



LOCKS & KEYS



Issue 21

The Newsletter for lock collectors

July 2003

Divided or shared responsibility

Dividing and sharing responsibility for valuables is a centuries old technique. There is a variety of possible functions, and many sorts of lock have been invented to implement them.

In England, the Church issued numerous edicts over the years requiring parishes to provide chests, with two or more keys. Some parishes had their own 'secular' priest (who lived in the parish). Others were supplied with a visiting 'regular' priest (who lived under the rules of a monastic order, and in a monastery). Parishes with their own priest usually had a chest with three locks, all different. Those with absentee rectors often had chests with two locks. The visiting priest often had no continuity.

The practice of having more than one lock, often of different types, is still used on some modern safes. With keys held by more than one person, two or more persons must be corrupt, or be suborned or compelled. Banks developed this by dividing keys into

'A' or 'B', and staff were allocated to the 'A' list or 'B' list. Thus, nobody should hold a complete set of keys needed to open a safe or strongroom.

Multiple locks

Figure 1 shows the chest of an 18th century friendly society. The chest was kept in a secure place, so its locks were mainly for protection against internal corruption. It has 3 locks all fixed on the same backplate. These are warded locks, of similar size, but the keys will not even enter each other's locks. This essentially simple function has

continued in use; Figure 2 shows a Chubb cut cupboard lock (1950's) on the same principle. One lock has a pin key, the other a pipe key. In similar fashion, grille gate locks have been made for prisons and mental hospitals. In

this function, any lock can shut the door. All locks must be withdrawn for the door to open, but the keys need not operate at the same time. Sometimes the key of one lock is held by a supervisor, so that the other keyholder cannot open on his own if the second lock is locked.

Padlocks have also been made with this function, some having two shackles, requiring two keys to unlock fully.

This supervisory control function is often implemented in more specialised locks.

(Continued on page 4)

"The ultimate in protecting keyholders from corruption or violence is to co-opt Time itself!"

"Locks & Keys" needs more subscribers. If you know any other collectors, please ask them to subscribe to their own copies!

"Locks & Keys" welcomes contributions, preferably with un-coloured illustrations on separate sheets. Unfortunately, colour photographs tend to be too dark to reproduce well. PC disks with files in MSWord7, MSWorks4.5, Write, Wordpad, or saved as .rtf can be used. Articles may also be emailed to the Editor — see below right.

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Editor

May I firstly thank all the loyal readers who have come with me so far. With this issue comes your subscription renewal. And my usual plea for more subscribers. If every subscriber would recruit 1 more subscriber, I would just reach an economical number — and could probably afford to add more pages. Also, there might be enough spare to pay for some advertising for readers. Certainly there are more collectors out there! Who buys all the locks off the Internet?

Although this is the holiday season for some readers, you would you would greatly encourage me and give me confidence if you would send me subscription renewals promptly rather than at the last moment :-)

Now is your opportunity to tell me what you like and don't like about the *newsletter*. One subject I hoped to include more often was places of interest, but I have now mentioned most of those I know. More suggestions are welcome.

During the year, several enquires have come to me from around the world, often by email. Of these, the most common subject has been Milner safes. If anyone can write an article on Milner safes and locks, I'm sure we would all be pleased to see it.

Several pictures have also been emailed to me. At least one, probably inadvertently, contained a particularly nasty virus which did considerable damage to my computer. It beat my email and computer virus checkers. Some files, including some pictures, have been lost as a result, and production of this issue of the newsletter has been rather protracted.

Several articles are part-written, but have had to be held over. That includes the book article; I really will try to put it into the next issue. More pictures should also be possible. A quiz has been suggested for the November issue — it just might happen!

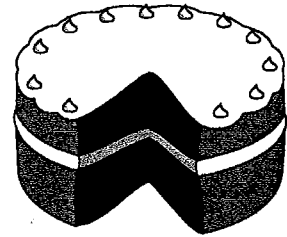
Several times I have exhorted readers to contribute articles about their favourite locks, or describe their collections, or send a profile. I have a very few pictures of collections, and one profile so far. I am aware that many readers know much more about locks than I do, and readers could benefit if you shared your knowledge. There are some loyal contributors, so I do have some items pending, but more descriptions of your locks would be welcome.



Several ideas have been mentioned in this column before, but seem not to have attracted any interest or response. A survey listing old chests in our churches was one idea. Another was a basic list of useful, available, books; and suggestions for cleaning and conservation

Feedback

It has been reported to me that the Royal Mail is to discontinue using Mail Trains completely by next March. So what will happen to all the quality locks and other fittings presently in the rolling stock? Trains will be replaced by more road lorries, and some more air transport.



After an item on handcuffs, *Jon Millington* came across a paragraph on Hiatt in a book of articles originally published in *Country Life* between 1979 and 1987 in: Rosemary Verey. *A Countrywoman's Notes*. London: Frances Lincoln, 1991. pp. 18-19.

'In the days when villages had their own areas of common land, where all the inhabitants had equal rights to graze their animals, the question of ownership must have caused problems, and rustling of cattle and horses was surely a difficulty which had to be dealt with. In our village a farmer named William Turk took no risks with his horses, as we discovered recently when his horse collar came into our possession. It is made of a thin strip of steel about ½ inch broad, oval in shape with a hinge at one end and an elaborate locking system at the other. It fits exactly round the top of a horse's neck, large enough not to cause discomfort or chafing but small enough to make it impossible to remove except with its two-ended key. On a brass inlay round the collar is the inscription in clear 18th century calligraphy: "Stolen from Wm. Turk, Barnsley, Glorshire". Both father and son Turk are buried in the churchyard. The horse collar was made by a Birmingham firm called Hiatt, which has been established for over 200 years and still makes handcuffs.'

of locks and keys. These are two common queries to me.

A British lock collectors' website?

Does anyone have any thoughts or suggestions about this? It's world-wide inexpensive advertising for collecting. However, I am not able to progress this idea in the foreseeable future. Can anyone help with it?

It should be more than just a look at an individual collection, but also different from a site for working locksmiths. It should have something both for fine art collectors, and those interested in technology. Unfortunately, it also needs an address, and a Webmaster to look after it! An address would cost some money unless the site is very small (i.e. too small for many pictures!) And somebody's expertise and time.

Any offers / suggestions?

Dual control locks: pictures

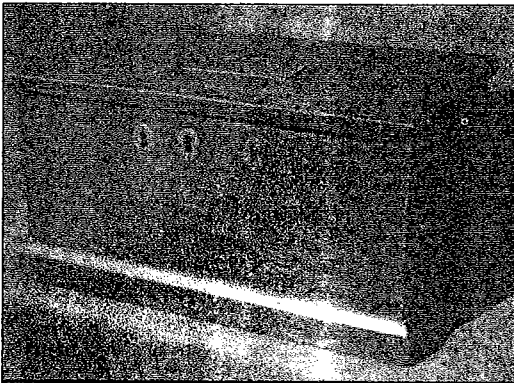


Figure 1 Friendly Society box, 1789. This box was the society's first purchase; there were three Keymasters and one Boxmaster



Figure 2 Chubb dual cupboard lock with caps removed; the barrel and curtain of the lower (pin key) lock has also been removed.

Figure 4 Escutcheon lock (below)

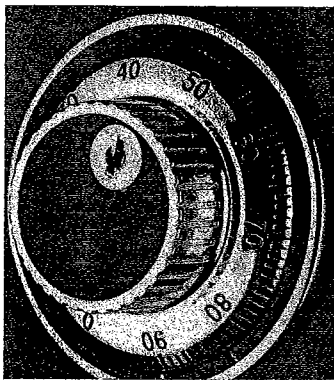
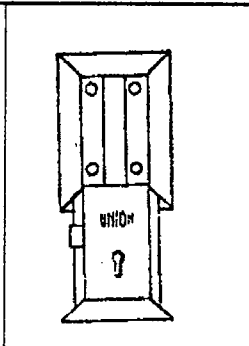


Figure 5 Dial check lock built into a combination lock dial. A spyproof dial ring is also often fitted..

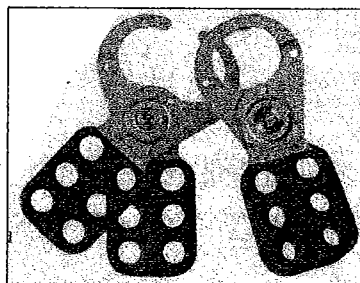


Figure 9 Safety lockouts, open and closed. (left)

Figure 3 Control lock of Chatwood back to back dual cupboard lock with cap removed. The peg of the control lock, which protrudes into the front lock, can be seen at lower right of the control lock's 'bolt'.

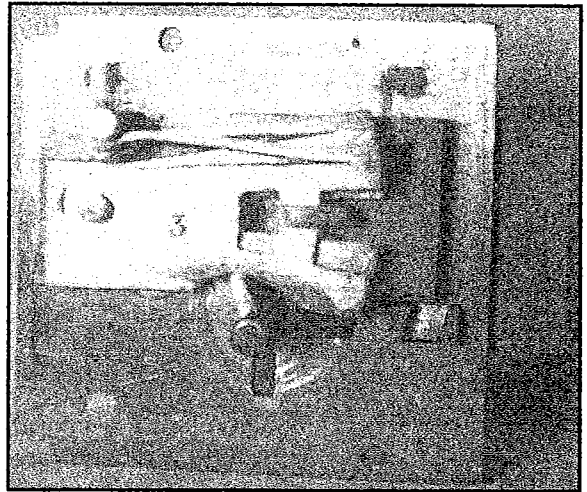
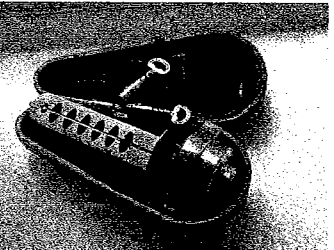
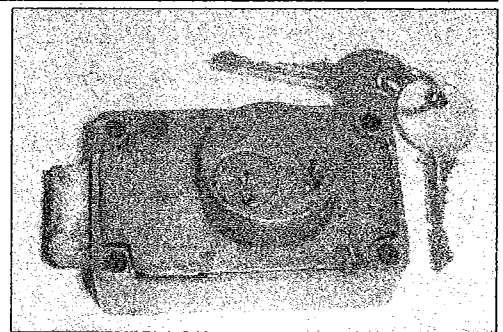


Figure 6 Cotterill's 'Lock Protector' in case; the barbs grip the wood of the keyhole, preventing removal.



Figures 7 right upper, typical lever safe deposit lock, for a compartment about 1" high; and Figure 8, below right, Yale safe deposit box lock with one cylinder having two keyholes.



(Continued from page 1)

Figure 3 shows a Chatwood straight cupboard bank lock with one external bolt, operated by an ordinary short key. Fixed to the back of the lock is another lock with no external bolt. Its 'bolt' has a pin that protrudes into the front lock. When shot, this pin stops the bolt of the front lock being withdrawn. The key of the back lock cannot open the cupboard — it can only control whether the front key can do so. Incidentally, the bolt step of the long back key (there is only one keyhole in this lock) is nearest the bow, similar to Barron locks.

Escutcheon locks

A form of supervision used mainly on safes and strongrooms is the escutcheon lock (figure 4). This is a small lock, usually of good quality, built into a sliding keyhole escutcheon. When locked, this prevents the safe key being introduced into the safe lock. The key to the escutcheon lock is very small, and cannot itself operate the safe lock. The escutcheon lock does not provide any physical security — it can be easily be removed by force. A similar function for single dial safe combination locks is the dial check lock (figure 5). This is typically a small pin tumbler lock, set into the dial knob. When locked, this prevents the dialled being turned easily.

Keyhole blocking locks

An apparently similar function was provided by a lock invented in 1831 by Samson Mordan¹. This was the keyhole-blocking lock, invented at a time when most doorlocks had large keyholes, and were often vulnerable to the use of false keys. Various forms of cylinder lock have been used; Figure 6 shows a fine "Lock Sentinel" by Cotterill. In Europe, until recently, many hotels had room locks with large keyholes. Keyhole-blocking locks have been on wide sale in modern times, using a pin tumbler mechanism. Such locks provide physical security, as it is difficult to remove them, and difficult to insert key or picks with the block in the keyhole.

This idea has been applied to safes; Chatwood certainly used it in the safe that Mr Walker bought for his jewellery shop after the Cornhill robbery². This keyhole lock was platinum, to resist attack by blowpipe. However, the idea cannot have been entirely convenient, as it has not been widely used.

Safe deposit locks

Safe deposits are widely used in some countries in Europe, especially Belgium, and also in the USA, Canada and Australia. Strangely, they are rarely provided in Britain, and practically are only available to wealthy persons in a few big cities. Some large hotels also provide safe-deposit lockers for their guests. Security lies not only in the lockers themselves, but

also in their surroundings. The groups of lockers are substantially built of steel, with doors, in many instances, a solid half-inch thick, fitted with a first class lock. All the lockers are placed in a strong room, or vault, as the Americans call it, which has walls, floor and roof of great thickness and strength; while this inside chamber is a separate self-contained inner strong room of heavy armour plate steel. A massive door, with modern devices, guards the entrance. In some deposits, there is a patrol passage round the outer walls, which the night watchman walks through at short intervals.

Lockers vary from a small safe to a locker about 1' high, which contains a drawer, and is mainly used for keeping documents. Locks have been designed in sizes to fit the various small sizes and shapes of locker door.

Several kinds of locks are fitted on the locker doors. In the English-speaking countries, the duplex key action is the favorite type. This frequently is made with two internal sets of works and two keyholes. Such a lock for a locker 1' or little more in height is shown at Figure 7.

The renter uses one keyhole and the guardian of the safe deposit, often with a smaller key, uses the other. The locks are so made that, before the renter can open his lock, the guardian must use his key, which in no circumstances can open any lock nor can it be altered to do so. Figure 8 shows a Yale pin tumbler lock on the same principal.

"The duplex key action lock makes it necessary for the safe deposit renter to inform the guardian each time he wishes to open his locker."

One simple way of achieving duplex control with a lever lock is to have two sets of levers, and two bolt stumps; but only one talon, for the renter's key. The guardian's key does not have a bolt step, and cannot move the bolt. This key usually has to be used before the renter's key. Typically, the levers would be endgated. Often, flat steel keys are used, and the trunnion can be bulleted, with a matching profile required for the key.

In some patterns, the guardian's key withdraws a steel shield, which covers the renter's keyhole; in other constructions it rearranges the internal mechanism of the lock, without which the renter's key will not operate. Although a renter has access to his locker at all times during business hours, the safe deposit authorities desire to confirm the renter's identity and keep a record of his visits. The duplex key action lock makes it necessary for the renter to inform the guardian each time he wishes to open his locker. All the renter's keys, which the guardian need not see, as they are usually in the charge of a high official, who issues them, differ from each other and have distinguishing numbers. The locks also are numbered, but not to correspond with the keys. Thus, key No. 347 might open locker No- 926. In this way, the finder of a lost key is prevented from knowing to which locker it belongs.

(Continued on page 5)

(Continued from page 4)

In some countries, a letter lock combined with the duplex key action finds favour. The renter has both to *have* something (the key), and to *know* something (the combination). For unlocking, the renter has first to set up a combination of three or four letters of the alphabet, for example, by turning a dial or dials. Then the guardian performs his part after which the renter with another key can withdraw the bolt of the lock. Change key duplex action locks are used in other installations. In some of these, a renter takes at choice one of a number of sealed envelopes containing keys, which the safe deposit guardians have not seen. With that key, the renter throws the bolt of his lock thereby setting the lock to that key only. On giving up the locker, the renter's key is sent to the maker for checking and resealing. It is usual to make safe deposit locks to go on guard automatically. When the renter has locked his locker and removed his key, he is unable to open it again without the collaboration of the guardian.

The idea of one lock moving a blocking shield behind the keyhole of another lock is an idea that has also been used on some Chatwood safes. The shutter is moved by a comlock. Incidentally, some Chatwood comlocks need a key to a lever lock to change the combination. Also, the back door covering the locking mechanism of many strongroom doors needs a key to open. Thus unauthorised combination changes cannot be made.

Masterkeying as such does not divide responsibility. Simply, each lock can be opened by its own 'servant' key, and also by a 'master' key that can open all the locks. This is an either or situation, rather than both being needed.

However, the concept can be extended.

Double locking / Master Keying

Some lever locks made for prisons and hospitals were made double or triple throw. Sometimes the Masterkey could double- (or triple-) lock, so that the servant key could not unlock. Thus the subordinate could be prevented from unlocking without the complicity of a supervisor, for example being locked out at night.³

Time locks

The ultimate in protecting keyholders from corruption or violence is to co-opt Time itself! The first timelock

was invented by William Rutherford in 1831. It was a clockwork-driven circular stop-plate with a notch. This revolved against the bolt head until, at the appointed time, a notch in the stop-plate moved into line with the bolt head, allowing the bolt to withdraw. It does not seem to have been much used.

Later, a more sophisticated clock mechanism was invented by James Sargent. The prototype was probably made about 1865, but the first one to be used by a banker was installed in 1874. Usually two, or even more, clock movements are used; the redundancy provides reliability, as any one movement by itself

could unlock the mechanism. Usually, the function is to block the movement of a rod attached to the main bolts of the strongroom door, even when the normal locks are unlocked, until the block is removed at the pre-set time.

When bank robbers showed themselves willing to use

extreme violence to compel bankers to unlock safes, the

timelock was adopted.

Safety in numbers

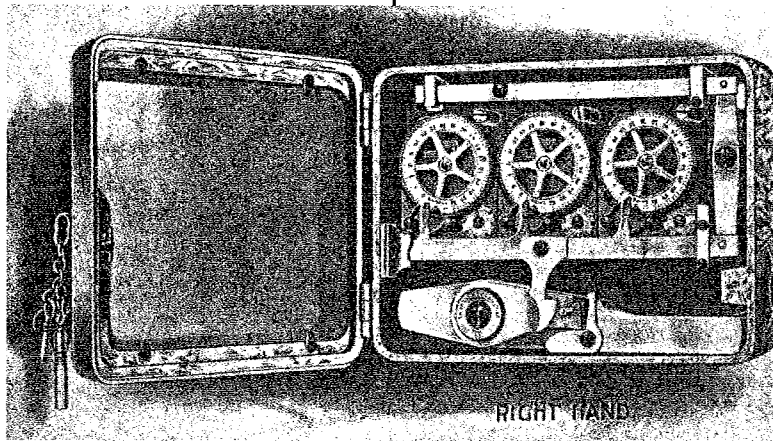
One other shared responsibility function might be mentioned. This has nothing to do with protecting keyholders from corruption or violence. It is the safety lockout (figure n). The device consists of two plates pivoted near one end, which resembles a padlock hasp. This can be opened by pivoting the plates apart. They can be locked together by locking padlocks through the holes down the sides. Each repair/maintenance man has some padlocks, all keyed to his unique key. The locks are distinctively marked so that each man can be identified from his lock. The lockout is locked onto a main switch or valve, which prevents a plant or machine operating. As each repair/maintenance man completes his work, he removes his padlock; but the machine cannot be started until the very last man has finished and is satisfied. This prevents inadvertant start-up whilst someone else is still working, or the machine is not in full working order.

R Phillips

¹ See Newsletter #1 pp6-7. The source is *Transactions of the Royal Society of Arts* v48 1831 pp132-3.

² See Newsletter #9 p12.

³ See Newsletter #17.



Sargent & Greenleaf timelock, early 20th century

German lock collectors meet in Velberg

After the rather successful first meeting of German lock and key collectors in Coburg, Bavaria, last year, when 15 collectors met, this year's meeting took place in the town of Velbert, centre of the German lock industry near Düsseldorf, on 27th/28th of June 2003. The number of participants had trebled, and mainly thanks to the great interest of British collectors, grew rather international. Besides German participants (30) there were visitors from England (7), Austria (5), Switzerland (2), India (2) and the United States of America (1). It should be mentioned, that the collectors in Germany are not organised in any way. There are no association, no president, no membership fees and no newsletter. Therefore, it was a matter of chance, who was invited to the meeting, or who heard about it from friends.

The meeting started in a nice little Hotel, "Zur Traube", in Velbert, at around six p. m. on Friday evening. No initial shyness was noticed and very quickly, a lively conversation developed. People showed treasures from their collections, photos and books. Photos were taken. All this activity was interrupted only by a good meal. Different languages seemed to be no difficulty, since there was always somebody at hand who could help with translating. Even the French-speaking collector from Switzerland managed to make himself understood.

On Saturday morning at 11 a. m., the "Deutsches Schoss- und Beschlägemuseum" (German museum of

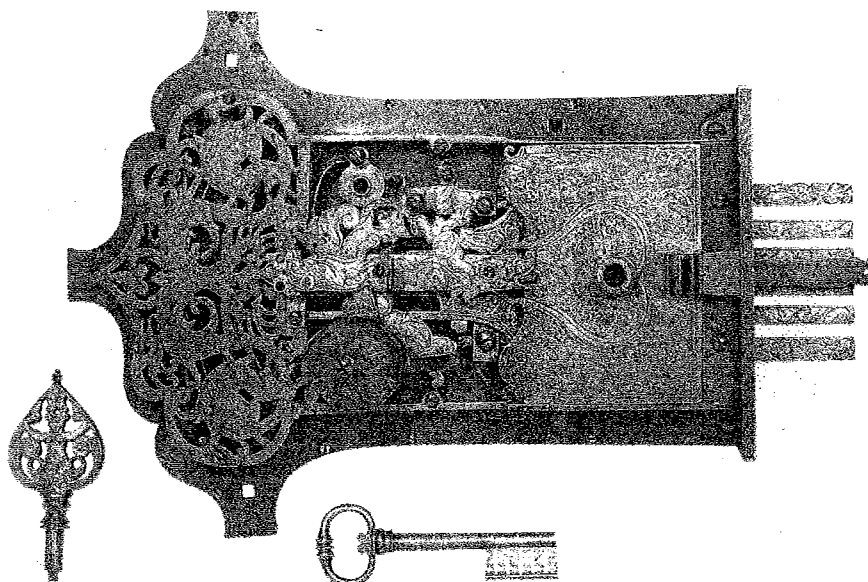
locks and fittings) was visited. Frau Dr. Langer, manager of the Museum, gave a short welcome. Then the curator of the museum, Dr. Ulrich Morgenroth, gave some interesting information about the history of the lock industry in Velbert, and of the museum. In his speech, he switched from German to fluent English (he had studied several years in Oxford).

Lockmaking developed some 4 centuries ago in this rural area, because the soil was poor and the farmers had to look for some additional source of income. Since neither coal nor iron ore was ready at hand locally, nor was running water available for producing power, lockmaking developed, because this industry needed relatively little raw material compared to the amount of human skill and ingenuity.

The museum was founded in 1936, based on a small local museum already existing. Besides the large number of locks, keys and fittings, of which only 25% can be displayed in the show rooms, the museum has a large library of about a thousand books. It also owns about ten to fifteen-thousand documents, such as contracts, sale lists, catalogues, patents etc.

After a quick but tasty lunch, there was room for displaying, selling and buying, all through the afternoon.

Ingo Schmoeckel



German lock and key, 1610. A Masterpiece in iron, pierced, engraved, and etched. The intricate box of wards is inside the polygonal boss. [For technical reasons, the pictures of the Velbert meeting have had to be held over until next issue; there were some more splendid locks on display and sale!]

Some lock puzzles

Harry Eng was a former minister and elementary school teacher, educational consultant and magician. Harry had the most fun with his impossible bottles getting people to think. The most common solution offered being that the bottle was cut or that it was blown around the stuff inside. Harry would tell you straight away that everything went through the neck of the bottle and that all of his bottles were standard, off the grocery shelf variety. No monkey business with the bottle. The stuff inside? That's up



to you to figure out. Harry made some unbelievable bottles. Some claim he made more than 600. His signature was a knot in each bottle. Sometimes huge, sometimes small, but always bigger than the neck. Harry died in 1996. (This puzzle is no longer available for purchase.)

The bolt part is the most puzzling piece in the bottle. Both ends of the bolt are nearly touching the sides of the bottle.

Making Working Wooden Locks: Complete Plans for 5 Working Wooden Locks

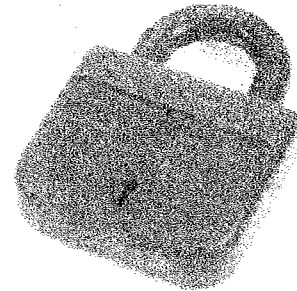
by Tim Detweiler: Linden Publishing Company, 96p.
Series: Woodworker's Library 2000 ISBN
0941936600

This is a book for craftsmen who love to make puzzles, games, mechanical movements, and moving, interactive objects of wood. It is the sheer novelty of a wooden lock that makes it so irresistible to woodworkers. The five projects presented here are all constructed entirely of wood; there are no metal parts. Amaze your friends with these fully functional, working wooden locks. They make intriguing conversation pieces or shop displays. All projects include step-by-step instructions, color photos, and measured drawings. They are arranged in order from least to most challenging. All the locks featured can be made with basic woodworking tools. The author is a retired carpenter and locksmith.

Contents:

About the Drawings

5. Warded Lock with Key
6. Three-Number Combination Lock
7. Antique Lever Lock with Key
8. Railroad Switch Lock with Key
9. Antique Push Key Lever Lock with Key



Akio Kamei

This is a puzzle lock entirely made of wood. Here is Akio's hint to open the lock: "If you buy my padlock in Japan you'd need to use only one monetary bill, so the change you'd get is only three yen (three coins)." From 1993. Akio is possibly the world's best-known designer of trick boxes. Most items are individually handmade to order, but a few are available commercially.

<http://www.karakuri.gr.jp/creation/purchase/purchase.htm>

Large wooden locks with clear perspex covers to see the mechanism always attract attention, and some are not too difficult for an ordinary woodworker to make.

Questions from readers

Write 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.



26] Is there any denominational difference between Roman Catholics and Protestants in a preference for trefoil or quatrefoil key bows? Augustin Pugin (who practically created the 19th century Gothic Revival), used both, apparently indiscriminantly, in his work.

Keith Carrier

For sale / Wanted

Over the last twenty years or so I have put together a large collection of keys etc., which, due to lack of interest from my family, I am now selling.

Collection consists of:

Many hundreds of keys, (including keys from the Tower of London).

230+ named and framed pocket watch keys.

Around 200 padlocks, including many rare American ones, including KEEN KUTTER, many having keys.

100+ safe and escutcheon plates.

The padlock collector: a price guide, by Franklin M Arnall, 1988 — a well-used copy.

Details from *David Atkinson, Pippin Lodge, Pasture Lane, Barrowford Nelson, Lancashire BB9 6ES*
telephone 01282 692353.

For sale or swap: old Indian screw key padlocks £10 each. Wanted: safe plates, British or foreign; I have duplicates to trade.

*Trevor Dowson 17
Landseer Drive, Gleadless Valley, Sheffield,
Yorkshire S14 1BS*

Christmas past

One of my Christmas presents last year was a pair of 'old style handcuffs made from rustic - finished forged iron, these very old-looking handcuffs look like they've just been retrieved from a dungeon.' They are new Hiatts 115 cuffs coated in black paint; the key is somewhat rough, but they do work. Presumably they didn't sell well. Together with a legiron (non-adjustable Darby pattern) on an 'actual forged iron ball' with 28" of chain', they were in the spring sale catalogue at half price. A bargain at full price; don't know whether there are any left, but probably! (Ball and chain reduced to £14.95).

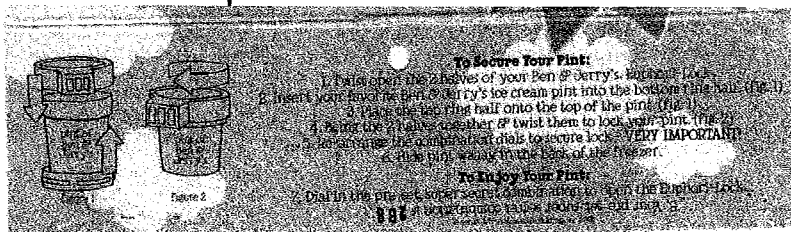
Hard to Find Gifts, 01543 438269
www.hardtfindgifts.co.uk



Another present was a combination-locked cover to secure the cap of a pint tub of Ben & Jerry's icecream! By post from Intashop 10 Wellington Street, Cambridge CB1 1HW; 01223 347806, or email info@intashop.com.

Price £5.

I'm sure it will also be available in America. Now you can sleep easy knowing your favourite icecream is secure!



Kaye Two-keyhole masterkey mechanism**COMPLETE SPECIFICATION 169,886 1921.****Improvements in and relating to Locks.**

We, Sam Cooper, Traveller, of 2, Cragg Hill Terrace, Horsforth, and John Valentine Kaye, Lock Manufacturer, of Joseph Kaye & Sons, Limited, Lock Works, Hunslet, Leeds, in the County of York, both subjects of the King of Great Britain, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:-

This invention relates to improvements in that class of locks which employ two keyholes and 2 keys, master and servants, and whilst the invention refers more particularly to padlocks it may be applied to other types of locks.

Generally it is known to construct locking mechanism with two keys either engaging with one common or with two individual key holes, and sets of levers or tumblers have been arranged one to be operated by each key. These levers may have been arranged each set in conjunction with its own runner plate or they may have been arranged as in the Specification of Letters Patent No. 100,985 wherein the key holes were one above the other and the master key levers actuated the servants key levers to free same from the gate and so actuate the lock.

This invention differs from that above referred to in that the key holes are side by side and the action and arrangement of the master key and its levers coupled with a double gate in the servants levers is such that check-locking may take place which has not to our knowledge hitherto taken place in padlocks, where the space occupied by the mechanism is somewhat restricted.

In describing our invention in detail reference is made to the accompanying sheet of drawings, similar letters indicating similar parts in which:

Fig. 1 represents an elevation of a padlock constructed according to our invention, with the cover removed.

Fig. 2 shews the position of the runner plate when check locked, and

Fig. 3 shews suitable servants and master keys.

To carry our invention into effect we will describe same with reference to a padlock of the automatic or spring type, but we wish it to be understood that it may be applied to other types of locks.

The locking catch or staple S of the lock is pivoted to or in the lock casing at one side as at S1 and engages a spring bolt B at the other side, and to force the bolt from the catch, such bolt is withdrawn by a projection R1 on a runner or tail piece R by the correct operation of the mechanism by a suitable key or keys after the usual manner but not by the usual mechanism.

There is one tail or runner plate R having the operating projection R1 which in this case is arranged so that it may withdraw the bolt by a moving contact with projection B1 and also act as an obstruction to prevent the bolt being

brought back. The projection R1 in this case abutting against the projection B2. This runner plate is provided with a suitable number of notches R2, R3 and R4 for engagement by the bits of the keys which are two in number a servants K and a master key K1 and their keyholes are placed side by side, a suitable distance apart as shown. The keys are preferably of such a construction that the servants key cannot be made into a master key and therefore cannot operate the master levers, a suitable form being shewn in Fig. 3.

There are two sets of levers L, M, one set L, having a suitable gate or gates L¹ therein or thereon, which set is spring actuated in any usual manner, this set being for the servants key, and another set of plain ungated levers M working with minimum friction which do not require springs, for the master key. The master levers M are so arranged that they are in contact with the servants levers L in such a manner and position that their correct operation will lift the servants levers correctly and allow the bit of the master key to move the runner plate R in the desired direction. Noses or projections such as Lx capable of engagement by noses or the like such as Mx give the desired co-operation between the parts.

In a padlock, the duty of the servants key is to withdraw the bolt only and the gating in the levers, and notch or notches in the runner plate are such that the servants key can only perform this operation, but the master key may not only withdraw the bolt but on operation in the other direction will cause the servants levers to be correctly operated and permit the runner plate R to be moved forward to cause its projection R1 to lock or obstruct the bolt B in which condition the servants key is inoperative see Fig. 2. The gate in the servants levers is double and in the gate operates the usual stump or stud R5 on the runner plate R.

The pivots of the two sets of levers may be comparatively close together and in alignment or nearly so.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:-

1. In lock mechanism of that class which employs two keyholes, the combination with two key holes side by side of a set of spring pressed gated levers and a set of ungated levers arranged to operate the gated levers correctly and to permit of the operation of the gated levers independent of the ungated levers.

2. In lock mechanism of that class which employs two keyholes, the combination with two keyholes side by side with keys therefor, one key engaging and operating a set of gated levers and another key engaging and operating a set of ungated levers which in turn operate the gated levers and so actuate a runner plate, substantially as described.

3. In lock mechanism as claimed in Claims 1 or 2, the combination of two sets of levers one gated and one ungated each having its own key, of a runner plate carrying

(Continued on page 10)

Pirate's treasure chest up for sale

A PIRATES chest found on the African Gold Coast around 500 years ago has been put up for sale to help a Lochaber care group. Alison Kane of Kingairloch placed the chest on the Internet for sale today (Thursday).

Made from the finest English oak it has a secret panel and drawer and a false bottom where Alison and her twin sister Jean used to hide all their treasures'.

The money made from the sale of the box will go towards supporting her card company Skylark Designs and the Lochaber Crossroads care croup.



The box is being kept in a vault in Fort William for safe keeping until it is sold.

She said: 'I really believe in Crossroads and am determined that it does not flounder in terms of finance. It is my way of repaying all the help Crossroads gave to my mother and father years ago.'

Alison's great, great, great, great uncle found it when he was walking on sand on the Gold Coast 300 years ago. When walking he stubbed his toe on the chest and began digging to see what had caused his pain.

Unfortunately there was no gold in the box he found. If there was ever any, it was long since gone and the chest's lock was smashed. Alison said: It is thought it was buried somewhere in the sands off the Gold Coast for hundreds of years, hence the wonderful condition of such an old chest.'

It has become a family heirloom over the years and has been used for everything from a toybox to a box for keeping kindling. Alison and Jean recently took their

treasure box to the BBC's Antiques Roadshow which was being filmed at the Corran Halls in Oban. The box was looked at by both Michael Aspel and Christopher Paine who told Alison that he had never seen anything quite like it in his 35 years in the antiques trade so could not give a valuation.

Oban Times 12/12/03

[As a banker might say, 'Words and figures disagree.' The picture shows an armada chest, which cannot be more than four centuries old, probably less; and made of wrought iron sheet. If so, it is surprising that the Antiques Roadshow experts could not identify it and give a valuation. The 'secret panel and drawer and false bottom' sound puzzling. A till is common; perhaps this chest was lined with wood, including a false bottom? Curious. Perhaps it had only been in the sand for half a century or less! Much longer, and would it be such 'wonderful condition'? Editor]



news items from Trevor Downson

(Continued from page 9)

a projection or operating piece to withdraw the lock bolt, and checklock same by the action of the master key only, substantially as described.

4. The arrangement, construction and combination of parts constituting the padlock with keys therefor arranged and operated as described and illustrated.

Dated this 12th day of May, 1921.

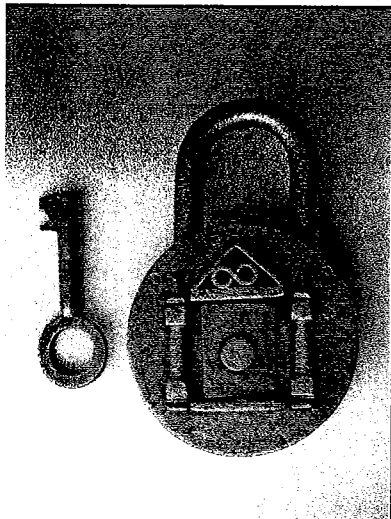
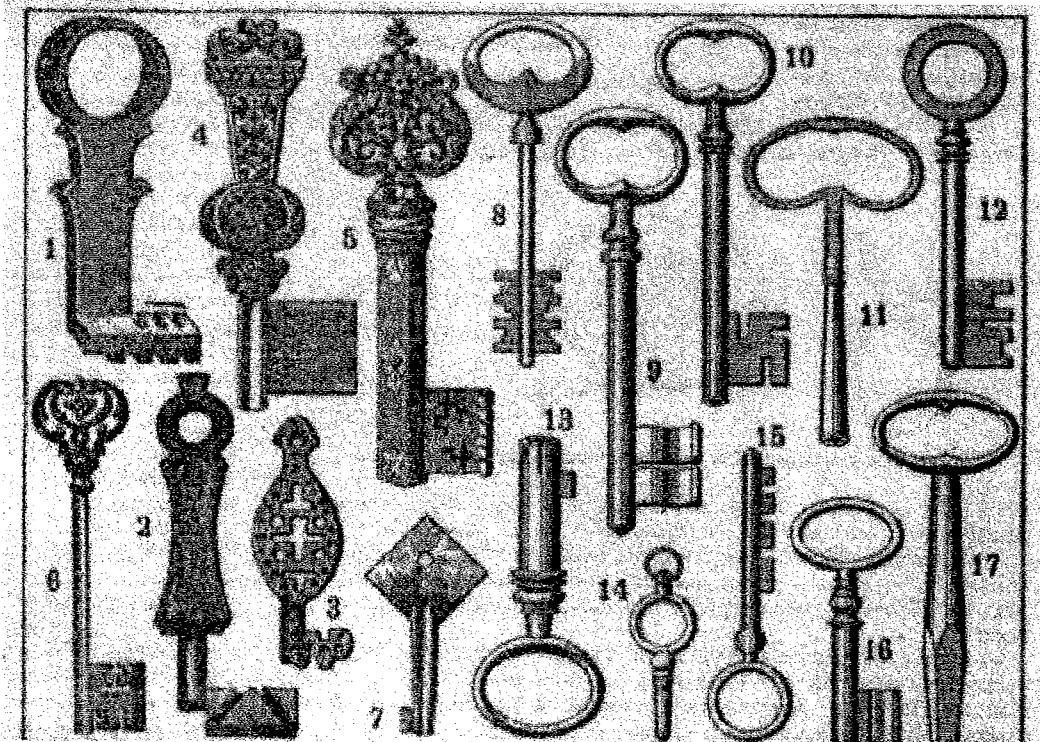
(The drawings for this patent appear on p12.)

Into war's byways goes our roving camera: *The War Illustrated* No. 155 vol 6 28 May 1943

Over two tons of keys were recently collected by the Gas Light & Coke Co. in a salvage drive. Among the 150,000 brought in were keys of every shape and size. This girl examines a giant specimen.

[Much of the scrap collected made no contribution to the war effort — it was not melted down until several years after the war; but much heritage was destroyed. Editor]

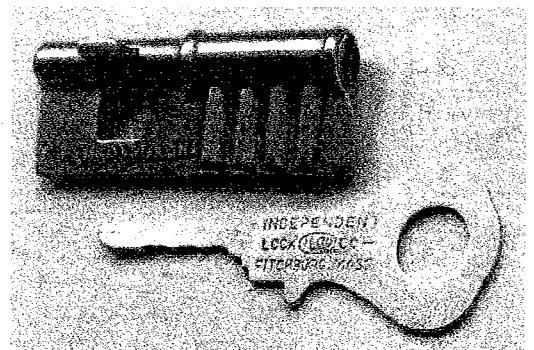
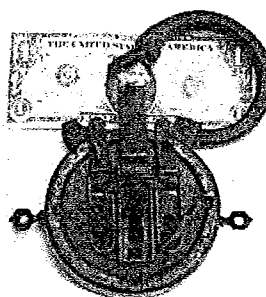
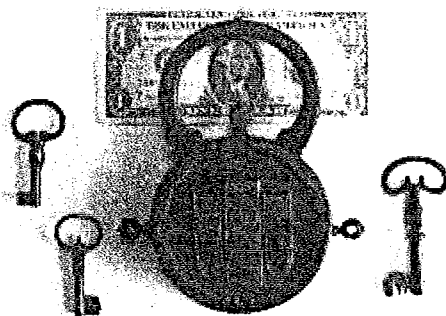
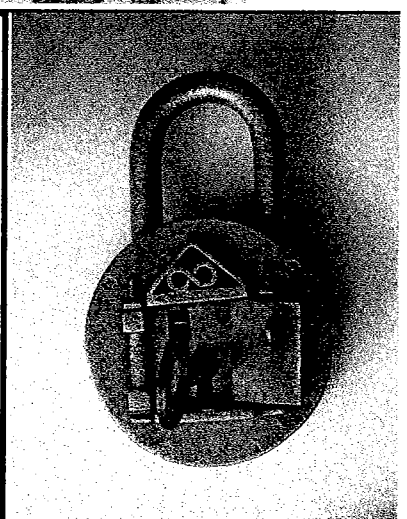
How many keys can you identify? (Answers in next issue).



Does anyone know anything about this padlock? It is iron, with a secret catch to release the keyhole cover. The key is not original. This was sent to me by an enquirer, whose details have been lost with a computer problem. But it's a nice looking lock.

Below left is another unknown lock, this one requiring 3 keys.

And lastly, below right, is an American keyhole blocking lock, by ILCO. I can only guess at the date of this. Anybody have any information?



Kaye's two-keyhole masterkey patent

169,886 COMPLETE SPECIFICATION

1 SHEET

[This Drawing is a reproduction of the Original on a reduced scale.]

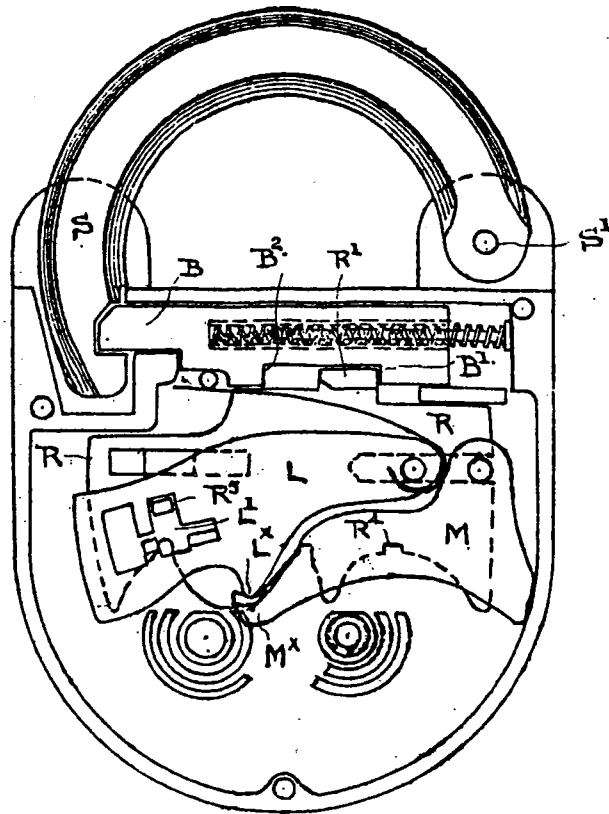


Fig. 1.

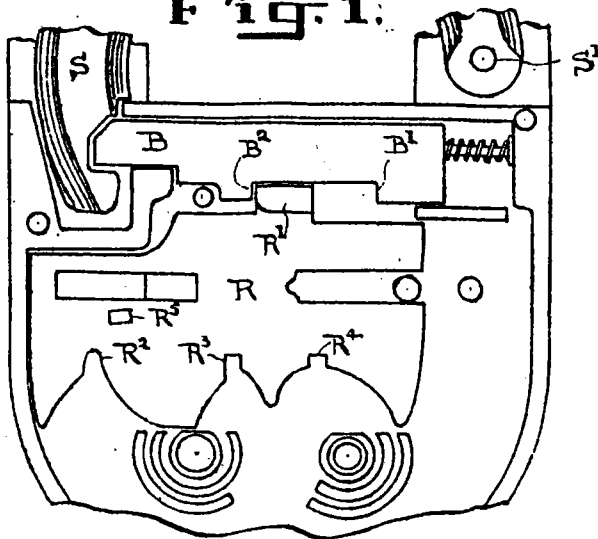


Fig. 2.

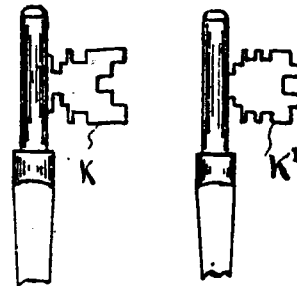


Fig. 3.