

Door and window furniture



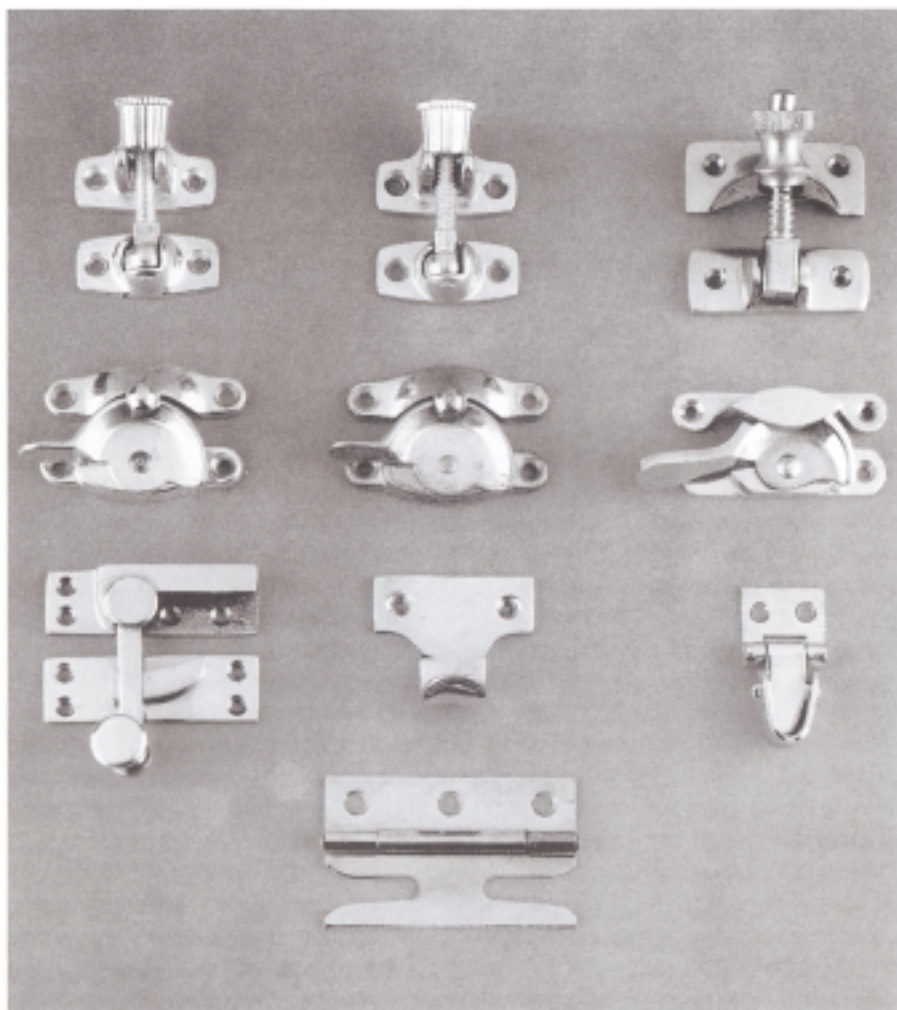
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Window furniture: history

In the early seventeenth century, window catches, latches, and casement stays were usually integral parts of the wrought-iron opening light. Early timber-framed casement windows, with glazing bars or leaded lights, usually had wrought-iron H or HL hinges and spring catches. The arrival of the sash window in the mid-seventeenth century created a need for a far wider range of ironmongery, which by 1800 had become enormously diverse and multi-patented. The basic ironmongery fittings for Georgian and Victorian sash windows were brass or hardwood pulleys, lead (and later cast-iron) weights, shutter hinges and knobs, and some form of security device to help prevent the sash from rattling in the wind.

The sash pulley can sometimes be a useful dating guide, especially when the more obvious period details have been lost and frames have been replaced. The earliest forms of sash pulley date from the late seventeenth century, and comprised either a brass wheel set directly into the pulley stile without an outside case (to facilitate removal) or, more commonly in less expensive work, oak or boxwood wheels with iron pivots. By the early eighteenth century, pulley wheels were set into their own removable blocks, and by the middle of the century they were, at least in first-rate work, set into wrought-iron frames with brass face plates. As casting techniques improved, it became possible to use cast-iron for the pulley cases and to introduce sophisticated axle pulleys.

The use of brass, rather than iron, for sash handles and early forms of sash fastener became more widespread during the late eighteenth century. By 1800 the sash fastener had evolved into the familiar, lever-arm pattern that we see today. By this time, too, sash



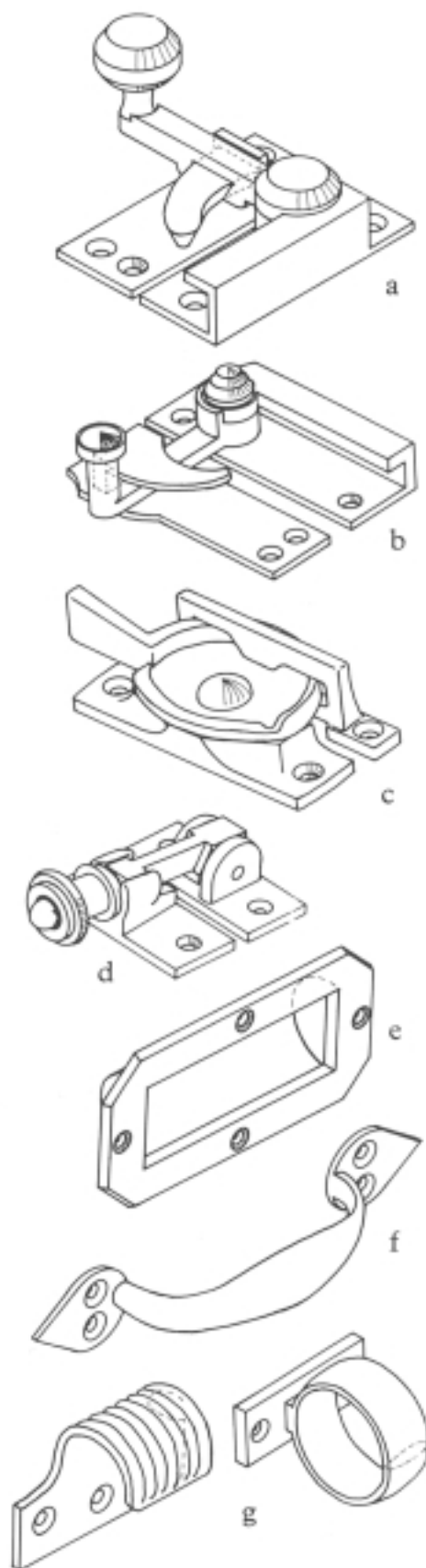
Modern window furniture which mimics or reproduces old patterns can easily be obtained today

fasteners had become increasingly elaborate and were often finished with ceramic, ebony, or glass knobs.



However, it is important to remember that throughout the nineteenth century traditional hinges and window fittings were used in humbler buildings. By the mid-nineteenth century cast iron was used for even the smallest window fittings, including latches and sash fasteners.

Sash lifts, which during the eighteenth century had been restricted mainly to grander houses and large windows, became essential after the introduction in the 1830s of cheaper plate glass and the consequent manufacture of larger, heavier windows. They also became heavily ornamented. Indeed, the various design revivals



Traditional window catches and lifts are now widely available in reproduction; combined with unobtrusive modern window locks, they can make an old window impressively secure; (a) and (b) two-lever arm fasteners, (c) a Fitch pattern fastener, (d) a Brighton pattern fastener, (e) a flush sash lift, (f) and (g) finger lifts

of the nineteenth century led to the integration of many more exotic designs into standard ranges of window furniture.

Sash weights were generally cylindrical and made of lead or cast iron; occasionally, rectangular-sectioned weights were also used. Sash cords were made of cotton during the Georgian period, but by the later nineteenth century this was being replaced by linked chain robust enough to operate the large plate-glass sashes then in use. In 1930 the spiral sash balance was patented. Housed in grooves in the sides of the sashes, each balance comprised a cylinder containing a torsion spring and a spiral rod. The rod was threaded through a bush attached to the spring and caused the spring to be wound or unwound as the sash was lowered or raised; the mechanism could be adjusted, within limits, to suit sashes of different weights.

By the end of the nineteenth century a vast selection of window ironmongery was available, ranging from Regency patterns still in production, to the revived Stuart and Georgian forms so popular with the Arts and Crafts Movement, and to the new, superbly crafted Art Nouveau designs. Many of the latter, which are both elegant and restrained, are often confused with examples from the 1920s and 30s. Many manufacturers continued to produce Victorian window-fitting designs well into the 1930s.

A modest range of sash window fittings was still available up to the Second World War. By the 1950s distinctly modern aluminium fittings were being displayed alongside older styles, most of which had become unpopular by the 1960s. The range of sash pulleys and fasteners was cut drastically, with only a few firms supplying them by 1970. Today, the renewed interest in old homes is bringing new life into this area of window furniture.

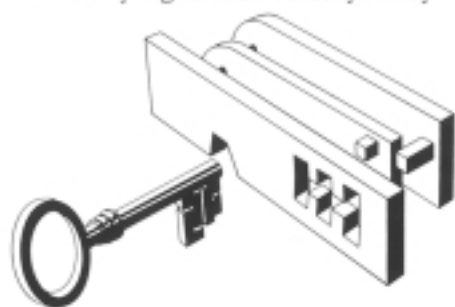
Door furniture: history

Door locks were used in Ancient Egyptian times, if not before. They were certainly common by the time of the Roman Empire: Roman keys and locks (which were generally either sliding or tumbler-operated)

have been found at various sites in Britain. By the fifteenth century monastic locksmiths were producing ornate silver lockplates, and the iron lockplates being made by their lay contemporaries were generally brightly painted. These heavy, cumbersome forms were used well into the eighteenth century. They were made obsolescent, however, by Robert Barron's 1778 invention, the double-acting lever lock, which relied on the sophisticated action of two separate levers. Six years later Joseph Bramah's new lock revolutionised the way doors were secured, its cylinder mechanism and small key constituting the first truly modern lock. Lock technology was further advanced in 1818, when Jeremiah Chubb was granted the patent for a lock that could detect small variations in the key shape. Chubb was so confident of the lock's invulnerability that he offered a reward (and a free pardon) to anyone who could pick a Chubb lock. However, in 1844 Chubb's invention was made to look primitive by the appearance of Linus Yale's new cylinder lock, which was not only more secure and used a smaller key, but could also be mass-produced at low cost.

By the middle of the Victorian era the British lock industry had become well established in the West Midlands town of Willenhall. The types of door lock had become hugely varied, ranging from simple, thin rimlocks to massive gunmetal-and-brass deadlocks. The more refined locks were often enamelled or japanned (given a black, lacquered finish). It was even possible to have bedroom door bolts that could be operated from the bed.

Front-door knockers and door knobs were in widespread use by the early eighteenth century. They



Robert Barron's 'Double Acting' lever lock of 1778



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From The care and conservation of Georgian houses, Edinburgh New Town Conservation Committee/Butterworths (3rd edition 1986)

were usually of cast iron and painted black, as only the grandest homes could afford brass fittings at that time. By the Regency era the lion's-head, sphinx-head, and dolphin forms had become common, and by this time too the numbering of doors (mandatory in London from 1805) became more popular. Indeed, the Regency saw a great proliferation in the types of door furniture in use, witnessing a significant increase in the number of front-door bells (generally circular and of brass), and, inside the home, in the use of brass, steel, glass, or ceramic finger plates. Letter boxes came into use after 1840, when the penny post was introduced. The earliest examples

were of cast brass; later models were often elaborately incised or decorated.

Restoring or reusing old fittings

With the renewed interest in conservation and older styles, there has been something of a revolution in ironmongery manufacture over the past ten years. Many firms are reintroducing older ranges, but others are producing banal styles bearing no relation to the period they are supposed to represent. The importance of maintaining original ironmongery can be appreciated from displays of restored fittings. A window latch or stay coated in cream paint may seem unremarkable, but when the layers

have been removed the fine quality of its craftsmanship and construction becomes apparent. The temptation to replace such details should be resisted until they have been cleaned down so that their true condition can be appreciated.

Great care must be taken when choosing replacement ironmongery, particularly for sash windows, because some fastener ranges are quite inappropriate for eighteenth- and nineteenth-century windows. For example, sash fasteners such as the Fitch pattern were introduced in the late nineteenth century, and did not become widespread until the Edwardian period; they are therefore quite wrong for Georgian sash windows.

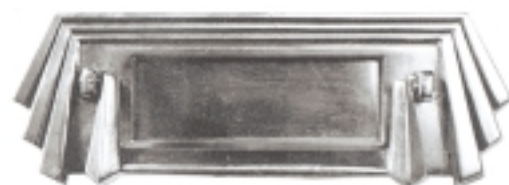
Simplex ironmongery

A simple and inexpensive set of ironmongery can transform the bottom frame of a vertically sliding sash window into a side-hung casement that is easier to clean and repair where access is difficult. These fittings can be obtained from any Scottish ironmonger and from Mighton Products in England (01799 531011). Ventrolla of Harrogate (01423 870011) can also install largely hidden Simplex ironmongery as part of their overhauling and upgrading service.

Security

Traditional doors, with their thick stiles and rails, are generally robust enough to resist a good deal of physical battering. If dog bolts, door chains, and five-lever mortice locks are fitted, then an old door can be made encouragingly secure. (Rimlocks are not recommended, as they are very weak and particularly vulnerable if the door is partly glazed.) The fitting of new locks does not mean that historic door furniture must be replaced, and it is important to try to retain it where possible. If this is not feasible, then keep it for use elsewhere.

A sheet of laminated security glass can be fitted over original stained or decorated glass built into the body of a door. This will still be visible to a potential intruder, but it is a far better aesthetic solution than unsightly grilles or bars. However, if the building is listed,



Examples of door furniture: a cast iron finger plate c1901 (far left), door knobs c1730 (centre, top), Gothic style lock c1860 (centre, below) and an Art Deco letter plate c1935 (above): Photos of items in the Charles Brooking Collection, courtesy of the University of Greenwich

Fidler, J, 1987 New openings, in *Traditional homes*, June (Simplex ironmongery)

Herbert, T, 1992 *Unlock the past, The period house and its garden*, September (door furniture)

Monk, E, 1974 *Keys*

Newson, J, 1986 *Furnishing up front, Traditional homes*, February (door furniture)

Parissien, S, 1992 *Regency style* (door furniture)

Useful addresses

Ironbridge Gorge Museum Trust
Blists Hill Open Air Museum
Ironbridge
Telford TF8 7AW
01952 586063

The Charles Brooking Collection
University of Greenwich
Dartford Campus
Oakfield Lane
Dartford DA1 2SZ
0181 331 9897

The Home Office Crime Prevention College
The Hawkhills
Easingwold
York YO6 3E6
01347 825060

The Lock Museum
54-56 New Road
Willenhall WV13 2DA
01902 634542

The Science Museum
Exhibition Road
London SW7 2DD
0171 938 8008

fitting security glass may need listed building consent. Alternatively, an internally mounted polycarbonate sheet will give greater strength to glazed areas.

Modern window locks, dual screws, anti-lift devices, mortice bolts, and sash chains can be fitted to old windows in a comparatively unobtrusive and reversible manner to make the window secure, while still allowing it to be opened for ventilation. (Traditional sash-window catches on their own are insufficient, as intruders can easily hammer the catch out of its screwed mounting.)

It is not true that double-glazed units offer the only real protection against intruders. Traditional windows can be made secure, and they have the added advantages that damaged parts can be repaired easily and that they are probably easier to escape through during a fire. Modern materials and designs are not necessarily more secure than traditional models. The glass industry recently stated that 'It is a well known phenomenon that PVC-U doors and windows are easy targets for criminals.'

Original window shutters can provide excellent protection against

intruders, as well as keeping warmth in and noise out. Fastening bars on shutters can be extremely effective at preventing a break-in, provided that they are fixed to the structure of the building as well as to the shutter woodwork. If no shutter bars survive, modern facsimiles or approximations can be obtained cheaply. A remarkably low-tech, late-Georgian alarm system which some householders have rediscovered is the installation of small bells on the inside of the shutter. Its modern, rather more advanced counterpart is the vibration detector, which activates an alarm when the shutter is disturbed.

The Home Office Crime Prevention College (see *Useful addresses*, right) can provide further information on door and window security.

Further reading

Allman, G, 1982 *One hundred years of keymaking*

Butter, F J, *An encyclopaedia of locks and builders' hardware* (reprinted 1968: available only from Josiah Parkes & Sons, Union Works, Gower St, Willenhall, West Midlands WV13 1JX; 0902 366931)

Davey, Heath et al 1986 *The care and conservation of Georgian houses*, 3 ed (sash window re-cording)

Eras, V, 1974 *Locks and keys throughout the ages*