereabouts I found that Ohlinger's settled in the Reading and western sectors of Berks. County, Pennsylvania. There are many Ohlinger's there today and also Mohll's, though not so many. There also is an Oley valley (note the anglicising of the name Ohlig), in the eastern part of Reading, Berks County. Being always a demand

there for settlers to work the iron, I think it just as likely that these families came direct from Solingen as from Shotley Bridge.

Ann Oley lived on at Cutler's Hall for a further twenty-one years and died in 1831. This seemed to herald in the final disolution of all swordmaking at Shotley Bridge. For a few more years the Oley's and the Mole's were forging the last sword blades then Robert Mole was attracted to start a business of his own in Birmingham.

Who can blame him? The firm of Wilkinsons of Pall Mall, gunmakers, were entering the field of swordmaking and Birmingham was competing against London for the remaining markets, army and navy swords; presentation and court swords. Birmingham was in the ascendancy.

The firm of Robert Mole and Sons rapidly became famous and many of their swords were sent to South America. They were reputed to have made the costliest sword ever to be made in the city.

There was co-operation with Wilkinson's of Pall Mall. This famous firm was founded in 1772 by Henry Knock and James Wilkinson, from being an apprentice, was taken into partnership. Henry Knock was gunmaker to George III in 1804 and in mid-century the firm was awarded the Royal Warrant of Appointment as Swordmaker to the Prince of Wales. Wilkinson's first numbered blades however, were not until the year 1854. In 1861 Henry Wilkinson (the son of James Wilkinson), died and the firm was now in the hands of John Latham and then, after his death in 1880 his son John Francis Latham took over. In 1898 he was succeeded by his brother Henry Latham. Prior to this – in 1890 Rudolph Kirschbaum of Solingen joined the company – an association which lasted until 1914 when T. H. Randolph succeeded Henry Latham as Chairman and Managing Director. From their first Royal Appointments the firm was always swordmakers to the ruling Sovereign.

However, the significant date which concerns the Shotley Bridge swordmakers was the year 1889 when Wilkinson's absorbed the firm of Robert Mole and Sons. Not until the year 1920 however, was the firm finally taken over. Thus we have seen that the Solingen swordmaking skill which was brought over to Shotley Bridge in the seventeenth century became an integral part of the present Wilkinson Sword (International) Ltd. Today one of the most important Wilkinson Sword Works is in Solingen itself.

This is indeed a 'poetical' return of the swordmaker's back to their birth place.

As we have seen, the whole history of the swordmakers has revolved around two families. The Oley's and the Mole's.

Their history has – to me – been strange. Certainly the strangest episodes have concerned the Mohll family. The first immigrant Hermann Mohll began them with his intriguing smuggling exploits which first led him to be imprisoned then to be mysteriously freed. He was undoubtedly a strong character and courageous in his protection of the immigrant's livelihood. Yet he never could have foreseen, when

he frustrated Den Heyford's attempts to take over the works in the year 1715 that he had set in motion a series of events which led (in the poetical sense), to the return of their swordmaking skills to Solingen. The history of the Oley's has been less spectacular. It has never-the-less been a history of endurance and adaptability to the prevailing conditions. The first immigrant – the bladesmith Adam Oley (Ohlig) – so adapted himself that he reached the status of yeoman. He was reliable and trustworthy enough to administer the estates of two of his deceased companions. When the works were apparently disintergrating and there was a slump between wars he urged his son Robert to buy the mill and land which William Mohll had to sell. His grandson William Oley – the one who built Cutlers Hall – had a prosperous career and *his* grandson Joseph, after being the last man to forge sword blades in the village was for fifty years a notable auctioneer in Shotley Bridge. His grave – alongside the graves of his ancestors – is in Ebchester churchyard and upon the stone is carved – "The Last of the Shotley Bridge Swordmakers".

During the lifetime of Joseph Oley there was a country wide admiration for the quality of Shotley Bridge swords and the legends were avidly repeated. His lifetime spanned nearly a hundred years and searching for books or pamphlets about the swordmakers I found one which was written by the Reverend John Ryan in 1841. The author (who had married a Miss Oley), called his book – which was a slim volume – *The History of Shotley Spa and Vicinity of Shotley Bridge.* Being so close in distance and time to the swordmakers one would expect more than a passing reference to them. I was disappointed, for the author skims over in pleasing prose the usual references to religious persecution and adds no new facts. He waxed enthusiasm about the Spa which was all the go then. The long ago settlers had merely (in a fascinating way of course), provided him with a wife. His book however, became notable for a naive and quite excusable misconception. By reading a faintly written entry in the Ebchester Register for the year 1628 he gave his readers the erroneous idea that the 'refugees' had been at Shotley before then. The words in question were – "Mathias Wrightson Cler" (Cler being short for Clericus, or Clergyman), and the Reverend Ryan had mis-read the word Cler as Oley because it was indistinct. The misconception was at last dispelled and righted by Joseph Oley in 1892 in an interview which was published in the *Newcastle Weekly Courant*. The interviewer was Mr. B. Hurst who was preparing a paper to read out to the Vale of Derwent Naturalist's Club about the swordmakers.

However, this popular and well-known auctioneer of Shotley Bridge – who had served his time to swordmaking early in the century – elicited no inside information about his ancestors. As the writer of the paper said – "their early history can only be looked at through the misty veil of conjecture and tradition".

I was already acquainted with the Memoirs of Thomas Bewick and I read the book again. Today, as never before has come a warm response to the sincerity and calmness of spirit of the famous engraver.

His immortality may yet rest – not upon his engravings which are acknowledged masterpieces but upon the sterling and upright qualities which shine through his memoirs. Again however, I was disappointed to find in his book only the one short comment that, "he etched sword-blades for William and Nicholas Oley".

Still searching, I came across a book of poems by Joshua Lax, a Shotley Bridge poet of the mid-nineteenth century. His book had been published with a long list of subscribers who had stipulated their required numbers of copies. There they were, the Oley's still living at and about Shotley Bridge; each of them taking a few copies. Although I had only probed the surface of their lives I felt I knew them. Christopher Oley – it was he, whose father Christopher had built in the year 1814 – a small methodist chapel in his own garden and which had been enlarged in 1855 to 'the Chapel on the Hillside'. There too was Joseph Oley.

The poems of Joshua Lax read – to me – like very good lyrical poetry. I wasn't surprised that he was famous during last century. At least in the North of England and in the book *The Consett Story*, published by the Consett Lion's Club, a just tribute is paid to him.

Joshua Lax's poem of Shotley Bridge itself, running to about seventeen pages fascinated me with its description of the river Derwent at Shotley Bridge. There it was, in beautiful verse, its rushing sparkling waters – with overhead the trees with their hidden glades behind and their steep mysterious green banks rising to the sun on all sides. His verses covered the village and the Spa and the legends of the country round about. But he surpassed himself in compassionate emotion and inspired poetry when he told the story of the refugee swordmakers. Even as his story again perpetuated the legend of the 'religious persecution', his eloquence satisfied my inmost feelings about the immigrants more than anything I had read.

And so the pattern was set, and had been set by the descendants of the immigrants themselves for reticence.

While the Spa at Shotley was flourishing and the best people were taking the waters around about 1840 a stone's throw away at the river sides and almost unnoticed, the North East's first and last sword-making industry was dying. Only the legends and the misconceptions were to remain.

Today, what we now know about the swordmakers has enhanced rather than lessened the legends about the quality of their blades. Up to about the middle of last century the 'hollow' blades were highly praised and avidly sought after and the fame of the Shotley blades mainly rested upon this quality. From about the time of Thomas Bewick's association with the swordmakers their fame rested upon their 'unbreakable bendibility'. A Shotley Bridge sword was a flexible sword. *The Consett Story* aptly describes them – "The long swords made at Shotley Bridge and used by the British army were of such marvellous temper that the point might be bent back on the hilt with the certainty that when released it becomes as straight as if it had never been bent".

The book is a composite history of Consett with many writers contributing. The section dealing with the history of Consett Iron Company begins be crediting four German refugees who were expert sword smiths with the honour of being the first men to produce steel in the area (Oley ,Vooze, Mole and Bertram).

Consett itself, it states, never became alive until early last century when the Derwent Iron Company was formed in 1840. Then the town which was known as Berry Edge grew quickly into the Consett we now know.

And now that the skill and craftsmanship has gone from Shotley Bridge what is there left?

Nature, as if to hold fast the memory of the early settlers in this industrialised and urbanised age has miraculously preserved the village's main attraction. The sylvan setting of the river scene with the sparkling waters of the Derwent swiftly splashing about the rocks.

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And there is still Cutlers Hall with its small sign – W. A. 1787 – above a door. An imposing inn – 'The Crown and Crossed Swords' reminds us that Robert Oley won the Crown for the sword produced in a competition.

Up the long hill and away from the village is Shotley Bridge Hospital with – on its Hospital Nursing Badge – crossed swords. A few miles away, across a beautiful stretch of country stands Hamsterly Hall where dwells Lord Gort. He talked to me about his grandfather Robert Smith Surtees and the swordmakers. He treasures the Shotley Bridge swords he still has in the Hall.

Back again in the village – a few years before this – I talked with Nicholas Walker Oley not long before he died (in 1964). He had taken down from its hook on his wall – "the last sword tempered by my grandfather in the waters of the Derwent".

'Nicol' Oley – the last of the swordmaker's family to live in the village had never tired of repeating to visitors the story of the sword in the hat. This story (he affirmed), was perfectly true.

Was it also true – as has been said – that the waters of the Derwent, being radio-active, had a peculiar power to temper steel? However much may be written or said about the Shotley Bridge Swordmakers the last word may never be said. . . .