PREFACE

This book owes much to 'The Swordmakers of Shotley Bridge'[1] (long out of print) by the late David Richardson (whose maternal grandmother was an Oley) as well as to 'The German Swordmakers of Shotley Bridge' by David Atkinson[2]. Both told the story of a part of the North-East's past that "Durham in History" believes is well worth reviving. Another, earlier writer[3] described it as: "... an industry which was never of great extent, had a comparatively short life, has long since died out, and, perhaps with one exception [...], has no particular bearing on the industrial development of this country, but which in spite of all this has a most curious and interesting history."

In this book I explore the swordmakers' reasons for coming to Shotley and look at what is known of their life and work – which is precious little before 1703, especially about their way of life. But there are also tales and legends - or are they? And there are mysteries - not the least being that of the hollow blades themselves. All very interesting and intriguing – but how much is fact? Yet, as David Richardson put it: "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...". I do not claim any original revelations, having aimed rather at re-assessing the evidence and raising doubts where necessary, for, despite a desire to "see behind all the available facts", I found I had first to try and determine to some extent what are "facts" and what suppositions, speculations or downright inventions. Perhaps some truth - of sorts - has emerged, perhaps not; there are many who are better qualified than I am to judge on that issue. All I know is, I have enjoyed trying to learn something about the Swordmakers of Shotley Bridge.

Here then is the latest version of the story to emerge, thanks in no small part to the efforts of the two Davids. If I seem to raise more questions than I answer, that may be no bad thing. This book might just spur someone else on before too long to investigate and appraise the story once more, so keeping it alive.

John G Bygate

N.B. In the footnotes books mentioned or quoted are only referred to by their author's surname - or first word of the title if there is no particular author - printed in capitals, as can be seen below. For fuller details of each book please turn to the Bibliography on p.47

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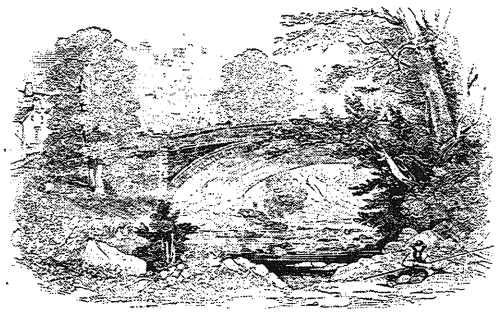
[1] RICHARDSON. I gratefully acknowledge that my Chapter 1 is an unashamed reworking (in abridged form, however) of his opening chapter, since I too found it valuable to consider first why the sword should be so highly prized long after the invention of firearms.

[2] ATKINSON.

[3] JENKINS

1. About Swords



The creation of a good sword blade has always been considered a highly technical achievement, and more. Perhaps no other object associated with Man (apart from fire, possibly) has acquired so much significance or been so revered. It was venerated in almost every country of the world, with the notable exception of China, where "sword worship" was usually an offence. Yet it was probably from China that the sword was introduced to Japan, the land in which it was most venerated. There, any offering to the gods had to have three main attributes – purity, rarity and value; the sword was seen as possessing all of these. This became reflected to the highest degree in its manufacture, use and veneration.

Self-preservation is the prosaic reason for the existence of the sword - but why then has it assumed and maintained such significance? The finished sword was a potent force, but it also had its own special *symbolic* potency throughout the centuries. In warfare (even well into the last century) war-leaders acknowledged defeat by yielding their sword to their conqueror. A dishonoured officer had his sword broken in front of his whole regiment before he was drummed out. On tombstones the knight is rarely portrayed without his sword lying closest by him; it is often even closer to him than his wife's effigy, while any dog that is depicted seems to be there merely to keep his feet warm. And still today many a civic procession is headed by a sword-bearer, an ancient and honoured office.

The days of the sword are gone, and yet still it is with us. Legend and "history", as well as the modern literary genre of fantasy fiction and the computer games of the *'Dungeons and Dragons'* type, abound with tales involving swords. Many indeed have been the swords endowed with various magical powers. It is not far-fetched to suppose that to the average peasant in the Middle Ages a highly capable swordsman could appear to have a "magical" blade around which legends could grow up. (And before you put it down to mere superstition, you should remember that a similar mythology was still to be found long after the Middle Ages - in the "Wild West" of only just over a century ago – though there the gun had replaced the sword.)

The manufacture of swords was an extremely elaborate fusion of (for its time) highly advanced technology and highly developed ritual. One has only to look at the *basic* processes for turning a piece of iron into a flexible steel swordblade to begin to wonder how Man discovered this weapon ... and to appreciate why the swordsmith and his blades became so highly revered.

Steel is an exact alloy of iron and carbon and other elements. The ultimate quality of the metal depends, however, on the hard-won practical knowledge and keen judgement of the swordmaker, honed over many years of hard labour in the craft. In those days there were no scientific instruments to measure accurately the temperatures or the quality of the steel. Tempering was another skilled art encompassing many different subtle processes - one of which definitely did *not* involve plunging the blade straight into any old cold water, as Hollywood often used to portray it! There is a set of instructions for tempering in a Japanese swordmaking manual that includes the following lyrical passages: *'At the final forging, heat the steel until it is the colour of the moon as it begins its journey across the heavens on a June or July evening'*; and: *'After the final forging, plunge the sword into water which has the temperature of water in February or August'*. Consider for a moment the exactitude implied in such instructions, doubtless perfectly understandable to Japanese swordmakers. Could any modern technologist make much of them, I wonder, let alone readily match the art of those craftsmen of one thousand years ago?

The Japanese *samurai* sword is still regarded as the finest ever produced, but extremely good blades were also to be found both in the Middle East (where the Damascus blade[4] was supreme) and in Europe, though here the processes were somewhat different. In design and efficiency the European art of swordmaking lagged well behind the Japanese, only reaching its greatest heights in the fourteenth century. This interestingly enough, was the century in which weapons using gunpowder (another invention in which the Far East was way ahead of the Western world) started to make their appearance.

Naturally, the quality of sword depended on the quality of the steel used. In England, for example, throughout the Middle Ages and beyond, there was only steel of inferior quality, so the English sword industry was never held in high esteem. They used forms of cemented iron- malleable iron with carbon added to it, produced in a furnace. Bars of iron were bedded in charcoal inside earthenware boxes, which were made airtight, brought to red heat and left in the furnace for five days or so. The result was called "blister" steel, as the absorption of the carbon produced blisters on the surface of the bars. From this came "shear" steel, produced by re-heating the bars and forging them under the hammer.

Reckoned among the finest blades the Western World could produce were those from Toledo, famed for their suppleness and durability. The skills needed to produce these qualities were quite possibly acquired through regular contact with Arab swordsmiths working in the Iberian Peninsula at that time. Europeans and Arabs were nominally at war here, but even so there was a great deal of interchange of culture and ideas, as there was at the other end of the Mediterranean during the period of the Crusades[5].

Other blade-making centres in Europe at this time were to be found in Milan and Brescia in Italy, and in Strasburg, Passau and Solingen in Germany. The main German distribution point for such weapons was Cologne, where bladesmiths gathered to sell their wares to the sword-cutlers, who furbished them with hilts, scabbards and, of course, decoration. The most highly prized among these "Cologne" blades were those bearing the mark of the "Flying Fox" [6] (or "Running Wolf"), indicating they had been made at Solingen and thus of the highest quality. This mark was originally granted in 1349 by Archduke Albert to the Guild of Armourers in Passau, but seems by some mysterious process to have been subsequently passed

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[4] *'To damascene' means now to burnish the blade and then wash it with dilute acid, bringing out the patterns of light and shade within the metal itself. In the original damascening process the pattern was designed into the blade by the swordsmith himself, by complicated and precise forging techniques.*

[5] *mostly to the benefit of Europe, it must be added.*

[6] *In Shakespeare's time (and in his plays) the word "fox" would often be used to mean a sword.*

on to the blademakers in Solingen - according to Richardson at least. I do find it hard to believe, however, that an already prestigious manufacturing concern such as the Passau swordsmiths' guild would deign to share such a mark of quality with a competitor. In any case the two towns lie on opposite sides of Germany, which does seem to militate even more against close co-operation. In a more recent publication[7] it is suggested that the swordsmiths of Solingen simply pirated the trade mark ... something we are still familiar with today and, in truth, far more probable!

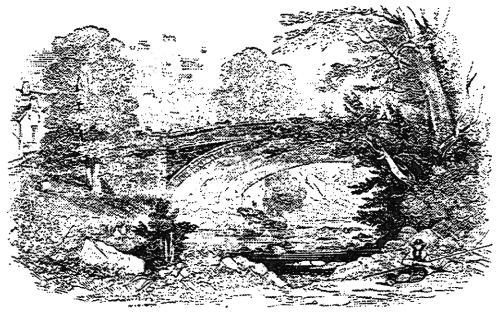
The word *blade* is used here advisedly, for that was the crucial part of the weapon, the part upon which its user depended for his life. The man who fashioned that blade was far more than just a craftsman. He was a Master, ruler of a workshop or of a family of bladesmiths. He could become internationally famous, much sought after by people of the highest quality and, of course, extremely highly rewarded.

One example that can be adduced as pertinent to our story is that of Charles I and the bladesmith Clemens Horn of Solingen. When the young Charles was made Prince of Wales, his father, James I, presented him with a special sword made by Horn. Later, when king, and remembering the quality of this blade, Charles caused a group of bladesmiths from Solingen to be brought over to London. There he set them up as what became known as the 'Hounslow Group', making swords by Royal command, for rich rewards from about 1628 to 1640. That he was able to prise them away from Solingen may indicate that at that time guild rules were not so strictly adhered to as they apparently were later, when the group that is to take centre stage in our story came to the North-East. Or it may simply show that royalty has the power to accomplish almost anything!

The Sword-dealer (17th Century illustration)

[7] *DICTIONARY*, vol. 11, entry on '*Swords*' (p.548)

2. From Solingen...



English swordmaking in the seventeenth century was definitely second-rate - as it always had been - with poor materials and below average swordsmiths. This lack of craftsmanship (somewhat surprising in view of the widely recognised skills of Sheffield's cutlers) was given recognition in a rather dubious manner by the government, in the form of an imposition of strict quotas and heavy duties on blades imported from the Continent - which served only to increase the trade in illegal imports.

The first "first-class" swordsmiths were brought from Solingen in Germany to England early in the seventeenth century, under royal patronage (see Chapter 1). There was no apparent objection from the German sword-makers guilds, despite the strong oaths of allegiance the men had had to swear to the guild, and no hint of persecution, religious or otherwise. Why then should so much mystery, suspicion, supposition and legend surround the arrival in this country in 1687 of another such band of swordsmiths from Solingen? And what had drawn them here in the first place? It was certainly not royal persuasion on this occasion.

By this time the Hounslow Group was no longer in existence, having ceased working for the king, by force of circumstances, in 1640. Its original members would almost certainly be dead or doddering. It does appear possible, though, that sons of theirs were still around, two of whom - Henry Hoppie and Peter English[8] - petitioned Charles II in 1762 for a revival of royal patronage. They pointed out that Charles I had caused the group specially to be brought over to manufacture swords for him; that Cromwell had seized their mills; that as a result they were out of work; and that they were still the only people in England who knew the secrets of their art. The petition seems to have fallen on deaf ears, however, for no more is heard of the group. And no Englishman gained knowledge of the craft secrets - of that we can be sure, for in that case there would have been no need to import the group occupying our attention.

So there was no question of royal patronage bringing over this new group from Solingen. We shall be looking shortly at an alternative possibility - namely that there were other parties interested in acquiring their skills - but first let us examine the commonly accepted theory that the swordmakers were driven from their homeland to England by religious persecution.

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[8] Henry was presumably the son of Johannes Hoppie (or Hoppe) of the original Hounslow Group. Peter may have been from a German family which had anglicised its name - or an Englishman who had joined the remnants of the group to learn some of their secrets – in which he almost certainly failed.

In his book[9] Revd John Ryan cites Robert Surtees[10], commenting that *"in his highly valuable work he draws from them* [i.e. inscriptions visible in 1820] *certain conclusions not deducible from the inscriptions that remain* [in 1840], *though his conclusions are generally correct, and correspond to the uniform traditions received among the German descendants"*. Like Ryan, I reproduce most of the paragraph in question (to quote Ryan): *"...that we may inquire whether his statements altogether agree with some well-known facts"*.

"At Shotley Bridge a colony of German sword cutlers, who fled from their own country for the sake of religious liberty, established themselves about the reign of King William. These quiet settlers, who brought with them the habits of industry, and moral and religious principle, easily mingled with the children of the dale, and forgot the language of their forefathers. [...] *Above the doorway of two decent houses there are German inscriptions (copied also into divers huge family Bibles) attesting the cause which drove these emigrants from their 'faderland'* [sic], *to seek, on the green brink of the Darwent*[11], *protection under the equal law of that country which has ever proved an ark of refuge to the victims of religious or political persecution."*[12]

Ryan goes on to say that in the 1680s a terrible persecution was being waged on the Continent against Protestants, especially in the Low Countries and Germany. It is true that in 1685 Louis XIV of France had revoked the Edict of Nantes - which had guaranteed freedom of worship to all - and re-imposed the Roman Catholic faith, leading to a hasty exodus of Huguenots (French Protestants) to England and to other non-Catholic countries. Louis had also granted himself the "right" to invade Protestant Germany in order to restore Catholicism there, but there is no evidence whatsoever that any such invasion was ever actually planned, let alone attempted. There seems to be nothing, then, to support the theory of religious persecution so often put forward. As to the inscriptions, we shall return to them later.

But there is evidence for a far more realistic reason for coming to England. In 1754, during a visit to Shotley, a Swedish engineer and official of the Swedish "Iron Bureau", Reinhold R Angerstein, was told by one of the men they had originally been brought over by the English government. Then, in 1831 a Newcastle man visiting the site heard from swordsmiths still there: *"their forefathers were brought over by a company of gentlemen with the licence of the government as a commercial speculation"*. Most interesting of all, putting one immediately in mind of Charles I, there is still in existence a petition to James II early in 1688 for a patent granting a group of merchants the monopoly in the manufacture of *"hollow sword blades"*. In it is the following: *"At great expense they have brought foreign workers to England and they propose to make use of a mill unlike any other hitherto seen in His Majesty's dominions"*. The businessmen in question were John Sandford (or Sanford) and John Bell of Newcastle (probably), and Peter Justice and John Parsons of London[13].

Ryan also states his belief that the party of Germans first made their way in hope to London, where sadly they found no opportunities for employment whatsoever. So (following some mysterious inner conviction, it would appear) they took themselves off to North-East England

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[9] *RYAN*; all quotations used in this book are taken from chapter 4 *"The Germans"*.

[10] SURTEES

[11] *sic;* by the 1840s the spelling (and presumably pronunciation) had reverted to *Derwent*.

[12] He also adds : *"Macpherson, in his "*Annals of Commerce" *states ' that on the breaking out of King William's war against France, in the year 1689, a company of sword-cutlers, was erected by patent in the county of Cumberland and the adjacent counties'."*

[13] Richardson says his researches into an lease agreement by the three (dated 1688; now in the Tyne & Wear Archives), brought him to the conclusion that they were *"gentlemen of substance embarking upon a promising gamble"*. The lease was for a parcel of land by the river on the Shotley Hall estate.

– merely on the off-chance of better prospects in that unknown region. Having got there, they found no better prospects on Tyneside, so they looked further afield ... and "discovered", or stumbled across, the hidden refuge of Shotley Bridge - by pure chance.

The evidence now available, however, shows this to be a fairy-tale (much like the one which tells of how the monks dragging St Cuthbert's body around the countryside were led to an "unknown" place called Dunholm, the final resting place of the saint). For a start, it is very certain the Germans would know *nothing* about the North-East region – just as today quite a number of people who have lived all their lives in other parts of England still have little or no idea where Consett is ... let alone Shotley Bridge. (And it is still necessary, as I know from personal experience, to explain to many a Continental roughly where *Durham County* lies ..."south of Edinburgh".) It is clear, therefore, that they could not choose where to settle but that they were actually *directed* to their new place of work.

It was a location where they would be out of sight of any prying competitors; with water of the right quality for tempering the blades[14] and of sufficient force to power the hammers and other machinery; with any amount of timber at hand to fuel the furnaces; and, moreover, close enough to a port (Newcastle) from which to ship their wares out. And it would obviously be Sandford and Bell – not the swordmakers – who would know of just such a site on the banks of the River Derwent, and it would be they who would prepare it for their new employees.

We can see now why the Germans came to Shotley – but we have not disposed of the question of how they were persuaded to leave home in the first place. It was not religious persecution, that we know; economic reasons seem much more probable.

Firearms were steadily superseding swords by now, so demand would be declining. Moreover, as in any industry - then or now – increasing mechanisation would mean reduced manpower needs. There is a record of a dispute – not the first by any means – within the ranks of the swordmakers in Solingen, in the same year as the group left for England, where hand-forgers violently objected to their replacement by machines; machines which automatically produced, at a fraction of the cost and at a much faster rate, the "hollow sword blades" for which Solingen was famous. (The guilds, like the later Luddites here in England, tried their best to get these machines banned but they had little or no power by this time.) Alternatively – or, more probably, simultaneously – there may well have been just too many swordsmiths in Solingen for all of them to maintain a decent standard of living.

So it is no wonder the group finally decided to escape. It seems the instigator of this move was one Clemens Hohemann, but how he came to forge links with the North-East merchants is still a mystery. I can only speculate here. Either the Englishmen, having gone to Solingen to sound out the possibilities of enticing away a swordsmith or two, were quietly put onto Hohemann as a likely "defector" - or they had been in touch with survivors of the Hounslow Group who still had contacts back in Solingen and so "knew a thing or two" (or a name or two). Another theoretical possibility is that, disillusioned by events, individual swordsmiths (including perhaps Hohemann?) had already crossed the Channel in the hope of repeating the success of the Hounslow Group, to be picked up by Sandford's London partners.

But go they did, probably in summer, when the seas were calmer. Exactly by what route we do not know, except that they almost certainly crossed from Rotterdam. Richardson envisages a journey of about two hundred kilometres across country with packhorses and perhaps wagons, travelling in small groups and at different times so as to avoid suspicion.

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[14] Richardson also makes a rather intriguing comment: *"Legend has it that the water, being particularly soft and radio-active, attracted the Germans to settle at Shotley Bridge." That* sort of advanced technology would most certainly be highly prized in those days!

About this, however, I have some reservations - but they do depend to some extent on evidence from an event which only took place almost a year after the group had quit Solingen, namely the tenor of the court indictment of 1688 (see below).

The first reservation must be considered in the light of the binding oath a swordsmith had to take; namely, to remain in Solingen under the aegis (and the eye) of the Guild. (But remember, this does not seem to have applied to the Hounslow Group.) Any family or group departing from the town with a large amount of possessions - which must have included tools of the trade - on packhorses or on wagons, would surely have aroused some suspicion at the very least. Even smuggling out small amounts of effects at regular or even irregular intervals would have been equally noticeable as a change in the family routine. Several families doing the same thing at roughly the same time would have been just too obvious.

Then, why must the journey have been made *overland*? Solingen is fairly close to the River Rhine, and goods must surely have gone, for example, to the market at Cologne by water as well as by land; to send goods *downstream,* towards the Low Countries -and the port of Rotterdam - would unquestionably have been far quicker by boat than by wagon. Moreover it would certainly have attracted much less attention if the defecting swordsmiths had sent their various possessions by water in packs ostensibly containing swords. This would also have meant that they and their families could have left the town more openly, unencumbered by luggage, on some plausible pretext. Had they done things in this way, it would have made a fine tale to tell in future years, and a superb one to form the basis of a novel or even a film; but, as I have to say repeatedly, this can only be speculation.

How ever they managed their escape, they would still have problems and decisions to face, one being the total forfeiture of any possessions and properties left behind. They would also have to break several guild oaths, especially the Oath of Residence binding them to Solingen. Finally, were their jobs in England assured, and would the authorities let them settle?

If we think back to Clemens Horn and his group, sixty years earlier, we recall there were no such problems. So again, we can only speculate why the situation was so different for these new emigrants. There were certainly pressures on them, from various bodies in Solingen - it could almost be called "persecution - if seen in the light of the Hounslow Group's experiences - and it all boiled over the year after their departure. On 26 September 1688 a Solingen court issued the following acrimonious indictment against Hohemann and his associates:

> We Wilhelm Wassman, judge of the court of Solingen, Matheus Wundes, Wilhelm Dinger, Wilhelm Vass, Johann Gansstand, Peter Voess, and all the lay assessors of the town and parish of Solingen, having recognised that over a year ago Clemens Hohemann did entice away to the Kingdom of England various craftsmen here resident and bound by the district court, and furthermore did incite them to abscond; and as the infamy has become widely known and has been recognised as punishable in the highest degree, let him, Clemens Hohemann, be charged here as a culpable seducer, together with all the persons involved - Hermann Moll, Abraham Moll, Johannes Clauberg, Clemens' son from Widdart, Clemens Knechtgen, Peter Tiergarden, Johannes Voes, Vurckelt, Johannes Voes [? see below], Adolph Kratz, Joann Wupper from Feld, Heinrich Wupper, Theiss's son, Johannes Wupper, Johannes' son from Hesson, Arnd Wupper, Heinrich Keuler, Adam Ohlig's son, Johannes Hartcop, Engel Schimmelbusch and Peter Kayser, Peter's son.

Quite unambiguous and detailed and in order, it seems. On closer inspection, however, this document presents us with a number of problems, mainly concerning the count of those indicted. Richardson states that there are nineteen people on the list, but a careful examination could increase or decrease that number – or perhaps not![15]

To begin with, the name "*Johannes Voes*" appears twice; so is he one person mistakenly listed twice or two separate individuals? And is there any connection between him and the "*Peter Voess*" listed among the members of the court [16]? (Remember, orthography was still far from standard in those days, and the punctuation of the document tends to confuse rather than clarify.)

If we take it that "*Adam Ohlig's son*" refers to someone not directly named (it is unlikely he is called "*Heinrich Keuler*"), what then are we to make of the entries "*Clemens' son from Widdart*" and "*Theiss's son*"? Is "*Johann Clauberg*" the same person as "*Clemens' son from Widdart*" or someone else? Is then the person "*from Widdart*" the son of Clemens Knechtgen, of Clemens Hohemann or of another unidentified Clemens? Is "*Theiss's son*" the same person as "*Heinrich Wupper*" (listed immediately before him) or another man? If he is Heinrich Wupper, then does "*Johannes' son from Hesson*" mean son of Johannes Wupper?

And finally, though it is only a minor point, it is hard to understand why the name "*Vurckelt*" appears without a first name. Either his name would be on guild records or someone in the town would surely know him – especially if, as seems probable, he was a practising sword-maker.

So, all in all, the document is not quite as clear and as helpful as it might at first seem.

Be all that as it may, this indictment (copies of which would have been posted on the houses of all the offenders' relatives in the town) obliged those named – for the first, second, third and final time – to return to their accustomed places of employment within the next six weeks and three days - or else:

> *... produce firm reasons for your refusal and defection, either personally or have at your disposal sufficient powers of attorney. Warning – do these things, for, if you do not, immediately after the expiry of the appointed time, upon further representations being legally made to proceed against you, such proceedings will hereupon be taken, according to the law.*

The "proceedings ... according to the law" that could be taken included – besides seizure of their properties and possessions[17] – depriving any children left behind of their rights and privileges (making them beggars, presumably) and ensuring that the miscreants, if discovered in or around Solingen, would be "punished on their bodies" (though this phrase is not defined; yet again we are left to use our own imagination). Furthermore, anyone suspected of or actually caught providing aid to the defectors would also be punished. What the practical

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[15] One (unknown) source adds a Lutheran minister to the count; this was reported in the archival material from the Joicey Museum exhibition but no source was given. As far as I know it is mentioned nowhere else.

[16] This is one of several instances where the lack of standardised spelling at that time can cause chaos and uncertainty. And irregular punctuation does not help.

[17] Yet SURTEES (p.387) quotes from a document of 28.April 1721 wherein John Voes, of Shotley Bridge, sword-grinder , gives *"... his estate in Germany, called by the name of Anffemhewmann, being in the county of Dusseldorf, to be disposed of by his brother, Johannes Smithart, of Solling ..."*. This seems to indicate that the properties were not seized after all. So we have to wonder (yet again) if the indictment was ever enforced?

results of this sentence were, we (again) do not know. Those in question were long gone, but we have to wonder if any relatives remaining in Solingen did suffer, and exactly how severe their punishment was.

Incidentally, the reason for this sudden, violent outburst on the part of the Solingen authorities is probably not too hard to divine – especially since at least two of those named as members of the court (Dinger and Wundes) are known to have also been among the leading members of the guild of swordsmiths in Solingen at the time. So it could very well be that the realisation that, due to complacency and carelessness, the guild masters had allowed so many craftsmen to slip away from under their noses, along with families and tools of the trade, not to mention the *secrets* of the trade, had set them up as the laughing-stock of the region. To try to restore some credibility to themselves they would naturally react with a heavy hand – far more so than if it had been a case of one or two isolated defectors – even though their actions would be potentially futile. The targets of their anger were several hundred kilometres away, by now well established in their new homes and in their new trade – that of English swordmakers.

The Arms of Solingen