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BRITANNIA METAL

by EDWARD PERRY

RITANNIA metal, a leadless alloy displaying a finer lustre than the pewter which it substituted, became silver-like in its character from 1820 when new methods of manu- made it possible to abandon tional shapes for others resembling and Sheffield plate. The pewterers selves, increasing profits at the omers' expense hastened their virtual ction by adding more and more lead ir alloy until the harmful proportion per cent. might be present. Not 1907 did it become illegal to issue s made of such dangerous metal : aximum of 10 per cent. lead was fied.

he death-knell of pewter sounded in when John Vickers of Sheffield ht for five shillings a formula for ng a soft tin alloy, so closely resem- silver in appearance that the casual rver would never differentiate be- n the two after they had been made nd engraved. So highly did Vickers e his bargain that he at once set up a kshop to manufacture "Vickers White al" goods, thus laying the founda- of an industry estimated to employ e than five thousand people three- rters of a century later.

his new alloy, consisting principally n with the addition of small quantities ntimony, copper and bismuth, was ibly the "new metal in imitation of r, called Silvorum", manufactured 1652 by Major Purling whom the terers' Company immediately sup- sed at a cost to themselves of . 4s. 9d. The all-powerful Pewterers' pany for centuries used every en- our to stifle competition.

hn Vickers' first appearance in the ctories of Sheffield was delayed until 7 when he was described as a "Maker its and Stirrups plated with White al. He also makes measures, tea-pots, er frames, salt spoons, etc., of the e metal." His output also included r basins, cream jugs, tobacco boxes, beakers. The ware made from this e metal was finely constructed and raved, following the shapes of con- porary Sheffield plate. Examples are rare and always impressed beneath the name I. VICKERS in small tals.

Shortly after 1790 Vickers omitted the copper and bismuth from his alloy, possibly owing to war-time shortage of such metals. The resulting alloy, harder, coarser textured, and less silver-like than the original Vickers metal was commercialised as Britannia metal. The absence of lead in its composition combined with its toughness made the serviceable metal a distinct advance on the pewter which it eventually succeeded. When polished this silvery-white metal faintly tinged with blue, became highly lustrous. Formulae for Britannia metal became countless, but the ingredients approximated 90 per cent. tin and 10 per cent. antimony. Antimony is a brittle metal of a bluish white colour which does not tarnish or rust and was obtained principally from China.

Britannia metal ingots were prepared in two qualities: for casting and for rolling. That intended for rolling contained an increased percentage of antimony. Vast quantities of goods were manufactured either by casting in moulds, stamping with dies, or spinning in the lathe.

Complicated articles such as ornamental candlesticks, tea-pot handles, feet, decorations and so on were cast in brass moulds. These were composed of numerous sections which fitted together and united firmly by surrounding them with plaster of paris. This was easily broken off after casting. Such moulds were very expensive: for making a handsome tea-pot complete with spout, legs, and relief ornaments might require a mould consisting of eighteen parts and costing as much as £80. The majority of tea-pots were however, cast in pieces and built up by soldering. Plates, dishes and other simple pieces were cast as a single entity.

Some ingots were rolled into sheets of suitable gauge by being passed repeatedly between heavy polished-steel pressure rollers. This, in about 1840, cost 1s. 4d. lb. This gauge metal was preferred because the metal was cheaper and labour costs lower. Hollow-ware was produced from sheets by spinning in the lathe, a speedy process by which fine thin discs of rolled metal were made to take any desired convex or globular form.

This was effected by the metal disc being placed against a shaped wooden block or chuck which revolved in a lathe. By means of the pressure of a steel tool or burnisher, the thin plate was pressed against the wooden form, finally taking the required shape. When in two or more parts they were assembled by tin soldering carried out with the aid of a blow-pipe. Decorative mounts were similarly attached.

Articles whether cast or spun in the lathe were trimmed and rubbed smooth by means of a fine brownish sand obtained from the River Trent, a piece of leather-covered wood, and finally polished with tripoli. The parts in relief, such as applied ornament, knobs or handles on covers were burnished with steel tools or silver-smiths' blood stones. After 1845 Britannia metal might be electro-plated and polished, such ware being extremely difficult to distinguish from silver.

Careful inspection of spun Britannia metal shows where sheet sections were soldered, usually at the handle junction. Such ware was also strengthened and given a more finished appearance by spinning over the edges of rims and bases: on cast ware such edges are solid. Fancy feet and handles on tea-pots, water-jugs, milk jugs and so on are features of Britannia metal distinguishing it from pewter. The surfaces of Britannia metal and good quality pewter made during the same period now greatly resemble each other, even when cleaned, with the result that much Britannia metal is mistakenly classed as pewter. The constructional methods of pewter were, however, entirely different.

Britannia metal was used for a wide range of table ware among those who could not afford either silver or Sheffield plate, and included tea and coffee services, tea canisters, cruet frames, dish covers, spoons, as well as tankards, beakers, measures and so on. None of this was engraved in the style of Sheffield plate or the earlier Vickers metal. Until 1820, Britannia metal tea-pots tended to be small owing to limitation of manufacturing processes. Sections for building hollow-ware were chiefly produced by drop stamping which enabled bodies to be inexpensively decorated with designs in relief.

Candlesticks were copied from contemporary Sheffield plate patterns and those platers engaged also in the

(*Continued on page* 32.)

BRITANNIA METAL

;ontinued from page 26)

ritannia metal trade might use the me dies for both metals. A consider- ɔle trade was carried out in Sheffield / fitting earthenware and stoneware ·inking vessels with Britannia metal ds, many of which bear the mark of roadhurst and Atkin.

Tremendous quantities of Britannia ɛetal goods were being exported by ;40 as well as a considerable home ade being carried on. In Sheffield iere were seven factories : Birmingham ad twelve. Preparation of ingots for ie rolling mills appears to have been a heffield monopoly at this date. Names : trade marks were impressed upon iuch good quality Britannia metal. ɔhn Vickers was responsible for a great roportion of the output until 1806 and l of this was marked I. VICKERS in nall Roman capitals. The same mark 'as continued until 1817 when the letters 'ere enlarged. After 1837 the small apitals were reverted to by Vickers' ıccessors, Rutherford, Stacy, West and :ompany, the words BRITANNIA LACE SHEFFIELD added below.

James Dixon, established in Sheffield 806, made some of the finest Britannia ietal impressed with the trumpet and anner mark. This firm never manu- ıctured pewter, yet so close is the esemblance today that early examples nd their way into pewter collections.

Other makers who marked their Britan- ıia ware included Kirby, Smith & :ompany, from 1797 ; William Holds- vorth, from 1800 ; John Parker from 821 ; J. Wolstenholme, from 1828 ; P. \shberry, from 1830 ; Broadhead & \tkin (eight crossed arrows) from about 832. Matthew Boulton of Birmingham nade Britannia metal between 1795 and 809. When a catalogue number or the vord SHEFFIELD is found impressed, he piece is Britannia metal and not ɔewter.

The pewterers, in an ineffectual effort o compete with their rivals began to vork with what they called plate pewter. This, composed of 89·3 per cent. tin, ··14 per cent. antimony, 1·78 bismuth, ınd 1·78 copper, and rolled into sheets, vas little more than Britannia metal.

Many were the variations of Britannia netal marketed under different names uch as argentine plate, usually cast in noulds, and consisting of 85·5 per cent. in and 14·5 per cent. antimony ; Queen's netal, 100 parts tin, 8 antimony, 4 copper, bismuth ; Ashberry's metal for casting vhich contained 77·5 per cent. tin, 20 per cent. antimony, 2·5 per cent. copper.

Charles II tankard, London 1682. Maker's mark I.C. Bracher and Sydenham, Reading.

ANTIQUE DEALERS' FAIR

THE tenth Antique Dealers' Fair and Exhibition is being held at Grosvenor House, June 8th-23rd. Here is to be seen a magnificent collection of antiques, each of which has received the approval of a committee of experts.

The handsome silver tankard illustrated above is clearly hall-marked on body and lid. Included also in the Bracher and Sydenham exhibit is an uncommon four-piece silver tea-set, by John Robins, London 1801. The body of each piece, raised on four squat feet, is square on plan, with slightly convex sides.

English silver, as well as comprehensive ranges of fine porcelain and 18th century flint-glass, is exhibited by Asprey and Company Ltd., New Bond Street.

Ronald Lee of Richmond exhibits a wide range of English furniture in which fine craftsmanship is a feature. Chairs of walnut and mahogany, rich in colour and handsome of grain, are specially notable.

Norman Adams of Hans Road, some of whose chairs are illustrated elsewhere in this issue of *Antiques Review*, exhibits chairs of outstanding merit in association with other English furniture.

Picture collectors will find much of interest in the exhibits of The Leger Galleries, of Old Bond Street.

Frank T. Sabin, who has opened spacious new galleries at 24, Rutland Gate, S.W.7, exhibits an usual selection of sporting pictures.

The major problem of packing and despatching antiques bought at the Fair is adequately and comprehensively dealt with by Gander and White Ltd., of 55, Great Ormond Street, W.C.1. Long experience has enabled them to develop a complete service.

OLD ENGLISH CHINTZ

(*Continued from page* 20)

pane, chair coverings, cushions, and window curtains. Hepplewhite recommended printed cottons for upholstery.

Late in the century decorations took a neo-classic turn, the subjects being those of classic mythology. But there was also a considerable vogue, towards 1800, for a bronze ground covered with wild flowers and foliage. The Regency period brought classic figure compositions set in medallions and lozenges interspersed with classic motifs on diapered backgrounds. During the George IV period came hunting scenes and similar naturalistic designs treated in the manner of sporting prints.

Technical progress was steady in the field of cotton printing during the first half of the 19th century. In 1809, when Widmer, the head of a French research laboratory, obtained, for the first time in the history of textile printing, a permanent green dye, the secret was exchanged for the drawings of an English copper-plate roller machine. The feature of this machine was that it could print three shades of a single colour in one operation, by varying the depth of the etched lines. The permanent green dye is very important in the dating of chintzes. In prints made before 1809 green was produced by pencilling indigo blue by hand over yellow, usually resulting in blurred outlines.

During the early 1820's more roundly modelled three-dimensional effects were produced with printed designs in which stippling took the place of hatching lines to produce dark, mottled shadows. Naturalistic floral designs soon appeared in this technique.

From about 1800 chintz manufacture took shape as an important industry with Manchester as its centre. Gradually the number of rollers used to produce a single pattern was increased. The use of five rollers, for instance, made it possible to print in one operation black and three shades each of four colours, making a total of thirteen variations of tint which could be further augmented by superimposing one colour over another. By this method a rose could appear modelled in the round with the delicacy and detail of an oil painting.

Until about 1850 the surface of English chintz was smoothly polished, but was quite flexible and did not crackle. This polish was produced by pressure from a calendering machine, and not by the later starch and size process. This glaze endured several washings before it gradually disappeared.