

**A HANDBOOK OF ART SMITHING,
FOR THE USE OF PRACTICAL
SMITHS, DESIGNERS OF
IRONWORK, TECHNICAL AND
ART SCHOOLS, ARCHITECTS, ETC.**

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A handbook of art smithing, for the use of practical smiths, designers of ironwork, technical and art schools, architects, etc. by Franz Sales Meyer

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FRANZ SALES MEYER

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INTRODUCTION TO THE ENGLISH EDITION.

Professor Franz Sales Meyer's previous works on the Science of Ornament, of which his "Handbook of Ornament", in the best known in this country, entitle his views and writings to respectful attention, though his knowledge of smith-craft is theoretical rather than practical. This, to one less highly trained, would have proved a serious difficulty, but brought up from his cradle in an atmosphere of technical education, he has made himself thoroughly acquainted with the *métier* of which he treats. Passing from the Teachers Training College at Meersburg to the Technical Academy at Karlsruhe, he has been successively appointed teacher in the Art Trade School and the Building Trade School, and finally, in 1879 at the age of thirty, Professor at that establishment. He has also produced as joint author, handbooks treating of metal work, cabinet work, carpentering, and painting.

Of these, the present work is, to English craftsmen, undoubtedly the most interesting.

Addressed especially to art workmen and designers, though not confined exclusively to German examples, the work is written from the German standpoint, which differs in many respects from the English. The actual technical operations are of necessity the same, but the tools differ somewhat.* A large part of the book and of the illustrations is devoted to modern German productions and design, and in view of the somewhat severe competition the English smith is experiencing, and must anticipate in the future from his *confrères* on the Rhine, this section is not without its special interest.

The ironworking arts and crafts have been at all times most earnestly pursued in Germany. The earliest contact of Roman armies with the Teutonic nations found them well equipped with iron for war, and throughout the middle-ages, references to the steel weapons of Cologne, Passau, Innsbruck and other centres of manufacture are scarcely disguised by the quaint spelling. A little later we find

* Mr. John J. Holtzapffel has kindly revised this section of the book which must greatly enhance its value to English readers.

great quantities of "Almagne rivetts", bills, &c., entered in the inventories of military stores in this country; and Henry VIII settled German workmen in Southwark and Greenwich, when endeavouring to revive the armourers craft in England. Finally we now know that the most costly suits of armour in the Paris, Madrid, and Vienna collections were produced in Augsburg, Nuremberg and Munich, whose master armourers achieved world-wide celebrity. The most distinguished artists of the day, Woblgemuth, Holbein, Dürer, Michich, Schwarz, Hirschvogel, Flötner, Aldegrever, furnished the designs. To the arts of embossing and encrusting armour with precious metals, known to antiquity, these masters added engraving and etching the steel, besides practising those of painting, tinning, and gilding iron known to Theophilus. Probably too, the art of iron casting was re-discovered in Germany, for cannon of the largest calibre were being cast at Erfurt long before the close of the 14th century. The art of drawing wire is also credited to one Rudolf of Nuremberg, who introduced it soon after the year 1300. It is certain that German ironworkers were peculiarly expert and painstaking before, as well as after the Renaissance, and among the marvels they produced, besides the exquisite shields, sword-hilts and pierced horse-muzzles, the beautiful work put into domestic utensils, tools, instruments of torture even, strong boxes, statuettes carved from the solid, and such *tours-de-force* as the throne presented to Rudolph II by the Augsburgers in 1574, now in this country, are most remarkable.

It is not however only the beauty of the productions themselves that makes German ironwork so peculiarly worthy of study. While in England, France, Spain, Italy, and the Low Countries, the iron industries ebbed and flowed with changing fortunes, so that they were at times in full and active swing, and at other times dormant almost to the verge of extinction: they did not languish in Germany from the 13th century, and enjoyed continued and boundless prosperity without a break, except during the 30 years war, almost until the invasions of the first Napoleon. Nor were the opportunities for development afforded to German iron industries limited to time alone: they had space and the advantages of racial divergencies as well, for it appears that blacksmithing at least was practised ubiquitously in the land from the Rhine to the farthest limits of Prussia and Austria, and from the confines of Denmark to the Italian frontier.

Of the earlier styles of German ironwork we know little. Of the Romanesque doors which have preserved their iron hinges and guards, some resemble in a remarkable manner the rude contemporary work of central France, whilst others imitate the more carefully designed swaged work of Paris. It is only in the 13th century that blacksmithing begins to exhibit any independent characteristics in Germany. At Marburg, Magdeburg, and many other places we meet with rather elegant branching strap-work on 13th century doors, ending in singular little fleur-de-lis and vine leaves still derived, but diverging considerably, from the French. The divergence continued during the next two centuries and resulted in some rich and characteristic foliated ornament, always based on the vine, mingled with fleur-de-lis and tracery forms. After nearly two centuries, and on the eve of the Renaissance, a new style of work appears, at first apparently in Cologne, based on the thistle. The origin of this may safely be assigned to the singular renown achieved by the Matsys family of smiths of Louvain, a specimen of whose work exists in the celebrated Antwerp well-cover. The thistly look of the foliage in this example is well rendered in Fig. 46 and 48, and some of the corresponding German thistle designs face it on page 62, and appear in the lantern, figure 179. Mixed thistle and tracery designs held the field until supplanted by Renaissance ornament.

The Renaissance work is fully illustrated by Prof. Meyer, and it is at this period more especially that Germany presents a perfectly unique field for the study of the ironworkers crafts. It is in the first place to be observed that the development, of blacksmithing at least, was entirely left in the hands of the workmen themselves. Except as designers of armour, artists of note did not meddle with the ironworker, the architects even, giving the smiths a free hand and apparently imposing no conditions as to design. There were no factories, and the nearest approach perhaps to any teaching school was the concert of a master smith with his numerous apprentices and assistants. Of designers of ironwork, as designers there were probably none, the master smith setting the task and directing the work on strictly traditional lines, with such modifications only as the moment suggested. The work may, in most cases, have been produced without drawings, for ironwork designs followed certain definite lines of precedent, which might be modified within limits, but were not de-

parted from. Thus Grilles were often worked from a threaded centre of more or less complexity, with the loose ends of bars finishing in traditional floriated ornament. Progress was mainly if not wholly confined to increasing the technical difficulties to be overcome by the smith. Not an illustration or drawing of any scrap of blacksmith's work, drawn for its own sake, has come down to us; a fact most remarkable in an age so prolific in studies and designs for the work of the gold and silver smith. Those among us who desire to see this state of things reestablished among the craftsmen of the present day, cannot do better than study attentively the progressive development of German ironworking, from the close of the mediæval period until the style known as Baroque began to change the current of smithing.

The new style came from across the French frontier and spread eventually over a large part, if not the whole of Germany, changing the character of the design and modifying considerably all the traditions of the smith's craft. It was however but a mere wave of fashion compared to the overwhelming change wrought by the Rococo, which followed and swept away every landmark of the smith. The lilies and passion-flowers, the tricky interlacings, threadles and spirals which had been his peculiar pride, and the round bar itself disappeared at once, only to reappear in our own times. Highly trained professional designers became indispensable, numbers of pattern books were published in imitation of the French, and the smith as creator and designer became extinct. The individual fancy of the workman in Germany could in future only be indulged, if at all, to the most limited extent. The designs were essentially French, but modified in the directions both of extra richness and less restraint. Though the skill and smithcraft in the finer examples is simply superb, the names of the smith's who produced them are never, unless accidentally, recorded. Whether this complete revolution was for good or ill is a debatable question.

29 Albert Embankment

London, S. E., March, 1896.

J. STARKIE GARDNER.