

"Locks & Keys" needs

collectors, please ask

"Locks & Keys" wel-

comes contributions,

coloured illustrations on

separate sheets. Unfortu-

preferably with un-

nately, colour photo-

graphs tend to be too

dark to reproduce well.

MSWord7, MSWorks4.5,

Write, Wordpad, or saved

PC disks with files in

as .rtf can be used.

see below right.

Articles may also be

emailed to the Editor -

know any other

own copies!

more subscribers. If you

them to subscribe to their

LOCKS & KEYS



ssue 24

The Newsletter for lock collectors

March 2004

The Abloy lock

t the heart of all Abloy products is the unique rotating disk locking system, pioneered by Emil Henriksson in 1907. The function of the

rotating disk cylinder is smooth and reliable in all conditions. Abloy locks avoid the use of springs and pins, which can cause malfunction when exposed to dust, moisture, salt air, corrosion or freezing. The absence of springs means that friction and wear are minimal, resulting in far greater durability than conventional locks. The Ablov cylinder is highly pick-resistant, and provides optimum resistance against physical attack. Case hardened steel disks and carbide inserts are available for extra protection against

sawing and drilling.

The Abloy rotating-disk cylinder system provides up to 1.97 billion possible key combinations, which ensures the flexibility

and expansion capabilities needed to satisfy the demands of even the most complicated master-key systems. The unique detainer disk cylinder enables all Abloy products to be master keyed to the same system. Therefore, where necessary, door locks, padlocks, furniture and cam locks can be

opened using the same key. Abloy locks can be keyed differently, keyed alike, master keyed or grand master keyed.

The original key is halfround in cross section with angled bittings along its length.

Six bitting angles are possible from 0 (no cut) to 90 degrees, with a 90 degree cut leaving a quarter circle of key profile. The keyway may have wards requiring the key to be milled out to a different profile to restrict access.

The cylinder has up to 11 discs with separators housed in a hollow plug, which has a slot for the sidebar. Discs all have an identical D-shaped easy clearance hole stamped in the centre and stop lugs on the rim to limit rotation within the plug to 90 degrees. Each disc also has a sidebar notch in its rim. When all discs have been correctly aligned by a quarter turn of the key, pressure exerted by a bevel in the cylinder wall will force the sidebar into the groove formed by the discs. The plug is then free to turn, releasing the

locking balls in a padlock or turning a (Continued on page 6)

ABLOY padlocks (in steel or brass; and key

In This Issue

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**West Linton 00 44 [0]1968 661039

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Earth might be fair ...

Turn back, O man, forswear thy foolish ways.

Would man but wake from out his haunted sleep,
Earth might be fair and all men glad and wise.

The country, indeed, the world, spends a huge amount of its treasure and labour on 'security'. If we all obeyed God's commandments, we would all have much more money and time to spend, on such things as health, education, comfort, pleasure,

Crime makes the work of lock and safemakers both necessary and worthwhile. However, 'it's an ill wind that ...' Some readers make their livelihood (indirectly!) from crime. And without the incentive of crime, there would be little development of locks, and so we would not be able to pursue our hobby of lock collecting.

Thus, we have an interest in crime and criminals. I have a considerable amount of material on criminals, which might be of some interest, but I meant it only to be used as padding and 'fillers'. I would prefer to have most of the newsletter's content about LOCKS.

I have recently had my attention drawn to two British criminals, who started their safebreaking careers in the 1930's. Both redeemed themselves during Word War 2 by being 'specially employed'†. Both received pardons for their former records.

Eddie Chapman exploited pre-war safes' vulnerability to explosive attack. After the war, he retired to a legal occupation for a period, and later went to live in Spain. MI5 repeatedly blocked his attempts to publish his story in Britain after the war. A sanitised book appeared in 1952; more detail later appeared in a film, and other books mentioning him.

Johny Ramensky went straight from prison to a Commando unit, as a safebreaker; uniquely, he joined directly without first doing army basic training!

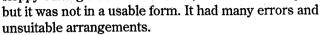
Ramensky returned to safebreaking and was a successful safebreaker, but, as one of his Judges remarked, he 'could have made more money by honest labour.' Ramensky became a popular cult figure; two versions of a popular ballad about him have been recorded. He was known for eschewing personal violence. In one arrest, a young copper belaboured Johny with his truncheon, which Johny removed, and restrained the policeman. He pleaded guilty to the safebreaking, but strongly denied assaulting a policeman — he was only defending himself, and did not use violence. He was acquited of assault!

To save my having to fill the newsletter with items about criminals, please send me more articles about locks!

† 'special' is often a British government officialese euphemism for secret: as in 'special foreign service', meaning spying.

Feedback

I had some feedback on the last issue. It wasn't perfect. I admit to sloppy editing. I found a booklist,



I downloaded records from some databases, but when I then viewed them as text, there were many garbage characters, and they had different punctuation and formatting rules. I tried to put them together, but the editing took ages.

In the past, some bibliographic databases have not clearly distinguished between CIRCA and COPY-RIGHT. Using 'c' in front of a date for both is misleading.

Cataloguers take information from the titlepage and verso; information found elsewhere, including elsewhere in the book, should be in [].

I ran out of time, and had to go to print with the list not as clean and correct as I would have liked.

Apropos the Museum article, I had an idée fixée about its being in Tours, and I didn't correct the headline from the article text, which was copied from the book. Such slips can happen. My wife does read some articles, but sometimes I run close to the deadline, and some things just don't get changed.



Looking at the article about the Tibbe lock on page 7 of issue 22, is the labelled diagram a Ford Chubb lock (similar to the AVA wafer and still found on LDV vans) rather than the Ford Tibbe (similar to the Abloy) as on the title? The Chubb has a different shaped keyhole and slightly different shaped key, which perhaps looked more similar to the one in the article. Can anyone else provide more information on these lock?

The page on the Tann change-key lock was sent to me by a non-lock collector, with whom I have had no further contact. I can only guess at the date, as early 20th century. Can anyone be more specific?



Colour pictures?

I am no further forward on a website, nor putting newsletter pictures on the Internet. However, I am investigating the possibility of including some colour pictures in the newsletter in the next issue. That is if my printer stops being bothersome, and does not need to be replaced!

♦

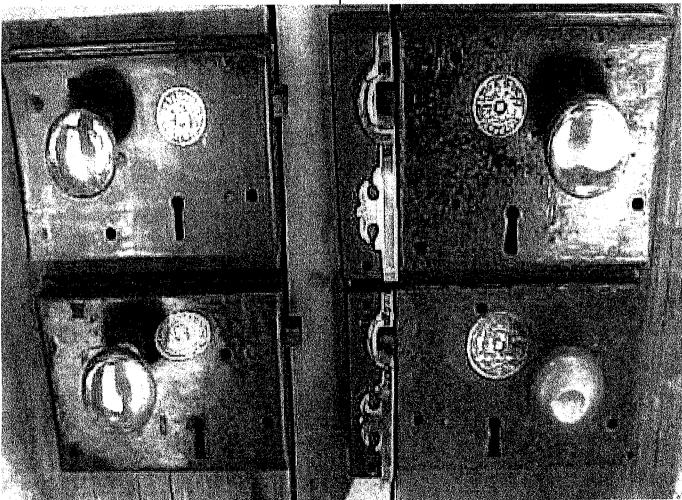
Carping about latches ...

any early latches, initially of wood, and later of iron, were lift-up pivoting latches, impelled by gravity, rather than sliding. Most of the early 'hatchet latches' or 'long latches' not still in situ are now museum pieces. Later metal latches were usually spring-impelled. Some later ones had a locking feature on the inside.

Odell, a Frenchman, is credited with inventing a lift-up

any part of the bolt that is overlifted will again be caught; thus, this is a double-acting tumbler. The bolt could be retained either up or down by a small pin inserted through a hole in the inside of the case. There are normally five levers (although some copies have only four, or even three).

This latch may be opened from outside, according to George Price's informant, by 'boring a hole in the door



latch with a spade key. Numerous keys survive from the late medieval

Four Carpenter-type latches, 19th century.

lockcase. A knitting needle is then inserted into the

opposite the pinhole in the

period, though latches for them seem to be rare. Possibly these keys are actually sliding keys for chinese padlocks, entering into the side rather than the end.

Much Dutch ironmongery was imported into the early American colonies. The Dutch were there in the 17th century. Many of the Dutch latches used a pivoting, lift-up bolt.

Chubb patented his 'combination latch' in 1828. It used a bolt consisting of a combination of several flat lathes, which pivoted at their inner end, and passed through a ramped notch in a staple. This has two hooks, so that hole in each lever in succession till it has gone through all, when by its aid the latch is lifted out of the staple, and the door is open.'

Many of the Chubb combination latches date from the late Victorian building boom of the 1870's to 1914. Chubb continued to offer them through the 1930's. They were medium quality latches, widely used on middle class town houses, and their weekend holiday houses in country villages. Today such latches are not uncommon, though less common than the cheapest latches and locks. (When doors are replaced, latches tend to be separated from their staples. Doors are

sometimes salvaged – but the staple is discarded when the new door is fitted.)

Early Royal Warrant

In 1823, Chubb was awarded a Special Licence by the Royal Household for the supply of locks. This was the forerunner of the Royal Warrant introduced by Queen Victoria. Some Chubb rimlocks carried a stamped brass escutcheon bearing the royal coat of arms and Chubb's name, but it is not clear when this practice began. Later copies of the combination latch had the chain fixed to an eye at the centre of a cast disk which carried the maker's name.

CARPENTER AND TILDESLEY

James Carpenter, although not a native of Willenhall, eventually became one of its worthies. He was born in 1775 and come to the town in his early life. George Price says that James Carpenter (d1844) was one of the most enterprising lockmakers of the district, and one of the first to apply machinery to aid their production. In 1795 he started to make ironmongery. His business was continued by Messrs Carpenter & Tildesley. James Tildersley was Carpenter's son-in-law.

In 1830 jointly with John Young of Wolverhampton, he obtained Patent No. 5880, for a lock with two sets of tumblers, which has vanished into obscurity. He also invented a box lock using a pivoted, rather than sliding, latch. (At this time, it was legal to enrol more than one invention in a single patent.) This latch was made in large numbers. Carpenter and Young agreed to divide the patent into rim lock use and mortice lock use. James went on to construct rim locks, while John Young had the right to make mortice locks.

Novel?

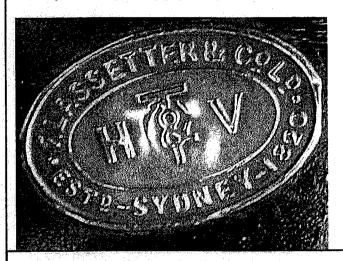
It is difficult to see any feature of 'novelty' in this latch patent. However, Patent Office Inspectors, covering the whole field of inventions, were being overwhelmed by the number of applications. It would be several decades before a Commissioner took a real grip on the Patent Office, and there would be several attempts to reform the rules.

George Price in the middle of the century noted several examples just in the field of locks where new patents had been granted for inventions which were not new, and should have been known to those 'skilled in the arts'.

In closing a door, the spring-pressed pivoted Carpenter latch rides up a ramp on the box staple, passes through a notch, and drops down inside the box staple. The ramp is usually brass, riveted to the iron box. The latch is normally operated on both sides by turning a knob either way, and a follower raises the latch. In some models, there is key operation from the outside. Normally, however, locking was by a conventional sliding bolt, key operated.

Carpenter called his latch the *Number 60*'. (Why, is not known, but the name stayed with the latch, even when made by other makers.) It became known as "Carpenters

lift up lock". It was his invention making the latch perpendicular instead of horizontal, which renewed the vitality of the town's staple industry. It carried a small stamped brass roundel riveted onto the case, showing the maker's name, and No. 60. Although not its inventor. Carpenter seems to have been the pioneering promoter of this practice of name roundels, later widely copied. In about 1870 other English lockmakers began to copy the Carpenter latch. By 1888 Carpenter were experiencing considerable problems with other manufacturers copying their locks. Their entry in Kelly's Directory contained the following statement, "Sole manufacturers of Carpenter No. 60 lock, and all kinds of door locks. To avoid spurious imitations fraudulently marked and numbered, buyers should in all cases specify "Carpenter and Tildesley" make." The Carpenter latch went into slow decline towards the end of the 19th century, with the rise of the American lock industry and the growing popularity of the Yale latch.



Badge of a maker and, presumably, importer or retailer, combined.

Name roundels for advertising

Other makers also adopted the practice of marking their locks with a stamped brass roundel. H & T Vaughan was a large maker of builders' hardware locks in the 19-early 20th centuries, and used the name

roundel extensively. Yale chose Vaughan to make their locks in Britain under licence, and bought the company in 1929. Many warded

Another Australian roundel. Fedarion?



rimlocks were later marked with brass disks bearing the name, not of the maker of the lock, but of prominent retailers. Evidently the practice was seen as a cheap form of advertising.

As Carpenter's business grew, he erected a large factory in New Road, Willenhall, known as Sommerford Works. James Carpenter died in 1844 age 68, and a memorial was erected outside the Wesleyan Methodist Church, Union Street, Willenhall where he was a member. John Carpenter, and James Tildesley a local locksmith who had married James' daughter Harriet, inherited the company. The name of the company was changed from Carpenter and Co. to Carpenter and Tildesley.

In 1851 they made an ornamental lock that was exhibited at the Great Exhibition.

In 1852 James Tildesley disposed of his various business interests and dissolved his partnership with John Carpenter (died 1857), and became the sole owner of Carpenter and Tildesley. He developed a large business exporting his locks, and large numbers of Carpenter latches were exported to the United States, and to Australia. In Britain, they were sometimes used as cheap latches on interior doors, often for bedrooms, sculleries, and such like doors.

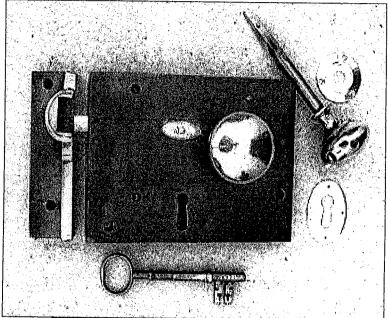
In 1870, James Tildesley obtained Patent No. 2440 for a new type of rim lock. The main feature was that it was double handed. That means it could be used on a right or left hand door. The lock was called the *J25*. James died in 1876 and the control of Carpenter and Tildesley passed to his sons, James C and Clement. They obtained Patent No. 14917 for a new process for plating door handles.

James became an invalid in 1904 and died three years later in 1907, aged 67.

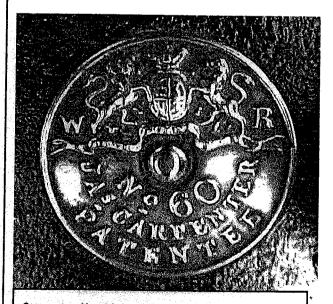
In 1915 Clement signed a lease with G R Smithson and Co., dropforgers, for the lease of Summerford House. (This was originally the home of James Carpenter and then the Tildesley's). Clement died in 1919 aged 75.

By this time, many Willenhall companies were making the No 60 lock and it appears that Carpenter and Tildesley ceased manufacture. Some of these copies were marked '60A'. They continued to be offered for sale until WW2, by which time they were fast losing market share to the cylinder rimlatch. Yale had the largest share of these, though there were other makes. To compete with Yale, Chubb, Hobbs, and Gibbons all made small key lever cylinder latches, but none of these achieved much market penetration.

R Phillips and Jim Evans



HTV Carpenter-type lock resored, with replica staple.



Carpenter No. 60 medallion, pre-1837.

(Continued from page 1) connecting rod in a cylinder lock.

Mastering and picking

Mastering is achieved by cutting more than one notch in one or more of the discs. Shallow notches are usually included to jam the sidebar and inhibit picking. Pick manoeuvring is made difficult by the geometry of the keyway and the relative positions of the discs when rotated. The number 1 (front) disc may not have a stop lug, preventing tension from being applied naively to the first disc. In any case, it is only feasible to apply tension to a disc corresponding to a 0-degree cut (i.e. no cut), since it will stop in the correct position. Of

> he Abloy cylinder is highly pick-resistant, and provides optimum resistance against physical attack. Case hardened steel disks and carbide inserts are available for extra protection against sawing and drilling.

course, it is not known a priori which discs are which, although discs 9 and 10 (in a 10-disc lock) are often of the latter type. In addition, fixed (non-rotating) discs can be used, so that the key blank must have warding cuts in order for it to turn.

It is possible however to defeat the lock using a reader or jig (similar to a technique used to decode keys for Chubb locks). A reader for an Abloy lock can be made using a coaxial rod fashioned to fit the keyway. The inner part of the rod tensions the core, while the outer part is free-sliding and can be rotated to test each of the discs in turn. In this way, the combination of the lock may be decoded and a key cut. Of course, if the discs have false notches, then this will only narrow down the number of possible keys that need to be cut and tried.

This lock is a most ingenious design, in that it contains relatively few moving parts yet is very difficult to pick or drill.

Abus Plus

AB32 disc side-bar, symmetric key

A close relative of the Abloy but with a rectangular keyway and a symmetric key that may be inserted either way round. These locks have typically 10 discs which, when rotated to the correct angles, allow the sidebar to drop into the channel formed by the notches and the core to rotate in the cylinder. Because the key is cut from both sides, it tends to be prone to shearing

off in the lock, e.g. when not inserted to the correct depth, although this is less of a problem with Abus. information from Graham Pulford and Abloy.

Piracy or plagiarism?

The advent of branded goods brought also piracy or counterfeiting such goods. Although not the biggest target of such practice, lock makers have suffered. In more recent years, Yale has been a target of numerous 'passing off' attempts, with locks, especially cast bronze padlocks, variously marked as 'Vale', 'Kale', etc. In the past, Indian locks often copied, more or les, British models, sometimes with egregious stamped marks.

Early in the 18th century lockmaking, like most industries, was still a cottage industry, with production mostly sub-contracted to homeworkers.

Both Bramah, and later, Chubb, suffered from subcontractors selling what were, practically, 'genuine' locks (some workers even used the actual authenticating stamps), but direct to customers. Thus the company did not receive its proper profit from these sales.

Both Bramah and Chubb at various times had to take legal action to defend their patent monopolies. Legal copies appeared when the patents expired.

I have seen a 1914 catalogue of locks and accessories from the wholesaler Benjamin Walters & Co., Wolverhampton. The poor quality of the printed engravings shows the blocks had been much used, over many years. There is a padlock whose form resembles the distinctive 'turret' shape used by E Cotterill & Co. for their Climax padlock, and their Cotterill-Wilson padlock, although the mechanism is quite different. There is also a copy of the Abrahams screw key padlock. It differs in having Walters' mark on the side on a small brass plate, instead of the Design Registration diamond mark.

Now that Abloy locks can be made by anybody, copies of some are appearing. There is a small-sized 'U' shackle padlock which looks sturdy, but has no marks. A high-shoulder padlock (as fig. n) appears without marks, and with various names stamped before plating. These are apparently badged for various wholesale importers. Unmarked keys of Abloy shape are supplied.

Perhaps someone in the trade can say more about these imports.

R. Phillips

Abloy lock pictures

- Hardened steel shackle
- Stainless steel ballbearings won't wear out
- Shackle cannot be pried open
- Cylinder has 11 rotating discs ... like tumblers on a safe

- Withstands up to
 21,000 lbs. of pull strength
- Ground brass or plated steel case resists drilling
- Removable cylinder
 for fast change over
- Key removes in
 locked position only for added security



Abloy high shoulder padlock: copies of this are now appearing, not marked 'Abloy' (left)

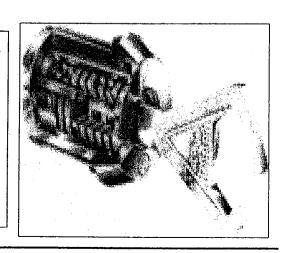


Abloy locks offer a selection of different key systems, key profiles, and key security levels.

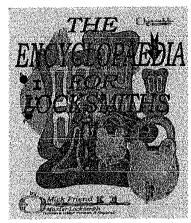


Cutaway Abloy cylinder, showing sidebar and disks. (right)

Symetric keys, a level of security available only from the factory; these keys can be inserted either way up. (left)



Encyclopædia for locksmiths



The encyclopædia for locksmiths. FRIEND, Mick. Hertford, Authors Online Ltd, 2004. 268p, 24cm. ISBN 0-7552-0117-5. RRP £39.95

A 'Print on demand' book, this can be ordered through any UK bookshop, Internet bookstore or can also be directly ordered from the publisher: Authors Online Ltd, 40 Castle Street Hertford SG14 1HR UNITED kINGDOM. Tel/Fax: 0870 7500544 E-Mail: theeditor@authorsonline.co.uk

Trade distributors: Gardners Books; Bertrams Books; Ingram Book Group.

Synopsis.

For the first time since 1958, an English writer has produced a book for the UK security market. Entitled *The encyclopaedia for locksmiths'* the book contains over 250 pages with over a thousand definitions, clear diagrams and helpful information. Intended for all levels of skill the book sets definitions on many aspects of the security industry, locks, alarms, access control and much more. This new book has its basis in the work of F J Butter. The diagrams have been specially drawn for the book. Updates will be available to registed purchasers.

The author was sometime Chairman of the Master Locksmiths Association, and first Chairman of their new company — Sold Secure; he was also a lead trainer and sometime chief examiner for the MLA. The author was self taught. He found Josiah Parkes' book by F J Butter 'Locks and builders hardware' (1948) and its successor, 'An encyclopædia of locks and builders hardware' (1958) of great help; especially when he studied for the Locksmiths entrance exam.

For further information please contact the author or publisher. Mr Friend can be contacted at: Calle Amsterdam 8, Bello Horizonte dos La Nucia 03530, Alicante, Spain. Tel: 0034966895903 E-Mail:

mick@locksmithsbooks.com

Website: http://www.locksmithsbooks.com/

Master Locksmiths Association meeting April 23-25 2004, Castle Donnington, Derbyshire

Donnington Park Conference & Exhibition Centre, Castle Donnington, Derbyshire, England:

23-25 April 2004.

The venue is 2 miles from East Midlands Airport (shuttles from London Gatwick and London



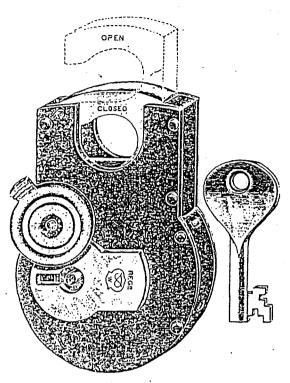
Heathrow), with frequent connections by bus.

Booking information available from The Master Locksmiths Association, 5D Great Central Way, Woodford Halse, Daventry NN1 3PZ United Kingdom 201327 262255; Fax: 01327 262539

Email: mla@locksmiths.co.uk
URL: http://www.locksmiths.co.uk/
There will be some lock collectors attending and presenting a display of old locks.
Overseas visitors are especially welcome.

Collier, Marsha eBay for dummies. 4th ed. Hobokon, NJ, 2004. 392p. ISBN: 0764556541 (pbk) This book addresses all the issues an inexperienced eBay user will confront. Covers the eBay interface, fees, and methods of buying and selling. I had a quick look at this in a bookshop, and didn't find much about using Paypal, though there is much else that could be useful. You could become a regular trader after reading this.

JAPANNED IRON PAD LOCKS.



No. 4619.

 $2\frac{1}{2}$ inch, step ward, japanned iron pad lock: I spring lever, bright iron shackle to spring up when key is turned and to sell lock when closed.

17.9 per doz.

Extra keys ... 6/- ,,

Galvanized ... 2 · ,i extra.

No. 4822.

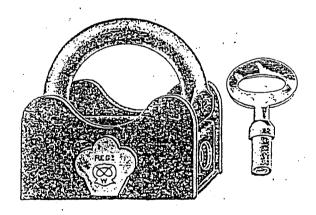
25 inch. japanned iron, registered screw pad łock

2 2 3 inch.

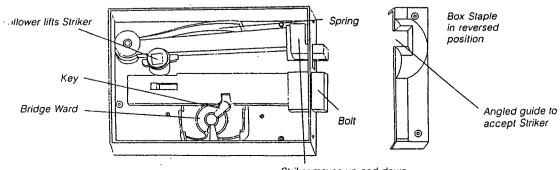
5 4 5 11 7 1 per doz.

Emra keys ... 1/4/16/19 /

Gaivanized ... 1 - 1 - 1 5 .. extra



Carpenter's Lift Up Lock



Striker moves up and down

TELEPHONE: 01-407 2866

Established 1906

The Thames Manufacturing Co., Ltd.

1 MAGDALEN STREET, LONDON SE1 3UD REG. OFFICE: 100 TOOLEY STREET, LONDON SE1 2TS

CONTRACTORS TO H.M. GOVERNMENT AND BOROUGH COUNCILS

DAYS SECURITY PATROL CLOCK

Used extensively in Warehouses, Hotels, Hospitals, Factories and Local Government Offices.

Regular patrols ensure protection against burglary and Fire by recording the time and position of security patrolman during his round.

The instrument consists of:-

- A Clockwork movement driving the hands and two character wheels. One wheel registers 0 - 58 minutes in two minute intervals. The second wheel registers 0 - 23 hours advancing in steps every hour. See Figure 1.
- A Printing mechanism which simultaneously prints on paper tape the hours and minutes and the individual number of each patrol key. See Figure 2.
- 3. A Security device to prevent fraudulent opening: When opened by key provided a small hole is punched in the tape Thus each tape should have only one punched hole in it between openings. See Figure 1.

The clock is provided with a best hide leather lock up pouch, shoulder strap, opening winding and setting keys and padlock. See Figure 3.

` TELEPHONE: 01-407 2866

Established 1906

The Thames Manufacturing Co., Ltd.

1 MAGDALEN STREET, LONDON SE1 3UD

REG. OFFICE: 100 TOOLEY STREET, LONDON SE1 2TS

CONTRACTORS TO H.M. GOVERNMENT AND BOROUGH COUNCILS

KEY STATIONS NO. 1 - 999

can be provided complete with drop lid housing, or supplied See Fig. 4 separately with chain only.

Numbers provided as required.

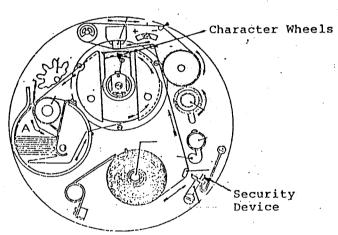
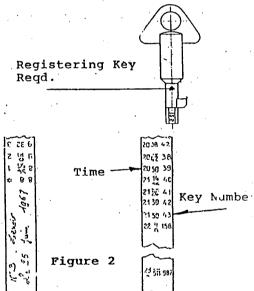


Figure 1



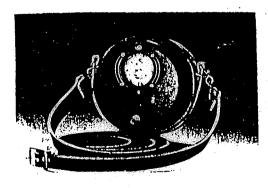


Figure 3



The Die Cast Station flox, Ratchet Key and Chain, which is sealed in position. Weight 9 ors.

Figure 4

Questions from readers

rite in to "Locks & Keys" with your questions about locks. Somebody will surely be able to supply answers. The Editor will be pleased to print a composite answer to questions. When replying, please mention the number of the question.

28] Trevor Dowson would like any information or trade catalogues on the safemakers Sheffield Safe Company, who were in business in the 1920's. Also *wanted*: old hotel keys and tags; and old safe plates.

Trevor Dowson 17 Landseer Dr, Gleadless Valley, Sheffield S14 1BS

A burglar raided an expensive apartment. He took great care that nobody was home, and kept the lights off the whole time. Just as he was tackling the wall safe, he heard a voice saying, "I can see you, and so can Jesus."

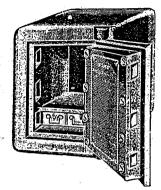
The burglar froze. He looked around slowly, but could see noone. Then he heard the voice again, "I can see you, and so can Jesus." This time he realised that the voice wasn't human. He shone his flashlight round and saw a parrot's cage in the corner, with a parrot in it. Again, the parrot said, "I can see you, and so can Jesus."

"Phew," muttered the burglar, "It's only a parrot."

"Yes," said the parrot, "And Jesus is only a Dobermann."

Colditz Castle is now a good place to get away to: after years of not having a suitable use, it has become a Youth Hostel!

SAFES



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RESISTING
SAFES

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12-CORNER-BENT STEEL SAFES

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WRITE FOR LIST

WALKER & WORSEY, LTD. Edmund St., BIRMINGHAM

LONDON: 34-35, HIGH HOLBORN, W.C.1 Works: "Triumph" Safe Works, Sedgley

The illustration on p16 below is from Ancient inventions.

It describes and illustrates the operation of wooden locks widespread in the Mediterranean in ancient times. The short round sticks with peculiar, but obviously deliberate, whittlings were quite common on archaeological sites. It was many years before their purpose was understood. The 'key stick' enables a wooden bolt to be both shot and withdrawn from outside by *pulling only* on strings. Although simpler than the 'egyptian lock', it would frustrate anyone who did not understand the operation, even if the short stick were recognised as a key.