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BALCONY RAILINGS IN KENT

By D. STEPHENSON, B.Sc., F.P.S.

THE ironwork to be described will be restricted to that made and erected or designed near the end of the eighteenth century and during the first half of the nineteenth century. It will include window-guards, area- and step-railings since cast-iron panels could conveniently be used for all these purposes.

INTRODUCTION

The kind of iron most used on houses during the eighteenth century was wrought iron, so called because it is ductile and can easily be shaped by hammering whilst hot. It was the material used by the blacksmith: forges were numerous in the eighteenth century and domestic ironwork was frequently of local manufacture. Towards the end of the century exterior domestic cast ironwork began to supplant the individual craftsmanship of the blacksmith. By this time, cast iron could be made in vast quantities in the blast furnaces which had been developed using coke instead of charcoal.¹

Unlike wrought iron, cast iron is brittle; it cannot be shaped by hammering even when hot: rather than bend it breaks. It is not unusual to see cast-iron rails from which pieces have been broken away, whereas wrought iron balconies often have scrolls or uprights which have been deformed. Where breakages in wrought iron do occur they are often in places where welds have been weak. Designers would often embellish their wrought ironwork by the addition of ornament, in the form of foliage or medallions, which might be made of other materials such as brass or lead and, frequently, cast iron. Such additions are comparatively easily lost. Cast iron is more resistant to corrosion than wrought iron; it rusts comparatively slowly in sea-water. It is admirably suited for the mass-production of articles to a fixed pattern. Cast-iron articles were made by foundrymen who poured molten cast iron into suitable moulds, frequently made in sand-mixtures on the foundry floor. It was obviously more economical to cast the finished articles, whatever their size and form, where the raw material was made. It was more economical, too, for foundries to specialize in particular forms of ironwork.

One of the earliest of the great companies of ironfounders was the Coalbrookdale Company which began in Shropshire in 1708. Although

¹ H. R. Schubert, *History of the British Iron and Steel Industry* (1957), 331 ff.

'as early as 1731 a large consignment of pallisades, pillars, rails, scrolls and spears had been cast for Preston Hospital and the interest in railings and other architectural cast iron work had continued in a quiet way which made it easy . . . to expand to the heights of the Hyde Park Gates and the Vienna Exhibition Gates',² the company seems not to have been much concerned with the design and casting of balcony railings. In 1929, the company was incorporated with Allied Ironfounders Limited and, in 1959, the Coalbrookdale Museum was opened.

Whilst the great iron-works was spreading in Shropshire another famous company had its beginnings at Carron, near Falkirk, in Scotland. The 'Carron Company', as it was soon called, made a reputation for casting reliable short cannon with which it furnished its own ships as well as those of the Royal Navy. As at Coalbrookdale, the prosperity of the Carron Company involved the acquiring of mines for the working of local ironstone, coal and limestone and the building of dams for the water to drive the large bellows and hammers. In 1764 John Adam became a partner in the company. John was himself an architect and a clever designer: his more famous brothers, Robert and James, were at the height of their fame and engaged on their great housing project, the Adelphi, London, from 1768. In the official history³ of the Carron Company, the author remarks that 'in addition to those from the Adam family designs were provided by the Haworths'.⁴

In 1810,^{5, 6} a number of enterprising employees of the Carron Company broke away and founded the Falkirk Ironworks. It became the second largest foundry in Scotland and joined the Allied Ironfounders Group in 1929. There is an early catalogue of the company, without cover or date, preserved in the Coalbrookdale Museum.

There were, of course, many other foundries at work during the period but the three mentioned, so far as the writer has yet discovered, are the only ones whose records have survived in sufficient quantity to indicate whence our balcony railings may have come.

WROUGHT IRON BALCONIES

Some popular designs of wrought ironwork used for balcony rails and panels and for staircase balusters towards the end of the eighteenth

² A. Raistrick, *Coalbrookdale, 1709-1966* (1966), 15.

³ R. H. Campbell, *Carron Company* (1961), 78.

⁴ The brothers Henry and William had been students at the Royal Academy School. Henry started work with the Carron Company as designer and carver in 1779, but died two years later. William took his brother's place and 'continued in vigour as a carver until his death in 1838'; see *The Story of Carron Company*, Bicentenary Commemorative Volume (1959).

⁵ Miss P. M. Tarver, Allied Ironfounders Limited, personal communication.

⁶ Glog and Bridgwater, 78, give the date as 1819.

century were illustrated in a catalogue⁷ by I. Cruickshanks, a copy of which is in the library of the Sir John Soane's Museum. Diagrams of three of the designs are reproduced in Figs. 1, 2 and 3. The segmental balconies at the three first-floor windows of the house no. 42 High Street, Rochester, are of a pattern similar to that in Fig. 1A, except that the ornaments at the centres of alternate uprights are circular bosses with a hint of a floral pattern. Each medallion consists of two similar hollow discs with the concave sides inwardly opposed; in a few cases, the outer disc is missing. The scrolls at the lower ends of the uprights are much deformed. The house is of 1778⁸ date, and the balconies are almost certainly contemporary.

No example of wrought-iron balconies with central loops is known in Kent, but the staircase rails in the George III customs house in Gravesend are of this pattern (Fig. 2).

The trellis pattern, with or without ornament at the junctions of the diagonals, is reproduced for balconies from wrought iron and from cast iron; the design is more suited to casting than to shaping in the blacksmith's forge. The balcony above the shop at no. 20 High Street, Rochester, consists of trellis panels of two different widths relieved by the addition of Adamesque balusters like that pictured in Fig. 4. The work has the appearance of wrought iron.

At no. 24 Star Hill, Rochester, built about 1790, segmental balconies at three first-floor windows are composed of balusters of a design similar also to Fig. 4, alternating with plain uprights. Next door at no. 22, over the porch, is a wrought iron rail consisting of uprights with scrolled ends; alternate uprights dividing at the centres into diamonds connecting them to the uprights on either side. Each upright is further embellished by the addition of two pairs of simple opposed leaves (see Fig. 5). Another example of this simple leaf ornament can be seen on a low window guard in Mercery Lane, Canterbury.

Prominent amongst the motifs used by the Adam brothers in their new style of classical decoration was the *anthemion*, an ancient Grecian ornament derived from a pattern of unfolding leaves. Other architects adopted the new style, especially James Wyatt who used it even more successfully than the Adam brothers.⁹ The work of Samuel Wyatt has sometimes been mistaken for that of his younger brother James. The house at Belmont Park, near Faversham, the home of Lord and Lady Harris, is considered to have been designed entirely by Samuel Wyatt about 1792. The plain uprights of the balcony railings are relieved by

⁷ I. Cruickshanks, *Eldorado Metal and Wrought Iron Sashes, etc., etc., also all sorts of Iron Railings at the Metal Sash Manufactory, Gerrard Street, Soho, London*. Date thought to be around 1790—Miss Dorothy Stroud.

⁸ John Newman, *West Kent and the Weald* (1969), 474.

⁹ Nigel Nicholson, *Great Houses of Britain* (1968), 270 ff.

the use at intervals of elegant balusters with the *anthemion* device in the centre, a star below and foliage above (Fig. 6A). Similar balusters are used for the staircase in the house. The design is illustrated by Cottingham (Plate I, 'Patterns for Gates, Window Guards &c.', No. 8) modified and added to by the artist¹⁰ (Fig. 6B).

CAST-IRON BALCONIES

The writer had been aware for a long time that the houses in the Adelphi, London, designed and built under the direction of the Adam brothers had balconies at the windows. It was natural then, when interest

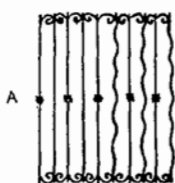


FIG. 1.

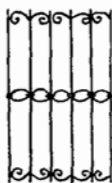


FIG. 2.

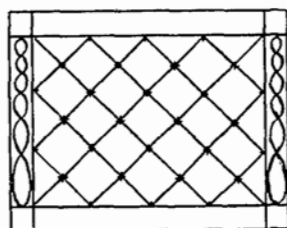


FIG. 3.

(After Cruickshanks c. 1790.)



FIG. 4.

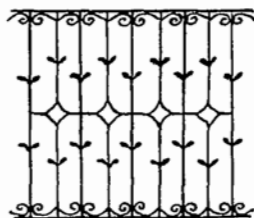


FIG. 5.



FIG. 6A.

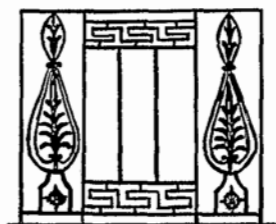


FIG. 6B. (After Cottingham.)

Designs for Wrought Iron Rails.

¹⁰ As is the case with many of the designs in this work.

was aroused in this form of ironwork on seeing so many houses with balconies being demolished in towns in Kent, that attention should first have been given to the houses there. No. 7 Adam Street, Adelphi, is generally regarded by writers on architecture as being very much as Robert Adam left it.¹¹⁻¹³ At the first-floor windows are heavy cast iron 'balconettes', each consisting of five upright elongated *anthemia* with a border of circles above and one of diamonds below, the whole forming a curved projection. Cottingham illustrates a window-guard of a similar pattern in his Plate xvi, no. 7 'Patterns for Window Guards & Balcony Railing. Executed in London', but the *anthemia* are stouter and have fewer 'leaves' (Fig. 10). Cottingham's pattern must have been taken from window-guards which were later removed from the Adelphi: the Victoria and Albert Museum has, in the architecture room, an example with three *anthemia* like Cottingham's, but lacking the upper border of circles. The balconies, at the second- and third-floor windows, are rectangular in plan, and the flat castings which form the rails are much lighter and more delicate. The front panel is composed of two horizontally opposed *anthemia* in heart-shaped scrolls with an elliptical device between them. There is an upper border of a wave-like pattern comprising seven 'waves' (see Fig. 8A); the pattern is drawn from the inside. Cottingham illustrates this also as 'erected in London' in his Plate ii, no. 8, but alters the design a little,¹⁰ increasing the number of waves in the border and modifying the side panels. In a drawing of his design for the Royal Terrace in the Adelphi, now in the Sir John Soane's Museum, Robert Adam has shown window-guards very like Fig. 10, but with quite different borders. The upper border, although on a very small scale, is a *wave pattern exactly like that in Fig. 8A* the 'heart and honeysuckle' pattern¹⁴ at the upper windows of no. 7 Adam Street. At the sides of the balconies, there are narrow cast-iron panels of a quite different design consisting of a horizontal ellipse above a device of two opposed vertical *anthemia* with a floral medallion between (Fig. 11). If the large panel is an Adam design dating back to about 1774, the year of the building of no. 7, then the side panel must be of the same period and will probably be the work of the same designer.

Some early records of the Carron Company are preserved in the

¹¹ Arthur Thomas Bolton, *The Architecture of Robert and James Adam*, ii (1922), 30 ff.

¹² N. Pevsner, *The Buildings of London*, Vol. I, The Cities of London and Westminster (1957), 295.

¹³ John Summerson, 138, 299.

¹⁴ This apt and easy name was suggested by Miss A. Chatwin of Cheltenham. Percy Fitzgerald writing in the *Architectural Review*, vii, 274, in 'The Life and Work of Robert Adam', refers to 'the pleasing pattern of the balconies . . . the ornament being his hyacinth sprays to which he was very partial'. Sir John Summerson, 139, writes of Adam's use of 'gay strips of honeysuckle embroidery' when referring to the use of the *anthemion* device in stucco. Nikolaus Pevsner too, writes of 'giant pilasters with honeysuckle decoration'.

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Scottish Record Office, Edinburgh.¹⁵ They consist largely of account books dealing with land, colliery and ironstone purchases. Of four small books of drawings one proved particularly interesting. It is¹⁶ a printed catalogue on paper water-marked 1818 (1823 on one sheet) and a pencil note reads, 'Note the goods shown in this catalogue are mostly in the Empire Period and decorated by Wm. Haworth who was in vigour as a carver until his death in 1838'.⁴ The goods illustrated are chiefly stoves, fireplaces and chimney-pieces, but at the end of the small volume are three pages of balcony-rail designs which are reproduced in Figs. 7, 8 and 9. Fig. 7 shows four panels of differing widths but

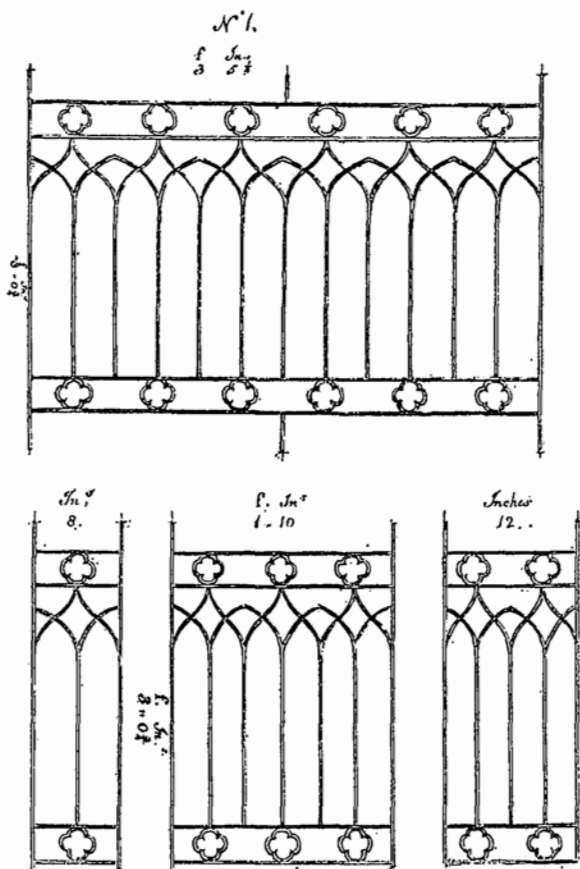


FIG. 7.

Facsimile reproduced by courtesy of Carron Company and the Scottish Record Office

¹⁵ Personal communication from Mr. Claude Blair, Assistant Keeper of Metal-work, The Victoria and Albert Museum.

¹⁶ Scottish Record Office, reference G.D. 58 15/5.

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essentially the same 'gothic' design. The bottom of the page has been worn away and bears no date. Fig. 8 illustrates the large 'heart and honeysuckle' panel and three smaller panels in which only one upright *anthemion* is used and the heart-shaped scrolls are modified to give new designs. The borders, whilst retaining a wave pattern (except in Fig. 8D) are also different. The bottom of the page bears the words 'Drawn & Printed by Simonau 1823'. Fig. 9 shows four new designs of a 'cobweb' pattern. It will be seen that the widths of the panels on this page are the same as those of the corresponding panels on Fig. 8, but the heights are a little greater. The words at the bottom of the page are 'Printed by Simonau 1823'.

A search of the records preserved in the Coalbrookdale Museum revealed only three pages of illustrations of balcony-railings or window-

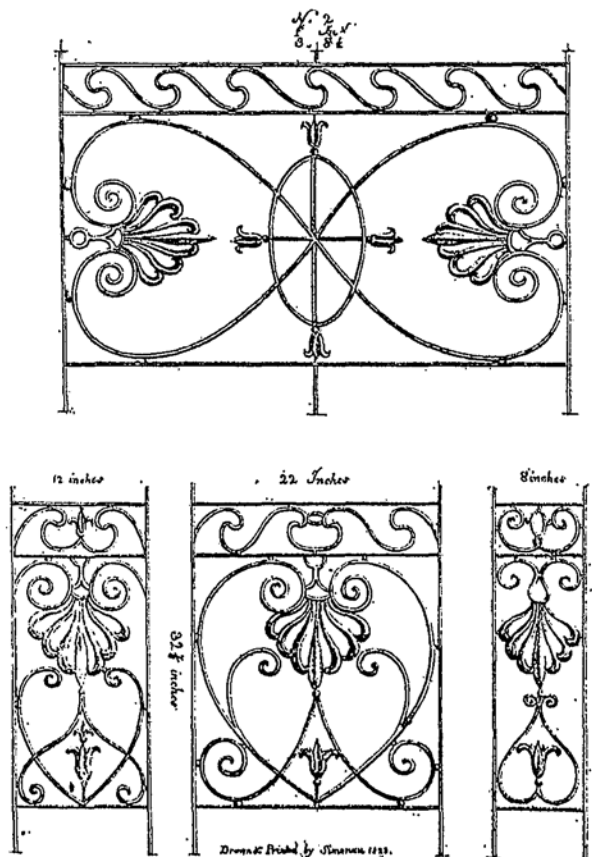


FIG. 8. A
B C D

Facsimile reproduced by courtesy of Carron Company and the Scottish Record Office

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guards. Two pages from the catalogue of the Falkirk Ironworks, previously mentioned, picture railings which are to be found in Kent and elsewhere. The third page, from a catalogue of the Coalbrookdale Company, dates from the middle or the second half of the nineteenth century; no railings have been found in Kent which closely resemble these patterns.

Falkirk Ironworks records. Plate No. 284A, 'Balcony Panels' is reproduced in Plate IA. The upper design with or without borders is found widely in Kent. Plate No. 288, 'Staircase & Balcony Bars' is reproduced in Plate IB. Pattern No. 6 is now widely distributed in Kent, No. 17 has been found only once.

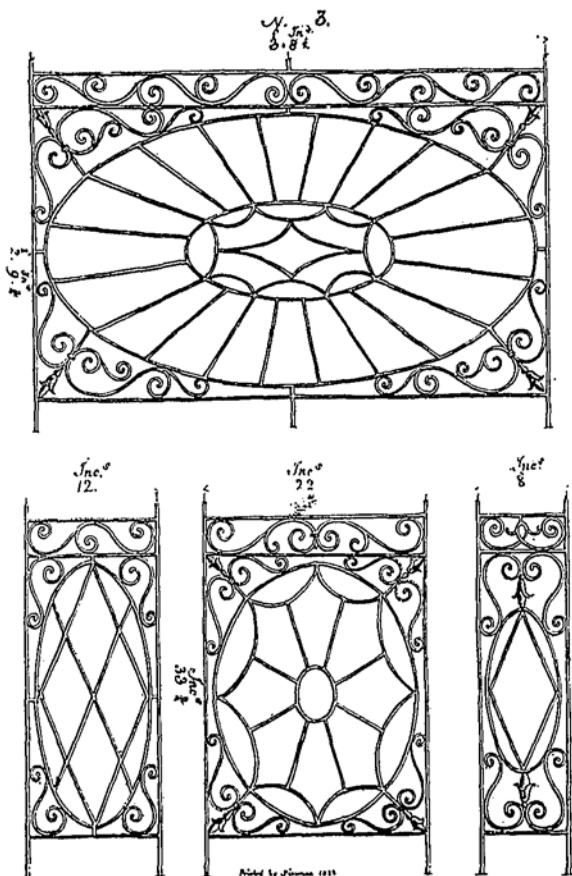


FIG. 9. A
B C D

Facsimile reproduced by courtesy of Carron Company and the Scottish Record Office

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As cast iron is so readily reproduced in almost unlimited quantities and to a fixed design, once a satisfactory pattern has been made, it is not surprising to find that some cast-iron panels occur repeatedly in widely separated places and over long periods of time. For example, the large 'heart and honeysuckle' panel Fig. 8A may be seen in many towns in Kent and as far afield as London, Bristol, Cheltenham, Weymouth and in Northern England: the drawing of 1823 is reproduced in a Carron Company catalogue of 1868. There was a considerable expansion of domestic building, particularly after the battle of Waterloo, at a time when Carron Company had its own ships, bringing castings from Scotland to English ports.

Following is a list of the cast-iron designs of the period in Kent. Design numbers are assigned in chronological order as closely as this can be done.

Design No. 0. Seen only in the Adelphi. Consists of varying numbers of upright *anthemia* which have different numbers of leaves. One version published by Cottingham. A version with three *anthemia* and a border of nine diamonds below is exhibited in the Architecture Room at the Victoria and Albert Museum (see Fig. 10).

Design No. 1 (Fig. 8A). Probably designed by Robert Adam. Cast by the Carron Company. Very widely distributed. Illustrated in Gloag and Bridgwater 130, 131, 283. The small lugs between the heart-shaped scrolls and the rectangular frame are always present; they probably assist in producing a strong casting. First erected at nos. 7 and 8 Adam Street, Adelphi. Oval strengthening pieces are added in the version of the design used at the windows on the corner of John Adam Street and Robert Street, Adelphi. A very unusual treatment of a cast iron design is to be seen on Central Parade, Herne Bay, where *curved panels* are used over the bow-windows of Marine House. This design is most plentiful in Gravesend, Herne Bay, Ramsgate, Margate and Tunbridge Wells, but occurs also in Deal, Walmer and Folkestone. It is an example of the long periods during which popular designs may remain in use: the illustration in the catalogue of 1868 preserved at Carron suggests a period extending over more than 90 years. Pattern illustrated by Cottingham, Pl. ii, 8.

Design No. 2 (Fig. 11). As old as design no. 1. Also occurs with design no. 1 on houses in Camberwell New Road, London. The only place where the design has been seen in Kent is at no. 4 High Street, Gravesend.¹⁷ Probably a Carron Company design. Illustrated in Cottingham, twinned, Pl. ii, 7.

¹⁷ The semi-detached pair of houses, nos. 4 and 5 High Street, Gravesend, is said to be of 1736. It was later an inn known as 'The Golden Fleece'. No. 5 housed for some time before 1839 and up to 1852/3 an ironmonger's business and a small foundry—see note 22.

Design No. 3 (Fig. 8C). Carron Company casting. Most beautifully displayed, with triangulated edges and spacing rods, on balconies in St. Dunstan's Terrace and Orchard Street, Canterbury. This panel has been frequently used as area-rails and step-rails on terrace houses, particularly in Gravesend. Also in Herne Bay, Ramsgate (as window-guards on Wellington House, Wellington Crescent), Deal (no. 50 Beach Street) and on the 'Musick Gallery', The Pantiles, Tunbridge Wells. Inversion of the main panel is frequently seen as in The Pantiles; in Central Parade, Herne Bay, the borders are placed at the bottom.

Design No. 4 (Fig. 8B). Carron Company design. Not frequent in Kent. Used as side panels with design no. 1. As window-guards on no. 53 Parrock Street, Gravesend, now demolished, and on no. 4 High Street, Gravesend. As step rails in Edwin Street and Darnley Road, Gravesend.

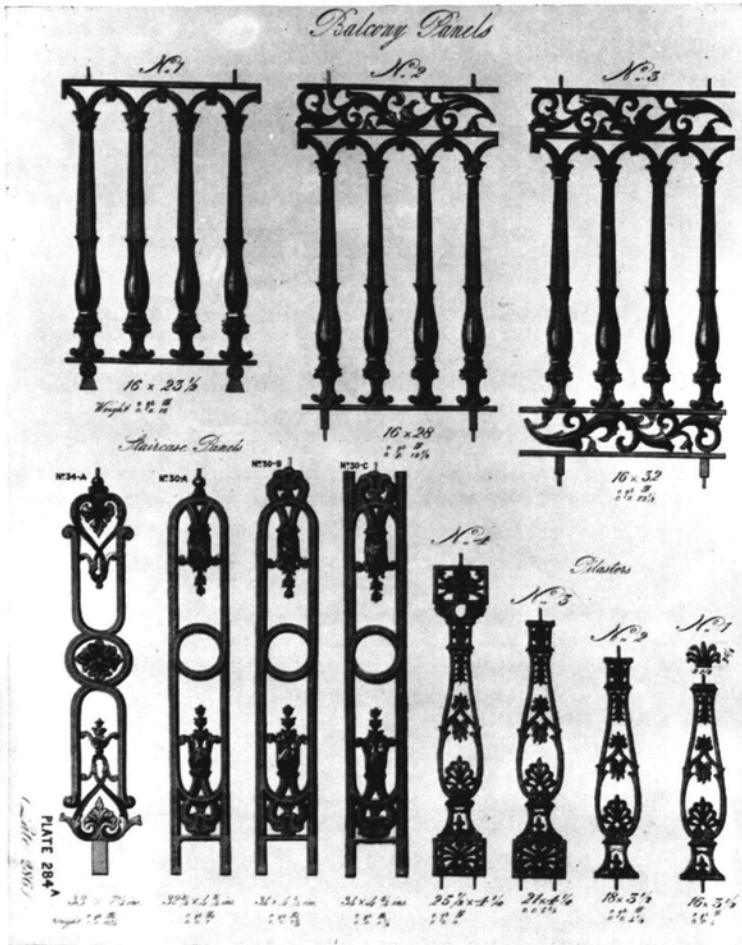
Design No. 5 (Fig. 8D). Carron Company casting. Rather more frequent in Kent than design no. 4. Generally used as side panel with design no. 1, as in Bath Street and Windmill Street, Gravesend; on Central Parade, Herne Bay; in Church Street, Tunbridge Wells, and in Fort Crescent, Margate.

Design No. 6 (Fig. 12). Consists of the main panel of design no. 5, Fig. 8D inverted, with a portion of the 'wave' border from design no. 1 and a small wedge shape added to improve the pattern. Seen only at nos. 16 to 20 Church Street, Tunbridge Wells, with designs nos. 1 and 4. (Also in Church Street, Tunbridge Wells, on nos. 33, 35 and 37, are ornate railings with *anthemia* above heart-shaped scrolls separated by decorated uprights. The effect is 'fussy' but the design is obviously an elaboration of the 'heart and honeysuckle' concept.)

Design No. 7 (Fig. 13). Origin unknown. Inner part of the design resembles the lower panel of design no. 2. Similar castings occur on old buildings close to the Adelphi. The design is widespread in Kent, and is used for verandahs, step- and area-rails as well as balcony-rails. It is to be seen in Deal (Albert Road), Dover (Castle Hill), Gravesend, Herne Bay, Maidstone (Albion Place and Marsham Street), Margate (Bridge House, King Street), Ramsgate (two sides of Spencer Square, finely at no. 38 West Cliff Road and with a splendid gas-lamp on the Iron Duke Inn, Belle Vue Road) and on Mount Ephraim, Tunbridge Wells. Illustrated with a cresting in Cottingham, Pl. i, 4.

Design No. 8 (Fig. 14). Origin unknown. Not frequent in Kent. Regarded by Glog and Bridgwater as belonging to the early nineteenth century.¹⁸ Like design no. 7, it has five pairs of prominent uprights in each panel. It occurs as area railings in Wellington Street, Gravesend, in Albion Place and in Marsham Street, Maidstone, and in Nelson Crescent and in The Paragon, Ramsgate.

¹⁸ Glog and Bridgwater, 285.



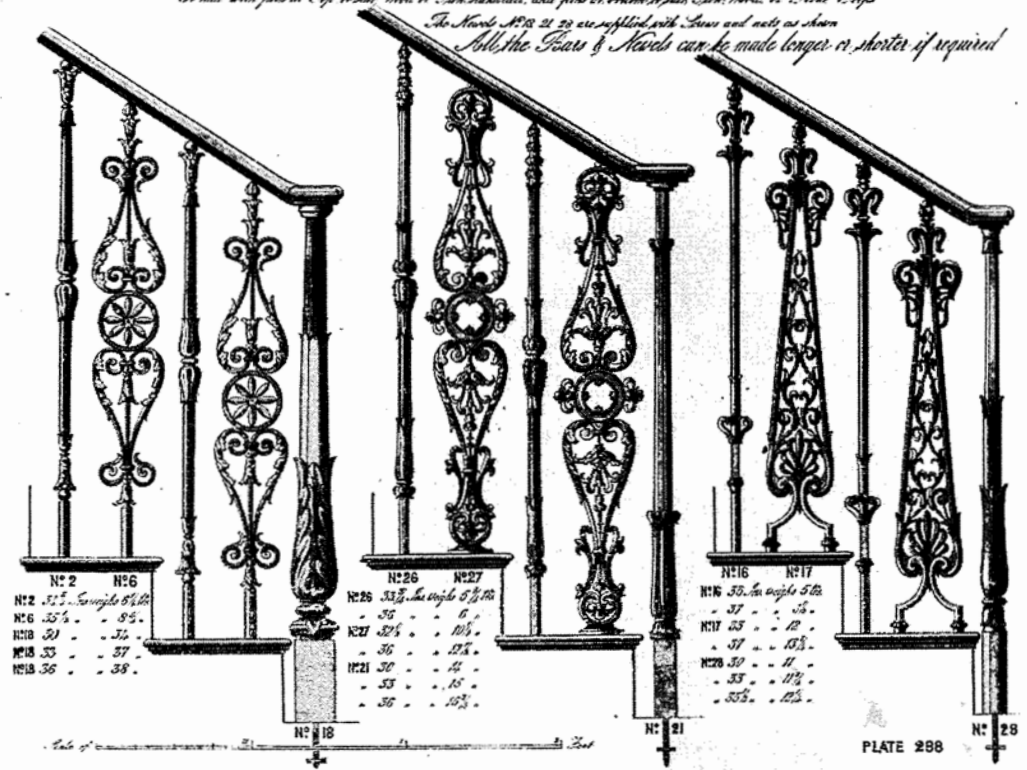
Reproduced by courtesy of Allied Ironfounders Ltd.

Staircase & Gallery Bars

Made with face in Top or with Wood or Iron handrail and pins at bottom to suit Iron, Wood or Stone Steps

The Nails Nos 21 to 29 are supplied with Tines and nuts as shown

All the Bars & Nails can be made longer or shorter if required



N ^o 2	N ^o 6
N ^o 2 5 1/2	Sample 6 1/2
N ^o 6 3 1/2	8 1/2
N ^o 8 3 1/2	7 1/2
N ^o 10 3 1/2	5 1/2
N ^o 12 3 1/2	3 1/2

N ^o 26	N ^o 27
N ^o 26 3 3/4	Sample 5 1/2
3 1/2	5
N ^o 27 3 1/4	10 1/2
3 1/2	12 1/2
N ^o 21 3 1/2	10
3 1/2	15
3 1/2	10 1/2

N ^o 16	N ^o 17
N ^o 16 3 1/2	Sample 5 1/2
3 1/2	5
N ^o 17 3 1/2	10
3 1/2	10 1/2
N ^o 20 3 1/2	11
3 1/2	11 1/2
3 1/2	12 1/2

PLATE 298

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Design No. 9 (Fig. 7). Carron Company 'gothic' casting. Specimen exhibited in the Ironwork Gallery, Victoria and Albert Museum, said to have been cast about 1820. The design is attributed by some writers to Decimus Burton: it was certainly used by him on at least one house in London.¹⁹ A characteristic of this design is the groove which extends over the entire front surface; uprights, arches and quatrefoils. Panel widths vary in multiples of the single pointed arch (8 in.). In Margate on the Thanet Hotel are some large panels with eight- and with eleven-pointed arches. It is one of the most numerous and widespread of cast-iron balcony designs, and was used for a long time; it occurs on houses in Albion Place, Ramsgate, dating from 1817²⁰ and appears with design no. 1 in the Carron Company catalogue of 1863. It is to be seen in Dover, Gravesend, Margate, Ramsgate, Rochester, Sittingbourne and The Pantiles, Tunbridge Wells. The design is sometimes cut off at the base to form low window-guards.

Design No. 10 (Fig. 9A). Carron Company 'cobweb' casting. An attractive design which recalls the panels of a Robert Adam's gate from the garden entrance of Lansdowne House.²¹ In the drawing, in the Scottish Record Office, the outer ends of the *radii* are not joined by loops. All the existing castings in Kent have the loops which improve the appearance; the design must therefore have been modified since 1823. Much coarser castings are sometimes seen, for example on nos. 44 and 46 The Pantiles, Tunbridge Wells, which suggests that the design was copied by another foundry. It is surprising that such an attractive casting was not more often used. It may be seen in Fort Crescent, Margate, on Albion Place, and Albion Hill, Ramsgate, and in The Pantiles, Tunbridge Wells. Illustrated in Cottingham, Pl. ii, 4, without loops and with no central 'diamond'.

Design No. 11 (Fig. 9C). Carron Company casting. Even more delightful than design no. 10. Not very numerous. More frequently used as step-rails than as balconies. Found in Edwin Street, Parrock Street and Windmill Street, Gravesend; Rosherville, Northfleet; at nos. 241 to 257 High Street, Rochester, and on Sussex House, The Pantiles, Tunbridge Wells.

Design No. 12 (Fig. 9B). Carron Company casting. Rare in Kent. Observed only as step-rails at 64 Parrock Street, at nos. 11, 12 and 13 Milton Place and no. 68 Milton Road, Gravesend, and in the High Street and The Pantiles, Tunbridge Wells, on balconies.

Design No. 13 (Fig. 9D). Carron Company casting. Rare in Kent. With design no. 21 as area-rails at no. 5 Marsham Street, Maidstone,

¹⁹ *Ibid.*, 133.

²⁰ John Newman, *North East and East Kent* (1969), 413, 'Albion Place newly built in 1817 and displaying a good selection of wrought iron (*sic*) balconies.'

²¹ Berkeley Square, London—now in the Victoria and Albert Museum. Illustrated in Glog and Bridgwater, 117.

with design no. 11 at no. 94 Edwin Street, Gravesend, with design no. 11 at no. 120 Rosherville, Northfleet, in Fort Crescent, Margate, and at no. 26 Albion Hill, Ramsgate. Illustrated in Cottingham, Pl. ii, 4, in conjunction with design no. 10.

Design No. 14 (Plate IA). Falkirk Ironworks, Pl. 284A, nos. 1, 2 and 3 with and without borders. The complete pattern occurs infrequently in Kent, but can be seen at its best on nos. 21 to 29 The Pantiles, Tunbridge Wells. In Gravesend at nos. 56 and 57 Windmill Street are window-guards made from this pattern without borders and cut off at the base of the columns. The cast struts which support the guards at the corners bear the words 'Troughton & Bevan, Founders Gravesend'.²² It is probable that the reduced castings were obtained from the Falkirk Ironworks and adapted to the small balconies by the local firm. The same pattern without borders is used as area-railings at no. 3 Trinity Square, Margate.

Design No. 15 (Plate IA). Falkirk Ironworks, Pl. 2849. Pilaster no. 4. Occurs as balcony balusters at no. 73 London Road, Tunbridge Wells.

Design No. 16 (Plate IB). Falkirk Ironworks, Pl. 288, no. 6, Staircase and Balcony Bars. Occurs on three houses, nos. 1, 2 and 3 Albion Place, Ramsgate, built in 1817.²⁰ The pattern is also illustrated in a catalogue of the Lion Foundry Co., Ltd., of Kirkintilloch, near Glasgow, of approximately 1903.²³ The design is often seen without the central medallion, for example as step-rail balusters in Edwin Street, Gravesend, and on the balcony of the 'Musick Gallery', The Pantiles, Tunbridge Wells. With a quite different medallion the pattern was used on balconies on both sides of Harmer Street, Gravesend, and at one time almost every house in the street had similar balconies (see Fig. 15). This last variant of the design has not been seen elsewhere in Kent.

The pattern with the floral medallion can be seen over the extension to the Eagle Inn, New Road, Gravesend, added after 1840,²⁴ on no. 5 The Paragon, and no. 69 Plains of Waterloo, Ramsgate, on verandahs

²² Medhurst Troughton was a prominent citizen of Gravesend and four times mayor. He carried on the business of ironmonger and brass- and iron-founder, first at no. 5 High Street and later (from 1852/3) at no. 15 High Street. The partnership with Matthew Bevan was begun in 1845/6. There are records of Troughton's business and private addresses in Gravesend Directories, at the Reference Library, from 1839 to his death in 1870 at the age of 81. He was already mayor in 1822, at the age of 33, and was, therefore, likely to have been in business at least ten years earlier. He might, therefore, have supplied much of the ironwork on Gravesend houses to local builders and to have been responsible for the ironwork still surviving on nos. 4 and 5 High Street and perhaps also for refronting the pair of houses.

²³ P. 43, no. 486. This Company was not in existence until 1880, but it purchased the patterns of the Sun Foundry of Glasgow when the latter failed in 1900, and the Managing Director of the Lion Foundry Company Limited considers that design no. 15 was amongst them. The Sun Foundry was in full production during the second half of the nineteenth century.

²⁴ R. H. Hiscock, LL.B., F.S.A., personal communication.

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at the rear of nos. 45 and 46 New Road, Rochester, and on a balcony overlooking the river in the High Street, Tonbridge.

Design No. 17 (Plate IB). Falkirk Ironworks, Pl. 288, No. 17. Seen in Kent only in Prospect Hill on nos. 20 and 22 Central Parade, Herne Bay.

Design No. 18 (Fig. 16A). Part of the design for Upper Woburn Place by Henry Shaw, first published in 1826 and in his book *Examples of Ornamental Metal Work* in 1836.²⁵ This pattern is used on small balconies on the houses on opposite sides of the entrance to La Providence, High Street, Rochester. The brackets used here appear to be like the design attributed to L. Vulliamy in Henry Shaw's illustration.²⁶ The design has been used in pairs of palmettes²⁷ (*anthemia*) separated by rods at no. 19 St. George's Terrace, Herne Bay. The lower half of the pattern has been used to make area window-guards at nos. 10 and 11 London Road, Canterbury.

Design No. 19 (Fig. 16B). Part of Henry Shaw's design. Sometimes used without design no. 18, for example, for balconies in Portland Place, London, but not so seen in Kent. Rods very like Shaw's have been much used in Ramsgate; in Royal Road, Spencer Square and on no. 11 Albion Place.

The whole of Henry Shaw's railing, but with plain brackets, can be seen on nos. 157 and 158 Milton Road, Gravesend, rusting badly.

Design No. 20 (Fig. 17). A pleasing pattern of arcs of a circle. Such a device was used by John Nash for a house in Park Square East, in London, between 1823 and 1825.²⁸ The design is well displayed with an upper border of St. Andrew's crosses on the Royal Victoria Hotel (now an antique furniture store) on The Pantiles, Tunbridge Wells. The same pattern of castings is shown in Gloag and Bridgwater, 131.

Other geometric patterns are to be seen occasionally. There is a small balcony with a railing of narrow vertical ellipses, a border of circles above and of Greek key pattern below, on no. 11 Albion Place, Maidstone. (Removed since time of writing.)

Design No. 21 (Fig. 18). This somewhat rare design has a very close resemblance to design no. 10. The upper borders and the corners of the main panel are exactly alike. The oval centre-piece differs from that of the large 'cobweb' design in having diagonals in place of *radii*. At the middle is a 'diamond' with small circles at the intersections of the four diagonals outwards from the centre. Castings of this pattern are to be

²⁵ Reproduced by John Harris, 165, and illustrated on houses by Gloag and Bridgwater, 281.

²⁶ Similar brackets have been used to support the balcony with rails of design no. 7 on no. 7 Albion Place, Maidstone.

²⁷ A specimen of this part of the design is now exhibited in the Ironwork Gallery of the Victoria and Albert Museum.

²⁸ Terence Davis, *The Architecture of John Nash* (1960), 148.



FIG. 10.



FIG. 11.



FIG. 12.

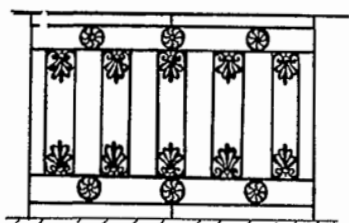


FIG. 13.

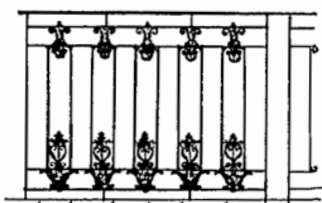


FIG. 14.

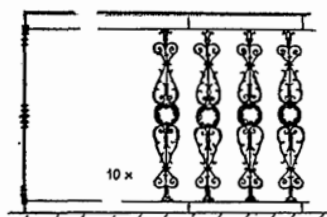


FIG. 15.

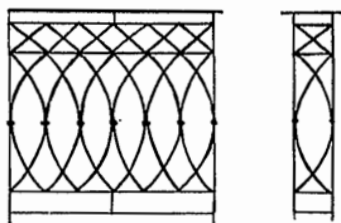


FIG. 17.

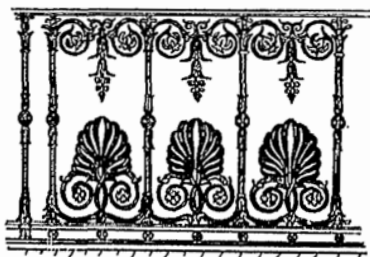


FIG. 16A.



FIG. 16B.

D. S. '70.

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seen at no. 5 Marsham Street, Maidstone, combined with two panels of design no. 13 (the smallest 'cobweb'). The castings are also used on nos. 70 and 71 Windmill Street, Gravesend, with panels of design no. 11, also a cobweb design. The houses were built about 1840. The design has not been seen elsewhere in Kent.

Design No. 22 (Fig. 19). The 'winged bolt'. Rare. As with design no. 21, the border of the largest panel is that of the corresponding Carron Company 'cobweb' panel; the corners again show the scrolls and foliage but, in this case, there is an extra small scroll at each inner corner. The purpose of the extra scrolls may have been to strengthen the oval which, in this pattern, is comparatively empty. The design occurs with smaller panels having the same motif on nos. 15 and 17 Albion Place, Maidstone.²⁹

Design No. 23 (Fig. 20). The rails are bowed outwards below the middle. They would be more troublesome to cast than flat patterns. An example occurs on no. 6 Adam Street, Adelphi, but the balcony is probably later than the house.³⁰ The design is illustrated in Gloag and Bridgwater, 124, as of the early nineteenth century. The design without the central medallions occurs in York Road, Tunbridge Wells.

Design No. 24 (Fig. 21). Very like the previous pattern, but with a medallion on a bar connecting the uprights of adjacent balusters. The design is shown in Gloag and Bridgwater, 282 and 287, as being of the mid-nineteenth century. It is used on no. 31 New Road, Rochester, with a smaller boss on the connecting bar.

By the middle of the nineteenth century cast-iron designs were becoming coarse and heavy as with the two just described. They lack the airy grace of the earlier patterns.

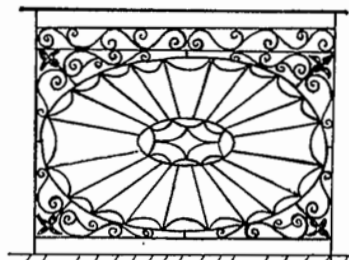
Design No. 25 (Fig. 22). With this design, too, there is a tendency to over-elaboration. Suitably placed, this design is still very attractive. It occurs in Sondes Road, Deal; on Parrock Lodge, Gravesend; in Royal Terrace and elsewhere in Margate; in The Paragon and in Nelson Crescent, Ramsgate; on the Kersey Hotel, Temple Ewell; and on three houses in Mount Ephraim Road, Tunbridge Wells.

Design No. 26. A geometric pattern said to be of the early nineteenth century is shown in Gloag and Bridgwater, 136, where the tapering space is filled with a classical *anthemion*. In a later version on houses in Albert Terrace, Margate, the design is simplified and the *anthemion* is omitted (see Fig. 23).

In several places in Gravesend, there are elegant balusters with the *motif* of a clinging stem of ivy with leaves and fruit. They occur in Edwin Street as occasional step-rail balusters (e.g. at no. 15) and on

²⁹ These railings are unique in the author's experience: the design is so striking that he would be glad to know of the existence of any similar panels elsewhere.

³⁰ Summerson, 138.



DESIGN No. 10 (LATER VERSION)

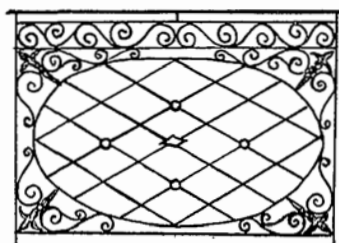


FIG. 18.

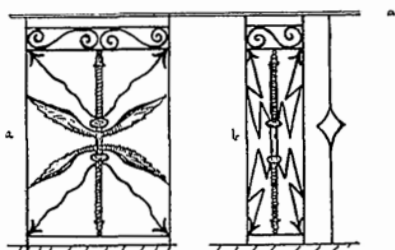
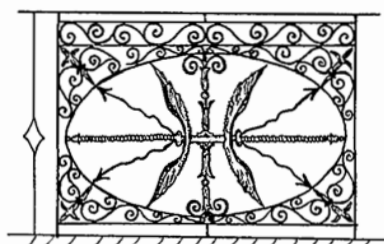


FIG. 19.

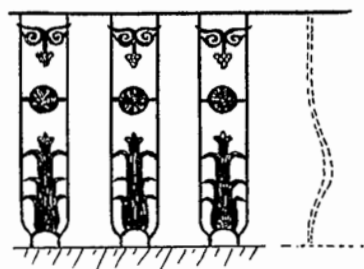


FIG. 20.

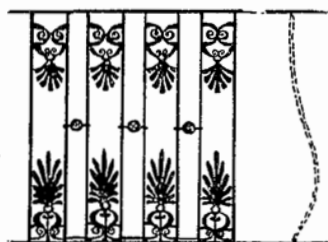


FIG. 21.

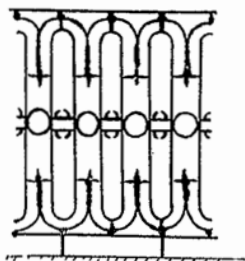


FIG. 22.

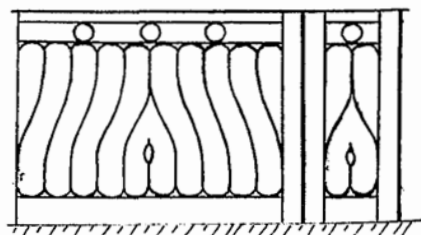


FIG. 23.

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small balconies at nos. 79 and 80 Windmill Street, built about 1840. In the latter case, they are used in conjunction with a cast panel of indeterminate pattern whose only readily discernible feature is a series of six arches from which assorted devices depend. The ivy-leaf baluster is depicted by Henry Shaw (Plate 15) as part of a street railing from 'a house in the Poultry'. Shaw's plate is also reproduced by Harris.

DISCUSSION

Memory suggests that the designs of balcony-railings described account in total for something between a half and two-thirds of all the iron balcony-rails to be seen in Kent at the present time. My records indicate that of this total a little more than 60 per cent consist of Carron Company castings. A further 10 to 12 per cent are castings which in all probability originated with the Carron Company, whilst a similar proportion are castings from Falkirk Ironworks designs. About 5 per cent of the total are represented by the designs of Henry Shaw and related designs (in which are included all the simple baluster rods) of which some were undoubtedly cast by T. W. and L. Cubitt. The remaining 10 per cent or a little more include the wrought-iron railings and all the cast-iron designs of unknown origin but believed to have been made before 1860.³¹

The figures show that the Carron Company had the major share of the supply of cast-iron balcony-railings during the early years of the nineteenth century. One of the most popular and perhaps the oldest of the cast-iron patterns is the large 'heart and honeysuckle' panel, design no. 1, which seems to have been designed by Robert Adam for no. 7 Adam Street, Adelphi, London, W.C.1. The evidence in favour of this view may be summarized as follows:

1. It is well known that Robert Adam chose to design all parts of his houses including quite small details of furnishing.

2. The design appears in the Carron Company series of co-ordinated designs dated 1823 (Figs. 7 to 9). It is probable that designs nos. 3, 4 and 5 (Figs. 8B, C and D) were made after the popularity of design no. 1 (Fig. 8A) was established.

3. The greater the number of houses bearing balcony-railings of design no. 1 built before 1823 the greater the probability that the rails were added to the structure at the time of building and not at a later date, when the design had become fashionable.

There are not many such houses in Kent, but London offers some promising examples. In Bedford Square, laid out in 1775,³² the houses

³¹ The unit used in these assessments was the typical Georgian three-bay terrace town house.

³² The architect was probably Thomas Leverton—N. Pevsner, *The Buildings of England*, London, ii, 1952, 216.

nos. 21, 25, 29 and 30 have 'heart and honeysuckle' panels, designs nos. 1 and 5. In Camberwell Grove, S.E.5, there are late Georgian terraces in which nos. 164 and 166³³ have some part of the balconies fitted with design no. 1 panels and nos. 170 and 172 have design no. 1 only. In Camberwell New Road there are long rows of houses on both sides of the street having 'heart and honeysuckle' balconies.³⁴

4. The strongest item of evidence that the 'heart and honeysuckle' design is the work of Robert Adam is the fact of the appearance of the 'wave' border on window-guards in his drawing of the elevation of the Royal Terrace in the Adelphi.³⁵

The popularity of the 'heart and honeysuckle' patterns spread outwards from the Adelphi with the growing fashion for the Adam style of decoration. The spread would be assisted by the presence in London of William, the fourth of the Adam brothers, as a partner in the firm of Adam and Wiggins, agents for the Carron Company, and by the fact that the Carron Company had its own fleet of ships.³⁶

ACKNOWLEDGEMENTS

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³³ Nos. 164 and 166 have some castings of design no. 1, but five panels of the design modified as if to be made by a local blacksmith.

³⁴ Some of the side panels are of design no. 2, whilst others have the main part of the panel of the same device but the border has a single 'wave' in place of the more usual ellipse.

³⁵ Although there are seven 'waves' in the upper border of design no. 1, and nine 'waves' (three to each upright *anthemion*) in the upper borders of the window guards drawn by Robert Adam for the Royal Terrace, the *pattern*, in both, is exactly similar.

³⁶ The writer has recently seen evidence that Carron Company railings were sent beyond the borders of Great Britain, i.e.:

(1) an illustration on p. 225 of 'An Introduction to Georgian Architecture', by A. E. Richardson, *Art and Technics Ltd.* (1949), shows balcony railings of design no. 1 in Armagh, N. Ireland.

(2) Dr. Alan Mitchell, now of the University of British Columbia, has given me photographs of cast-iron-fronted houses in Australasia, one of which, in Windsor, N.S.W., has a verandah comprising about twenty of the large panels of design no. 9 as balcony railings.

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