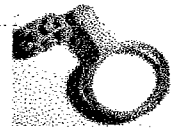




# LOCKS & KEYS



Issue 31

The Newsletter for lock collectors

July 2006

## David Englert

**U**W research scientist David Englert is studying how to pick locks. That doesn't mean, however, that you need to hide your valuables when he's around. His interest is purely recreational. He swears he only needs to know how to pick locks so he can open the many locks at his home that are

"Englert holds the keys to just about everything"

missing keys. And why has he lost so many keys? He hasn't lost them. He never had them in the first place.

Confused? There *is* an explanation. Englert, whose day job is to maintain some sophisticated Chemical Engineering equipment, is a collector who owns more than a million keys and thousands of locks. They come from all over the world and originally opened jails and homes, rice storage facilities and dormitory rooms. Some are as old as the first century and some as recent as the twentieth. Englert is eclectic in his tastes and a saver by nature.

(Continued on page 7)

## Chatwood single spindle letter (SAM) lock

**T**he Chatwood safe company started about 1856. The company began to concentrate solely on the production of safes and locks (there had earlier been other interests in addition) from 1861. There were in the early years several changes of location and company name.

Despite the excellence of Chatwood safes and their locks, the company had a continual struggle to remain solvent. For some years, no dividends were paid. The company even went bankrupt in 1874. The industry had its share of men who were better craftsmen than businessmen. Chatwood safes used expensive production methods and materials.

When the cold bending of large steel plates up to ½" thick became possible, the plant to do so was expensive. So expensive, indeed, that many existing safe companies withdrew from the market because modernisation was too expensive.

Product development and testing was expensive, and the company operated at the top end of the market, where most products were made to order. There were also many 'one-off specials' and experimental locks. Safes and vaults do not benefit from volume sales, nor do many customers bring repeat business – few customers replace their safe every few years!

After World War II, the Milner Safe Com-

(Continued on page 4)

"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 uncoloured 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

Subscription renewal is now due; and please note my new email address:

rphillips52@toucansurf.com

*Locks & Keys* is a newsletter, not a membership organisation. There is a need for a membership organisation for Britain (and Europe). Though there have been informal meetings of British collectors in the past, a start has been made to form a membership association for collectors in Britain, and elsewhere.

At a meeting in the "Locksmith's House", Willenhall (formerly the "Lock Museum") in June, the Lock Collectors Association was formed. There is a draft constitution, and officers. Those attending the meeting contributed £20 each to enable the committee to start functioning.

We do of course need a prominent communication site such as a website, plus of course our two Newsletters intended to advise on the progress/development of the LCA. Things remain to be determined, such as:

- what are the benefits of being a member? At the moment this might seem unclear as those joining are asked to pay £20, but this is necessary to provide a fund to enable progress — for administration, web site (including registered domain etc.), and to promote meetings, etc.
- define a logo for the organisation, this too is being considered relative to the web site identity.
- define our aims, ie. to promote education (through journals, web site etc) about antique locks and allied collecting. To organise events for members to meet up for social occasions including sales of locks and to show other members nice old locks etc we have so that they may be examined, and for inter-change of information.
- additionally the subject of lock (and allied subjects) collecting should be promoted by the Association to increase the awareness of it and increase membership of the Association so that it becomes a focus for lock collectors.
- membership is open to all collectors on payment of the subscription fee, and is not confined purely to British collectors.

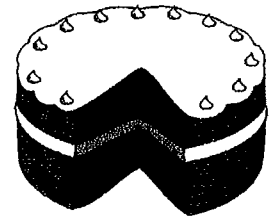
Tony Beck, who also publishes a newsletter, is Secretary. Further details are available from him. It is hoped to have a meeting at the "Locksmith's House", Willenhall, in August. At the time of writing, no more details are available, so do contact **Tony Beck**:

tony1000@ntlworld.com

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## Feedback

I did not intend puzzle locks to feature prominently in this newsletter. Of course, long ago, combination locks were called 'puzzle locks'; and the type of padlock with a plurality of revolving rings (see e. g. #29, pp. 5-9) goes back several centuries. Most combination locks before the 19th century were padlocks, and so were most of the puzzle locks.



Some folk regard all locks as puzzles to be solved, and combination locks, being openable without any tools, are popular as puzzles. I started with a bicycle padlock in the 1950's, and today Master single dial padlocks are popular targets of puzzlers!

Many puzzle locks use some mechanism to conceal the keyhole. Most of these are padlocks, but the Armada Chest is a familiar non-padlock example.

A number of puzzle padlocks have been made over the centuries, some of them expensive one-offs. There are, for example, some in the Victoria and Albert Museum in London. Peter Friedhelm von Knorre (peterschnurzel@hotmail.com) is selling some modern ones at around £200 — see #28 p. 12.

A good number of puzzle boxes are known to magicians, and there are also many puzzle money-boxes.

What surprised me, however, is how many different sorts of puzzle locks have been made, and continue to be made. There are several mass-produced puzzle locks and keys now available new. Not to mention various fêked padlocks and handcuffs made for escapologists — which I might mention in a later issue.

Here is a collection of puzzle locks:

<http://www.padlock.s-a-w.net/lockidx.htm>

and of course there is the now well-known cryptex

[http://www.encryptagifts.com/the\\_story.htm](http://www.encryptagifts.com/the_story.htm)

which you can buy here:

<http://www.encryptagifts.com/>

This site has a large collection of puzzles:

<http://home.comcast.net/~stegmann/disassembly.htm#locks>

including a section on locks, some of which can be bought new. One of the best is the Danlock — see below, p. 14.

There are more puzzle locks for sale here:

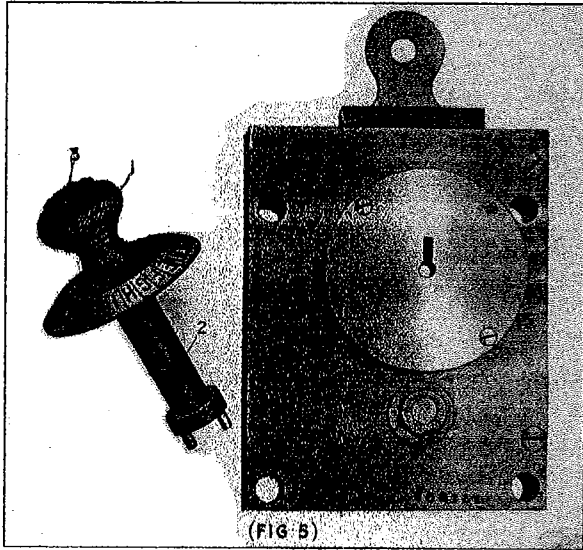
<http://www.puzzlemaster.ca/puzzles.php?type=locks>

and something about chinese locks here:

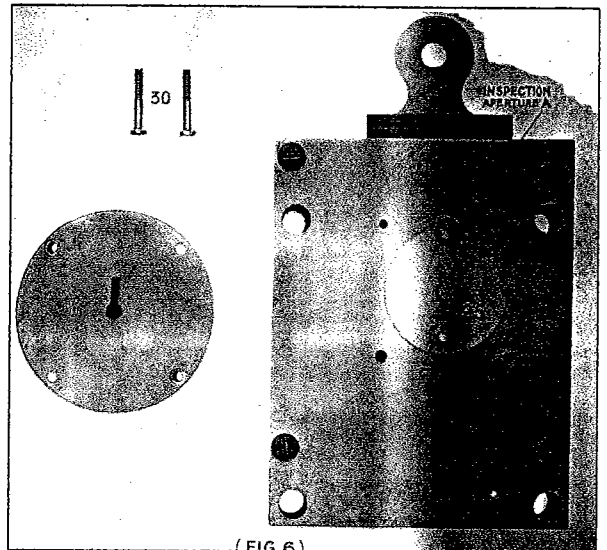
<http://140.116.71.92/lock/english/C10.htm>

I appreciate this is not of much use to any reader without access to the Internet, but there is a wealth of information there. I would like to have more articles from readers who know about locks, so that I could be less dependant on the Internet.

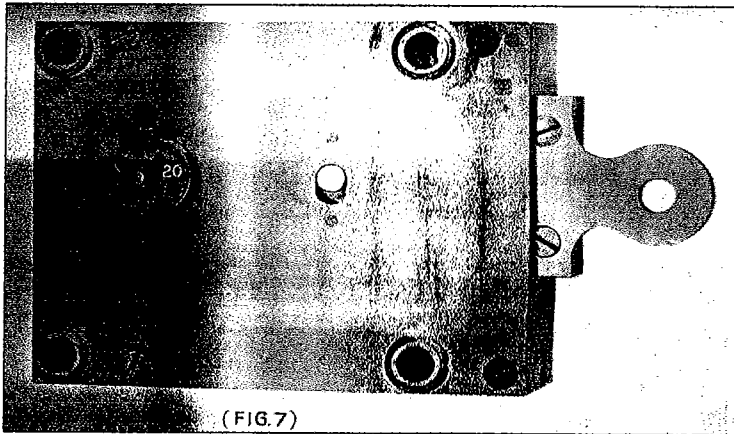
# Chatwood SAM lock instruction manual



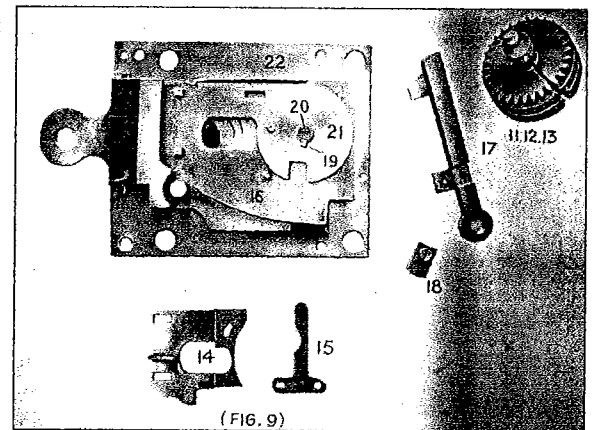
(FIG. 5)



(FIG. 6)

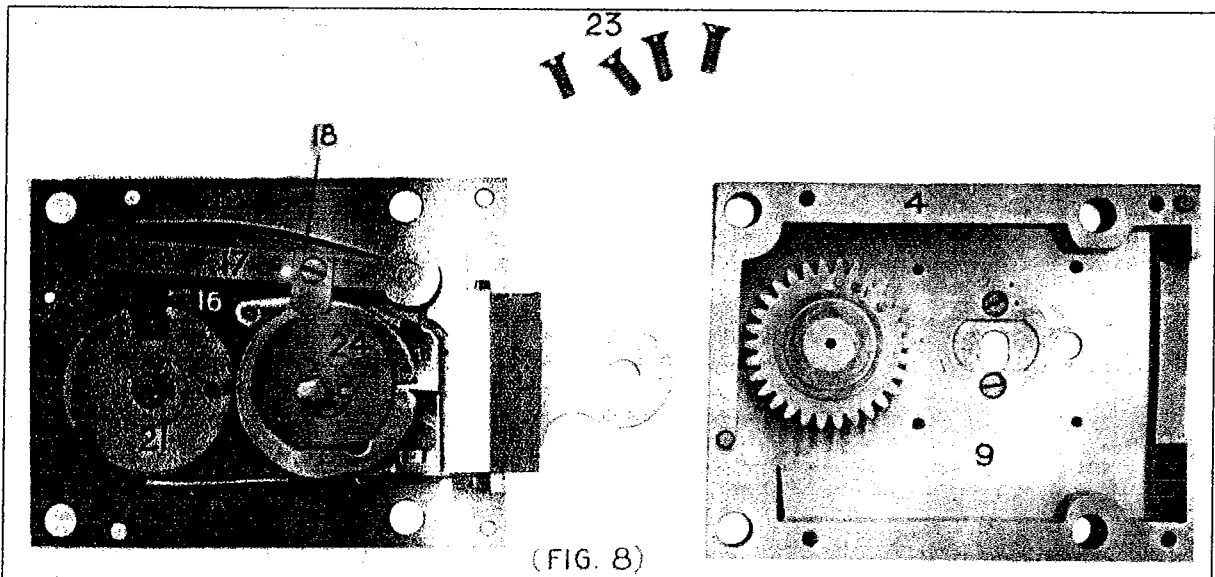


(FIG. 7)



(FIG. 9)

More pictures on pp. 8-9.



(FIG. 8)

(Continued from page 1)

pany suffered a crisis of consumer confidence as the result of the criminal activities of two corrupt employees. Both Milner and Chatwood were by then owned by the same holding company, Hall Engineering (Holdings) Ltd. (as it later came to be called, from 1958). Hall's merged Chatwood and Milner in 1956.

### Decline and mergers

Reconstruction after the war was urgent, but new safes and strongrooms were not high priorities for industry and commerce, struggling to recover from the devastation and cost of the war. Both Hobbs Hart and Company Ltd, and Chatwood-Milner, joined the Chubb Group in the post-war years, together with several other security companies. The size of the market demanded some rationalisation of the industry. It was also a time of rationalisation in the banking industry, with mergers, followed by branch closures (although not then on today's scale!).

### Chatwood combination locks

Samuel Chatwood's first combination lock was the 'Chatwood's five spindle letter lock'. This was large, round, and very expensive. It was used for 'top of the range' safes and strongrooms, and was only produced in small batches. It was usually arranged also to move an internal shutter to block the keyholes of keylocks that would also be fitted to such safes and doors.

Because of the size and cost of the five spindle letter lock, Chatwood needed a smaller, cheaper combination lock.

The use of combination locks for safes was a fashion originally more popular in the USA than Britain, where key locks long continued to be more popular. However, both varieties of lock have their merits, and presumably there was some demand in Britain. Chatwood's 'single spindle letter lock' was patented in 1888. It is usually called the 'SAM lock' because that was the original factory combination.

### The SAM lock

The SAM lock was a very successful lock, albeit expensive relative to the typical Sargent & Greenleaf combination lock; it was used on safes and strongrooms for half a century, up to World War II. In the early 1930's, Chatwood designed a simpler lock, the four wheel 'A' type, being essentially a copy of the Sargent & Greenleaf key-change single dial combination lock. The 'C' type lock was an updated version of the SAM, with four instead of three wheels. It had considerable use, despite a design weakness (which was not present in the original SAM).

The SAM lock had two sets of wheels. Combination changing was by means of a key that moved the two sets of wheels apart, out of mesh. This feature is unique to Chatwood changeable locks, both combination and key, that the changing mechanism is itself usually con-

trolled by a keylock (rather than a simple spanner) – usually a small round four lever lock mounted on the back of the lock case.

### The maintenance manual ran to 15 pages

To remove the lock from a safe, it should be unlocked. The keylock is then locked and the key removed. Then the lockstops (which provide additional support against sideways force) are removed. Next, the fixing screws holding the keylock are removed, allowing the keylock to be slid off the bolt strap.

Then the fixing screws for the combination lock are removed, allowing the combination lock to be removed from the door, disengaging from the spindle which passes through the door. The spindle engages with the lock by 2 pins; and there is a central pin on the lock which fits a hole in the centre of the spindle. The keyhole shield is then disengaged from the end of the combination lock bolt.

### The following procedure for dismantling the lock is taken from the maker's manual.

To take to pieces the Combination Lock (see that the bolt of the lock is in the locked position).

#### Operation 1

Take out the two screws securing the circular-shaped back lock and remove this lock.

#### Operation 2

Remove the components of this lock, which are as follows:

Back lock cap (part 26, fig. 13)

Back lock levers (4 in number) (part 27, fig. 13)

Back lock circular bolt (part 28, fig. 13)

Back lock block (part 29, fig. 13)

Back lock 2 screws for attachment to combination lock (part 30, fig. 13)

#### Operation 3

Clean each component with a clean rag moistened with a little clock oil, and wipe dry with a clean, soft cloth.

#### Operation 4

Reassemble the components, lever marked with a single dot being placed next to the circular bolt, and the remaining levers in the order as marked with two, three and four dots in position shown in fig. 11.

#### Operation 5

See that the bolt of the combination lock is in the locked position. Rotate the disk (part 25, fig. 6) one half turn anti-clockwise. The peg on the disk should then be in the position nearest to the bolt of the lock and exactly opposite to the position shown in fig. 6. Remove the eccentric disk (part 35, fig. 6) and clean with clock oil, as described in Operation 3.

Turn over the lock so that the bottom plate (part 22, fig.

7) is uppermost. Remove the four screws holding the plate in position and then lift the plate vertically from the block, when it will be found that the following are assembled on this plate:—

- main bolt slide (part 16, figs. 8, 9, 11 and 13)
- lever and tongue (parts 17 and 18, figs. 8, 9, and 13)
- gated gears (part 12, fig. 13)
- spacing collars (part 13, fig. 13)
- eccentric spindle (part 11, figs. 9 and 13)
- cam (part 21, figs. 8, 9, and 13)
- short bolt (part 14, figs. 9 and 13)
- bell crank (part 15, figs. 9 and 13)
- short spindle (part 20, figs. 7 and 13)
- cam key (part 19, figs. 9 and 13)

**Note:** Exercise care in removing the bottom plate. Fig. 8 shows the lock with the bottom plate removed and the components on both the bottom and top plates.

**Operation 6**

Remove lever tongue (part 18, figs. 8 and 9), push the main bolt slide into the unlocked position.

Rotate the eccentric spindle one half turn in clockwise direction, using the outside eccentric plate (part 25, fig. 6) for this purpose, and then remove the pack of gated gears and eccentric spindle (parts 11, 12, 13, figs. 9 and 13).

**Operation 7**

Dismantle the components on the eccentric spindle comprising the inside eccentric (part 24 fig. 8), the three gears (part 12, figs. 9 and 13), spacing collars (part 13, fig. 13), and clean each thoroughly with clock oil, as described in operation 3.

**Note:** Around the bore of the holes in the gears and on the faces of the spacing collars, (part 13), and around the eccentric spindle, only the very faintest trace of oil should be allowed to remain.

**Operation 8**

Remove lever (part 17, figs. 8, 9 and 13), short bolt (part 14, figs. 9 and 13), bell crank, (part 15, figs. 9 and 13), and main bolt (part 16, figs. 8, 9 and 13), and clean as described in operation 3.

**Operation 9**

Reassemble the whole of the components on the bottom plate, proceeding as follows:

- (a) replace main bolt slide (part 16, fig. 9), the bolt head passing between two square stumps, and the elongated slot in the bolt slide engaging with a large square stump. These three stumps are attached to bottom plate (part 22, fig. 9).
- (b) insert the short spindle through the back of the plate (part 20, fig. 7) and refix the cam (part 21, fig. 9) to the short spindle by screwing together, and fix finally by inserting the key (part 19, fig. 9) in the keyway from

the outside. Fig. 9 shows the bottom plate as it appears at this stage.

**Operation 10**

Refix lever (part 17, fig. 8) and place the short bolt (part 14, fig. 9) in position, seeing that the slots in same engage correctly with the square stumps on the main bolt slide.

Replace the bell crank (part 15, fig. 9) which connects the main bolt slide, short bolt slide, and main bolt slide lever together.

**Note:** Test for correct engagement of the components by moving the main bolt slide lever (part 17, fig. 8).

**Operation 11**

Move the main bolt slide to the locked position and replace the eccentric spindle (part 11, figs. 9 and 13) in its correct position on the bottom plate (part 22, fig. 9), with the small rectangular keyway at the top and facing towards the main bolt head slide.

**Operation 12**

Replace the first gated gear (marked with a single dot) on to the spindle, with the gear portion underneath the disc which is attached to it, and with the gating or slot exactly opposite to the stump on the small bolt slide. Next follow with spacing collar (marked with a single dot) and in like manner replace the gated gear (marked with two dots), and gated gear (marked with three dots).

Place the inside eccentric (part 24, figs. 8 and 13) on the spindle in such a manner that the cut-away part is furthest away from lever no. 17.

Fix the tongue (part 18, figs. 8, 9 and 13) in position on lever no. 17, and rotate the cam (part 21, figs. 8 and 9) until the slot is in line with the projection on the main bolt lever (part 17, figs. 8 and 9) when the bolt of the lock is in the locked position.

**Note:** Place outside eccentric (part 25, fig. 6) over the eccentric spindle and test to see if spindle has been turned as far as possible in an anti-clockwise direction, and afterwards remove the outside eccentric.

**Operation 13**

Remove the top plate of the lock (part 9, figs. 10, 11 and 13) from the lock block (marked 4, figs. 10, 11 and 13), and take off the top V-notched collar (part 7, fig. 10) from the end of the barrel.

Dismantle the permutation gears from the barrel (part 8, figs. 10 and 13), also the driving plates (part 6, figs. 10 and 13) and spacing collars (parts 5 and 7, figs. 10 and 13).

Clean all the components in the manner described in Operation 3.

Reassemble the components in the following order:

- (a) spacing collar (part 5, fig. 10)

- (b) permutation gear (marked with one dot) with hub and driving pins uppermost
- (c) driving plate (marked with one dot, part 6, fig. 10), with the projecting pin uppermost and the projection fitting between the projecting pins on the gear
- (d) spacing collar (part 7, fig. 10) with the V-fitting in the V-shaped notch in the barrel
- (e) permutation gear (marked with two dots) with driving pins uppermost
- (f) driving plate (marked with two dots) with driving pin uppermost and projection fitting between the projecting pins of the gear
- (g) spacing collar (marked with two dots)
- (h) permutation gear (marked with three dots) with driving pins uppermost
- (i) driving plate (marked with three dots) with driving pin uppermost and projection fitting between the projecting pins of the gear
- (j) spacing collar (marked with three dots, part 7, fig. 10)

**Note:** Test for freedom of movement and to check the positions of the projections on the driving plates, which should all lie between the driving pins on the gears.

#### Operation 14

Replace top plate assembled (part 9, fig. 11), on the lock block (part 4, fig. 11) by means of the four screws, and screw up tightly.

#### Operation 15

Lay the bottom plate assembled, flat on a table, invert the top plate as shown in fig. 12, and place together. Insert the four screw attaching the bottom plate to the lock block, and screw up tightly. With the use of the outside eccentric (part 25, figs. 6, 11 and 13) turn the eccentric spindle one half turn clockwise, and see that the slots in the gated gears are in the correct position, i. e., still in line with the stump on the short bolt (part 14, figs. 9 and 13). (The slots may be seen through the inspection aperture A, fig. 6).

#### Operation 16

Place the outside eccentric (part 25, figs. 6, 11 and 13) on the end of the eccentric spindle with the projecting pin uppermost.

Refix the back lock with the elongated slot in the circular bolt (part 28, Fig. 13) engaging with the pin in the outside eccentric.

**Note:** The key slot should be in the position as shown in fig. 5, and the change key should be tried to test the lift of the levers and the freedom of movement of the gated gear pack.

The spindle which passes through the door (part 2, figs. 5 and 13) should be attached to the lock by pressing the two projecting pegs into the two round holes in the

short spindle on the lock (part 20, figs. 7 and 13), taking care that the line marks on both the short and long spindles coincide.

From the back of the door push the spindle (still keeping it attached to the lock) through the door, and screw the lock lightly to the door by means of the four fixing screws.

Press the knob, upon which the alphabet is engraved (part 1, figs. 5 and 13), upon the spindle until the knob comes up against the shoulder on the spindle. Insert the screw to attach the knob firmly to the spindle. Replace keyhole shield in position with the connecting pin uppermost and engaging with the hole in the projecting part of the main bolt slide, and then screw the combination lock up tightly to the door.

**Note:** Test the lock and keyhole shields for freedom of movement by throwing the main bolt slide into the locked and unlocked positions by means of the knob.

With the bolt of the lock thrown it will be found, if all is in order, that the blank space next to the letter 'A' on the knob is exactly between the index marks on the rose (part 1a, fig. 13).

There is no necessity to remove the rose (part 1a, fig. 13) from the door, as the cleaning of this component can be carried out whilst it is in position.

Next replace the horizontal bolts (part 3, figs. 3 and 4) with the projecting stud engaging with the lever (part 5, fig. 4). Slide the key lock or the key locks on to their respective bolt tails and lightly screw in position. Before tightening the screws, test the correctness of the position of the key lock or keylocks by means of their respective keys. Remove the key or keys before proceeding further.

Replace the lock stops (part 2, figs. 3 and 4).

Replace top and bottom bolts (part 4, fig. 4).

Test the movement of the boltwork by turning the handle with all the locks in the unlocked position, also test each lock (combination and key lock or key locks).

When all is in order, the fireproof chamber can be replaced.

**Important:** Before finally locking up the safe or strong room door, the combination lock should be locked and unlocked several times to ensure that it has been correctly fixed and the combination correctly set.

(Unfortunately my copy of the *Instructions* is a very dirty copy, and some of the pictures do not copy clearly. Even the originals have poor contrast.)

R. Phillips

*(Continued from page 1)*

He does not collect to trade or sell. He collects to learn and to experience.

Why locks and keys? Englert has a hard time answering that question. His father, he explains, collected many things, including a shoebox full of keys. So, when Englert found a key he would offer it to his father, and his father would say "keep it for your own collection." After his father's death, Englert forgot all about keys — until 1982. He was in Wiesbaden, Germany, working as a volunteer for a youth organisation, and was given a tour of the dormitories.

"They were just switching over from old fashioned locks to modern ones, so I asked them what they were going to do with the old keys," Englert says. "When they told me the keys would be thrown away, I said I'd take them."

There were 200 keys all told, probably only about 50 years old, but they were enough to open the door to a lifetime obsession for Englert. The very next week he was in the south of France and met a man who had a metal reclamation junkyard. The man sold him about 600 keys for 90 French francs, about \$15. Those were the first of many dollars Englert has spent on his collection.

A two-year employee at the UW, Englert's job is to maintain the Electron Spectroscopy for Chemical Analysis (ESCA) instruments and the Time of Flight SIMS. These are both techniques used to analyse the surface of materials. Although he is not an engineer, Englert has long been fascinated by all things mechanical—thus his interest in keys and locks. He became familiar with the high-tech instruments when he worked for their manufacturer, travelling the world installing them and teaching others how to use them. The travelling was a convenient way to indulge his passion for keys and locks. No matter where he found himself, he devoted his off-hours to cruising the flea markets, antique stores and junk shops in search of new items for his collection.

Acquiring the keys and locks, Englert says, is half the fun of collecting. He jokes that he has "101 stories" about his efforts. Once, for example, he and his wife encountered a buyer and seller of used furniture in Brussels who wanted to sell them two keys. The man spoke little English and Englert speaks little French, so they struggled to communicate.

"He kept saying he had two 'gyles' keys," Englert says. "We looked in our French-English dictionary for something that sounded like that but couldn't find anything. It turned out he was trying to say 'jail.' He had bought a set of furniture from a jail, and on the bottom of one of the chairs, these two keys were fastened."

Englert later took the keys — large, heavy keys about 10 inches long — to an antique dealer and learned that one of them was 300 years old. Both keys were for cells in the jail.

These and many other keys in Englert's collection are "warded" keys. The principle used today in pin tumbler cylinder locking had been invented before the birth of Jesus. The Romans, however, decided to use warded locks instead, and spread them everywhere they went. Yale locks were patented in the mid-19th century in the United States, and quickly became the dominant lock because they are more difficult to pick.

Learning history like this is part of Englert's fascination with collecting. Along with the keys and locks themselves, he also collects books about them. Once, when he found an interesting book in a university library and was told he could not check it out, he paid \$90 to have the whole book copied so he could have it for his collection.

These days, Englert has become more specialised in what he collects. He has a complete set of Ford Model T keys and is looking for the holder that was made to hang them on. And he collects keys for winding pocket watches. In the heyday of such watches, he explains, a buyer would receive a brass or steel key to go with the watch. However, it was also possible to buy silver or gold keys, some of which were custom made and included hand carved embellishments. Englert has paid as much as \$300 or \$400 for some of these, including one that has a ferret carved on it.

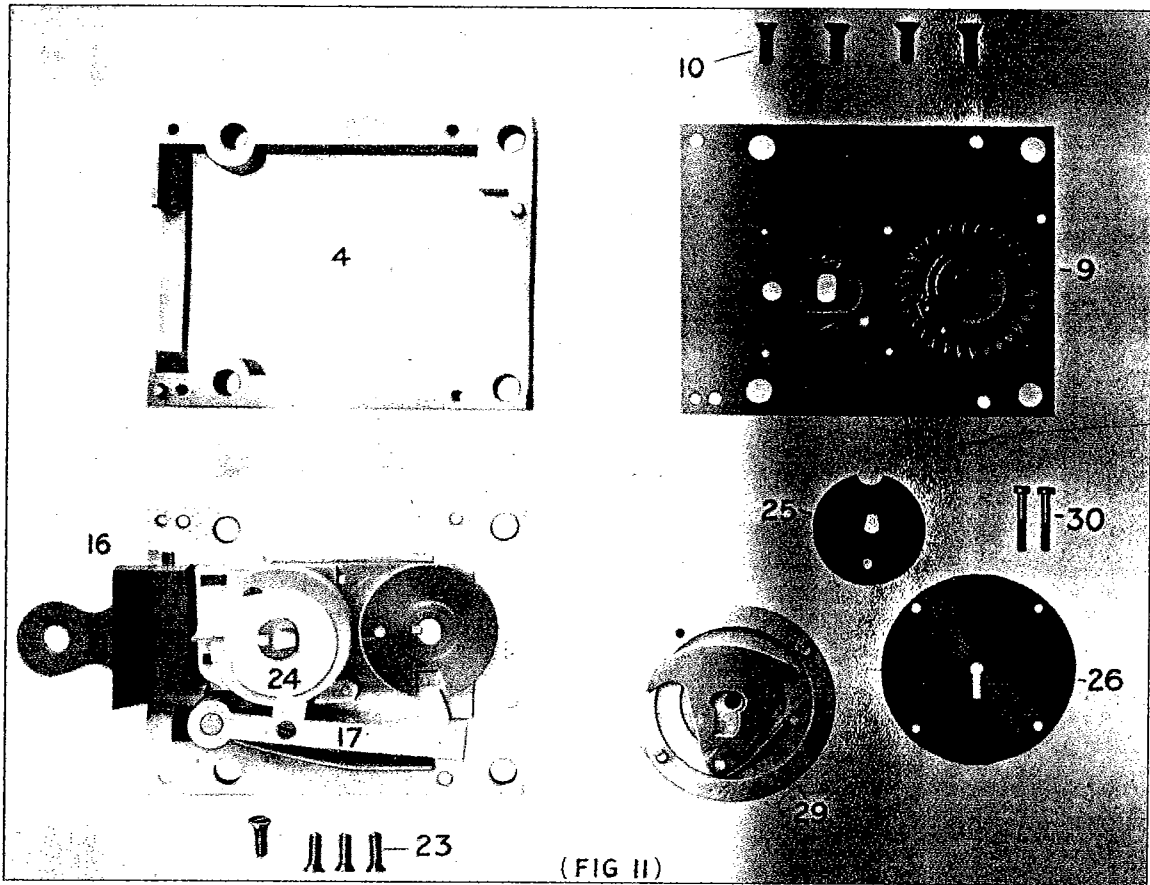
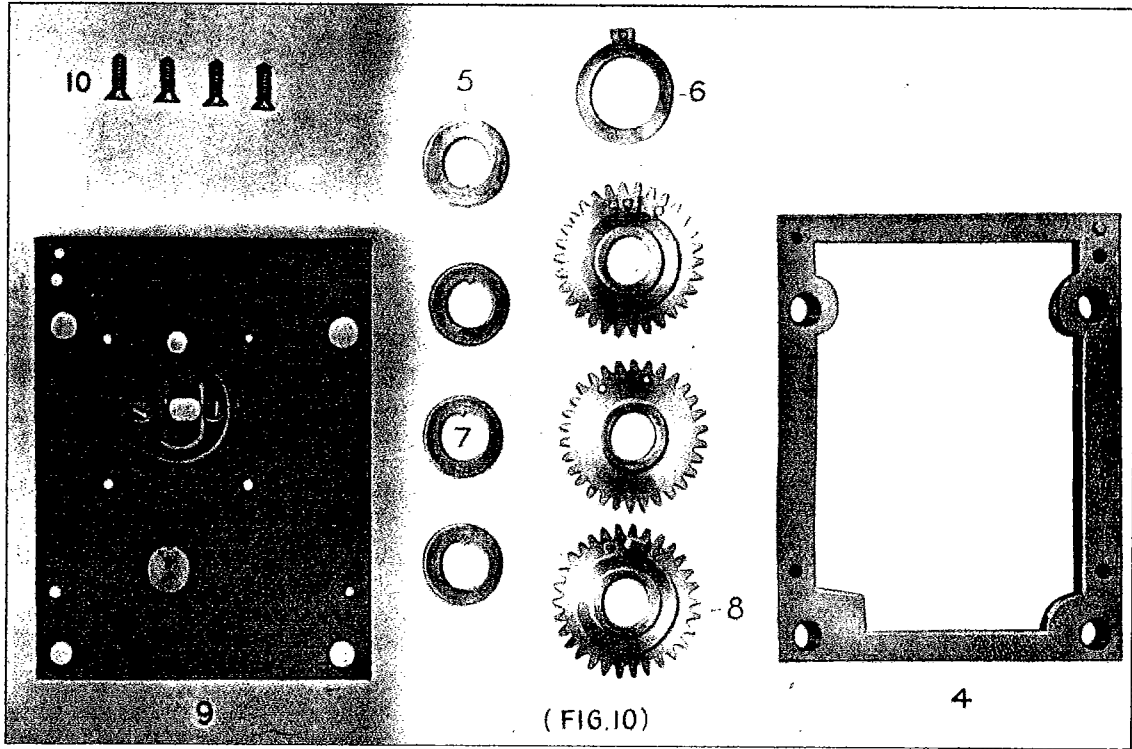
Although she does not share his passion for locks and keys, Englert's wife has been tolerant of his collecting, he says. But she has her ways of getting even. Once, when the couple was in France, she told him she wanted to buy a set of Limoges china, so they went to the factory where it is made.

"I looked around and said, 'Wait a minute, \$120 a plate,'" Englert recalls. "Then my wife said, 'Yes, and how much have you spent on your keys?'" Mrs. Englert got her Limoges.

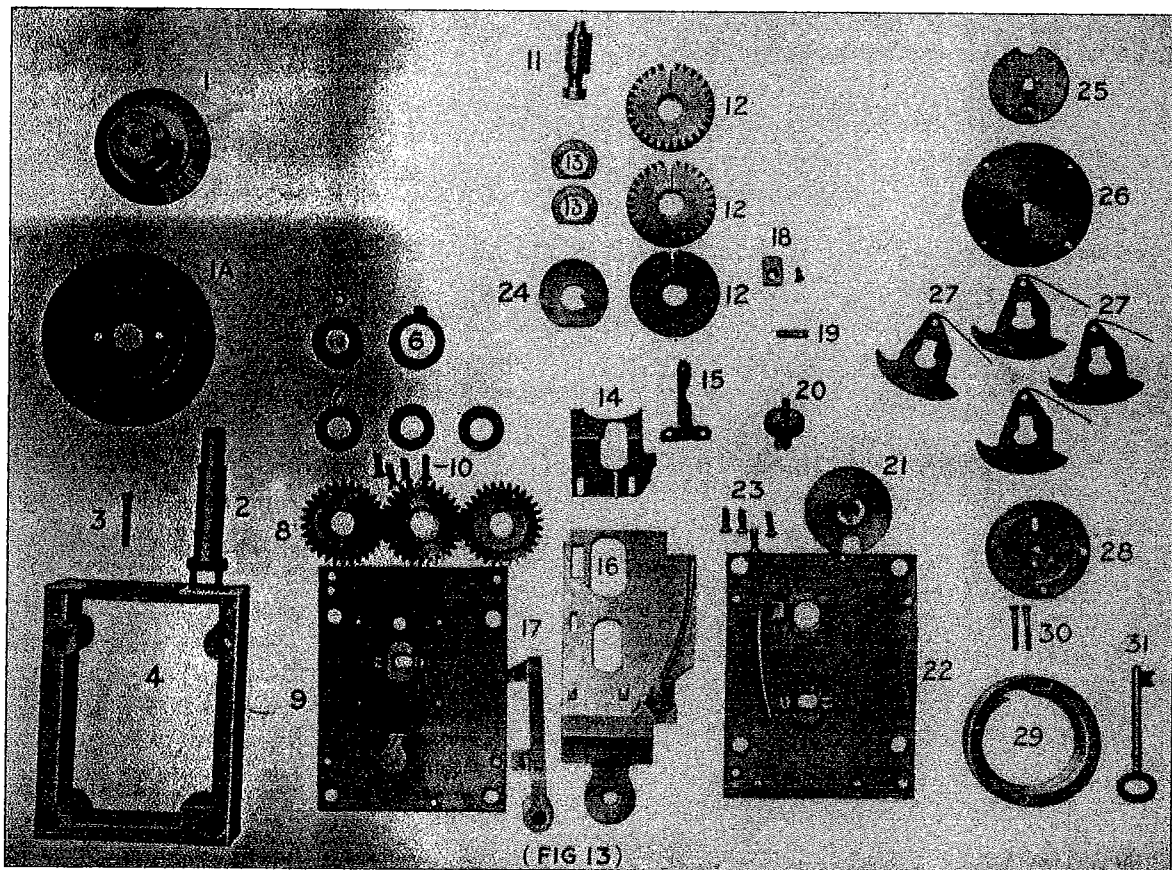
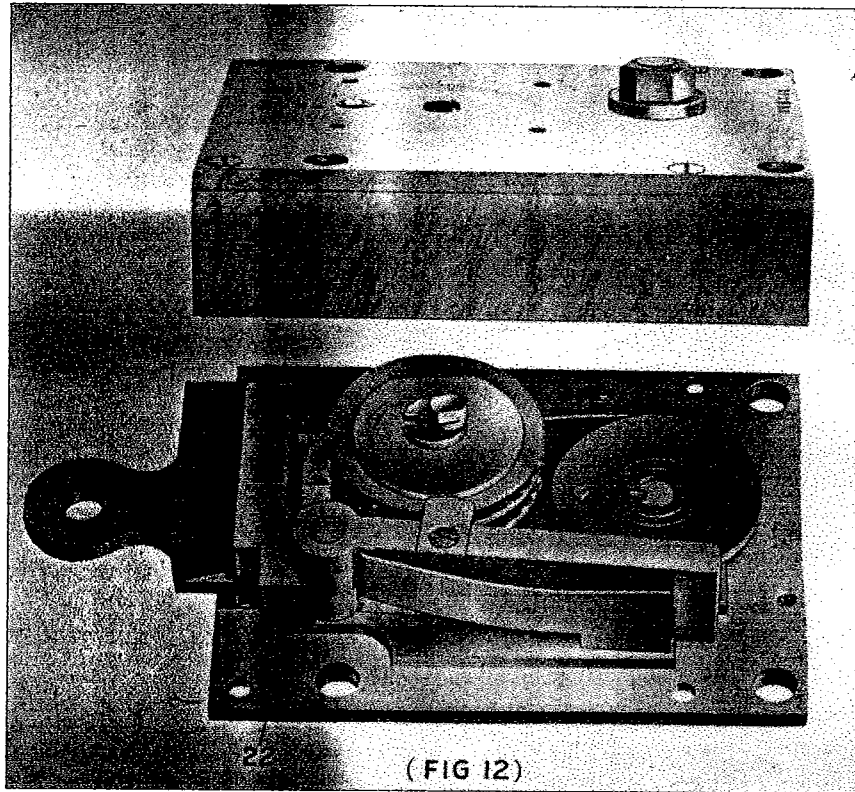
But she will not be getting rid of all those keys and locks that threaten to take over the couple's home. Englert never sells or trades what he buys, which means his collection just keeps getting larger. "Even if I were housebound I think I would have enough to do to keep me busy—just categorising and cleaning what I have," he says. "I'm sure I'll be at this the rest of my life."

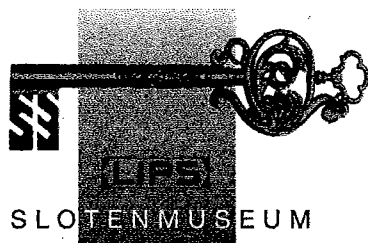
*Nancy Wick, College of Engineering*

[http://depts.washington.edu/uweek/archives/1999.03.MAR\\_11/\\_article13.html](http://depts.washington.edu/uweek/archives/1999.03.MAR_11/_article13.html)









In the Lips Slotenmuseum (Locks Museum) a world-unique and large number of locks and keys are brought together in a company-owned collection. The collection starts about 2000 years BC with a wooden Egyptian lock and it shows the development of keys and locks throughout the ages. In the collection we find Greek, Roman, African and European locks and keys in different materials and techniques.

The Lips Company (Lips Nederland BV) was founded in 1871 in Dordrecht by J. Lips. He started production of stoves and safes for which he obtained the (safe) locks in Germany and England. In 1903, the son in law of Mr. Lips, Vincent M. Eras started the production of locks and the Lips Locks Company grew to the best-known producer of quality locks in the Netherlands. In its first years for safe-locks only, but later on for a complete and broad spectrum of locks, keys and cylinder locks.

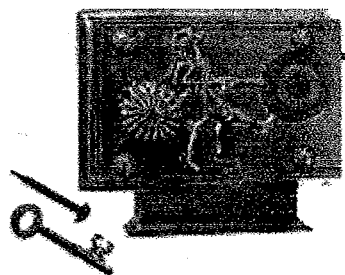
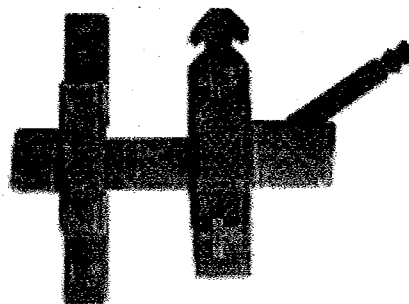
Mr. Eras started collecting locks and keys on his commercial travelling in Europe and in the world. He was very much obsessed by locks. The collecting of locks was also a kind of studying ancient techniques. The moment he found a new type of product he would not rest before he knew its secrets and he used his knowledge to improve the quality of Lips locks. Based on the collection Eras wrote in 1941 the book "*Locks and keys throughout the ages*" which is even in these days a standard work on locks and keys.

After the death of Mr. Eras in 1958 the interest for the museum changed with every change of management. As from 2000 when the Lips Locks Company became an Assa Abloy Company – the largest lock group in the world – the museum was recognised as useful for entertainment and customer marketing. Today some retired Lips employees help to catalogue the collection and try to collect as much knowledge of the locks and keys in the museum and of locks technique throughout the ages.

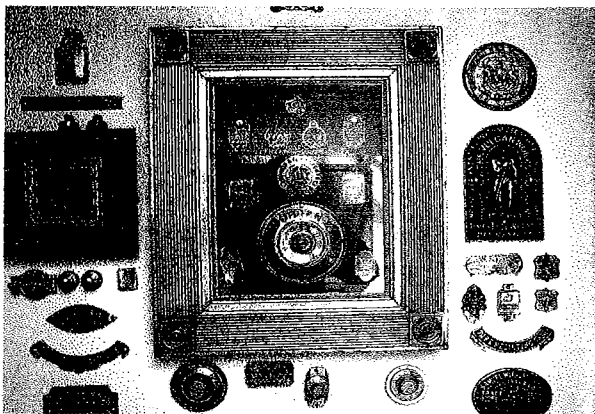
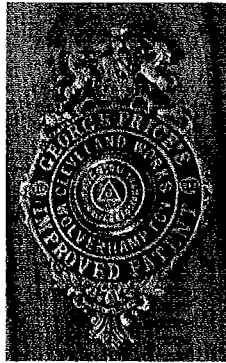
**Lips Nederland B.V.** Merwedestraat 48 3313 CS  
DORDRECHT Netherlands

Tel. 0031(0)78 6394606 Fax. 0031(0)78 6394605  
e-mail: peter.wismeijer@lips.nl www.lips.nl

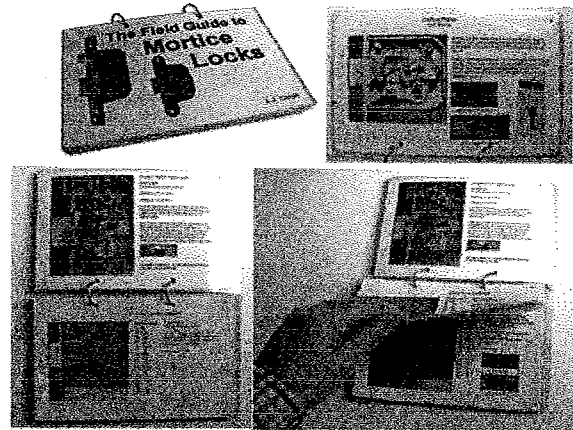
***Open to the public by appointment only  
on the last Wednesday afternoon of the  
month.***



Safeplates in the collection of Ray Vian. See 'for sale', p. 12.



## Book 'looks through the keyhole'



### *The field guide to mortice locks*

This is a book which lists almost every model of mortice lock on the UK market. It has large clear photos of the exterior and interior of each lock and detailed descriptions of keyways and other distinguishing features to allow you to determine the type of lock fitted before you even attempt to open it. Also given are detailed measurements of all critical parts of each lock. Drilling points, instructions and the recommended type of tool to open each type of lock are given.

An absolute must for anyone who needs a quick and easy reference guide that's small enough to fit in your toolbox. All of the 111 A5-sized pages are laminated to protect them whilst out on a job. Ring bound so you can fold it right back and lay it flat whilst you work. This edition covers most of the mortice locks common in the UK, including major brands from:

Chubb, Ellis, Era, Guardian, Legge, Securefast, Union, Walsall, Waterloo, Yale.

We hope to be able to a further supplements in the near future.

Item Number: FGML  
Price: £79.99 (Euro 117.26)

Tradenet UK  
St. Mary's Training Centre  
Oystershell Lane  
Newcastle Upon Tyne  
NE4 5QS  
0870 446 1022  
Lines open 9:00AM-5:00PM Mon-Fri

[http://www.locksmith-tools.co.uk/acatalog/More\\_Info.html](http://www.locksmith-tools.co.uk/acatalog/More_Info.html)

## Questions from readers

**W**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.



29] The mark shown on a padlock (Issue #29) is identified as a dragon. The Dragon trademark is from Walsall Lock and Cart Gear. It goes back to at least the 1950s and maybe earlier.

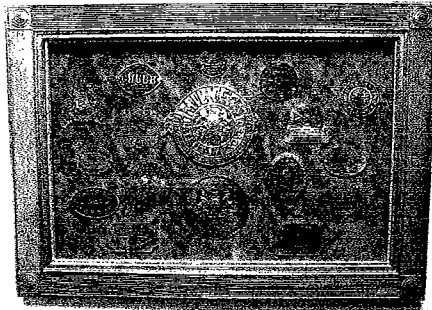
Jim's Gazetteer has a good picture. This notice, from the Ironmonger Guide 1950 trade marks section, shows a dragon trade mark.

REGISTERED **WALSALL**  
 **LOOKS**  
**AND**  
**CART**  
**GEAR,**  
 TRADE MARK **LTD.**  
**DRAGON**  
 NEALE STREET,  
**WALSALL, Eng.**

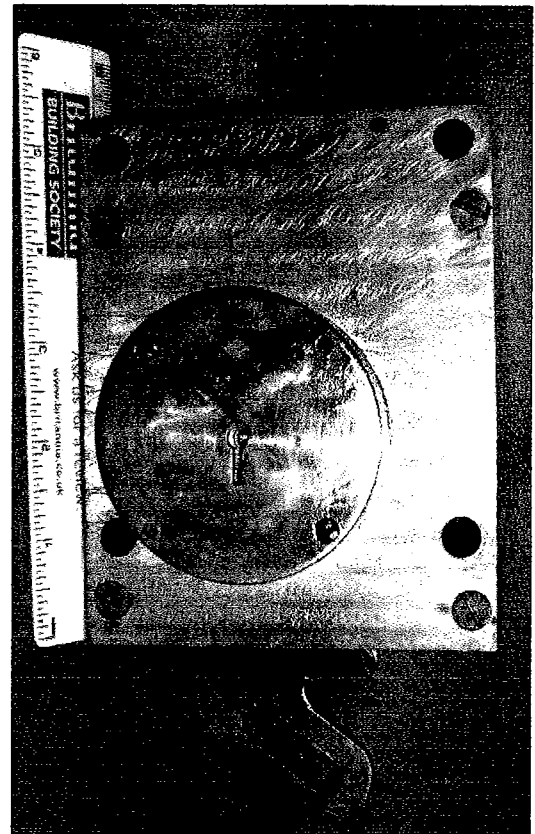
*Richard Hopkins*

*[The Editor apologises for the delay in showing this answer.]*

*Some of Ray Vian's safeplates. More pictures on p. 11.*



## For sale



**C**hatwood single dial letter combination safe lock (SAM lock) available for purchase.

David Rolfe has this lock on offer, but it weighs around 8 lbs, and he does not wish to post it. So, this is available only to buyers who can collect.

'I live in Essex, about 9 miles north of Chelmsford and any buyer would have to meet me somewhere nearby', writes David Rolfe, whose email is:

david.rolfe02@tiscali.co.uk

There is no change key, spindle, dial, or rose to match the lock. However, there is a numerical (Tann) dial with it. Most safe engineers should be able to provide a change key.



Ray Vian has a collection of about 250 safe plates for sale. Many of these are displayed professionally mounted on picture frames. He can provide details.

The Chapel, Sutton Court, Stowey PENSFORD  
 BS39 4DN tel. 01275 333458  
 ray@historicalnewsprint.com

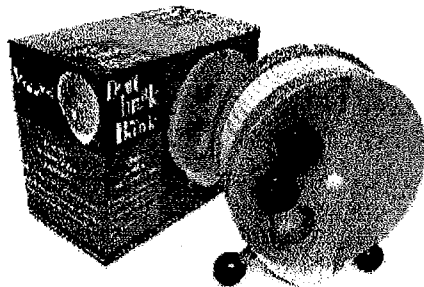
## Funky wooden coin conundrum ...

Drop in your coins, accumulate the cash, and make a withdrawal? Not so fast!  
Money talks and it's telling you to invest in the future.

It could take a long time before you figure out how to release your savings!

**Size & Packaging:** Packaged in a beautifully printed gift box with bright graphics and text in four languages (English, French, Spanish and German). Detailed solution enclosed also in four languages.

MrPuzzle: AUD \$49.95



*DON'T FORGET AUSTRALIAN TIME IS GMT +10:00 HOURS That means when we're finishing our working day at 5pm it will be 11pm the day before in Los Angeles and 7am in London. We're always pleased to hear from you with feedback about our puzzles or a comment about or suggestion for our web site.*

## What's Up

### Trick locks versus other puzzles

The problem with most trick locks, from the ardent solvers point of view, is that the large majority of them consist of finding just one secret in order to open them. So for most people you can either solve it ... or you can't. By contrast, a Soma cube or a set of Pentominoes provide a gradual solving process as well as providing a variety of different puzzles. You can get many hours (days, weeks, even) of enjoyment from the latter, but only minutes from your average puzzle padlock. Unless, of course, you are unable to solve a particular lock and enjoy thinking about how to solve it for hours on end! To a lesser extent the same applies to many puzzle boxes.

So it is always with some surprise and joy when I

## Trick padlock — new design

All new design. Released 2005. Different opening mechanism from other puzzle locks. Made to look like an antique lock but it's actually brand new. Comes with key.

Approximate size: 70mm x 45mm x 15mm

AUD \$11.95

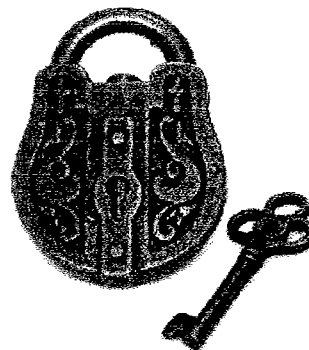
email: [mrpuzzle@optusnet.com.au](mailto:mrpuzzle@optusnet.com.au)

Or if you're not in such a hurry you can get to us via snail mail at:

P. O. BOX 37,

TAMBORINE, QUEENSLAND, 4270.

AUSTRALIA.



find a padlock that consists of several puzzles and keeps you guessing for some considerable time. I recently found a lock that fits this description exactly. If I had to give away my entire collection of locks? there must be a hundred or two hundred of them? and keep only three, this recent acquisition would be one of them. As the other two are rather nice antique ones, we need not consider them any further here. To my way of thinking, the new lock is easily the best of the modern padlocks and is called 'DanLock'.

### DanLock

Most padlocks, once opened, are easy to close: not so the DanLock. In fact it is rather more difficult to get the lock back to the same state as it is delivered to you. Altogether it involves the solving of at least three quite distinct puzzles, which will keep even the ardent enthusiast

*(Continued on page 15)*

## ***The brass keys of Kenwick. A mystery***

**A**udrey answered him quite seriously: "You know what I told you about my discovery of the locks of those two doors beside the mantel in the ballroom – that the one going into the hall has a much smaller one than that of the false door on the other side of the fireplace. Isn't that rather important? Both those keyholes are surrounded by a sort of fancy metal design, the same as all the keyholes throughout the main part of the house. But I noticed that the keyhole itself to the false door was about twice as long up and down as the other one. And another thing – I noticed that the keyholes to the two other false doors were just plainly fakes – you could see the wood of the door through them. But the one to the door in the ballroom had the deep hole behind it that shows it is really in use – a lock back of it. I feel perfectly certain that one of those keys fitted that door."

From p. 171 of *The brass keys of kenwick. A mystery* by Augusta Huiell Seamen, New York, 1931.

Supplied by *Jon Millington*

## **Condiments of the season**

**(it is now winter in Australia)**

Spotted this humorous exchange between locksmiths on Usenet:

"Did a job today on an up-market apartment right on the beach front. The complex was only 3 years old. I had to re-key a bunch of knobsets. The tenants had been complaining about all their locks being tight and stiff to use. Well, growing on every lock spindle were great lumps of salt crystals, I couldn't believe the corrosion around the complex. Even the external air conditioning units were just about rusted out. Wonder how long your car would last parked in that environment?"

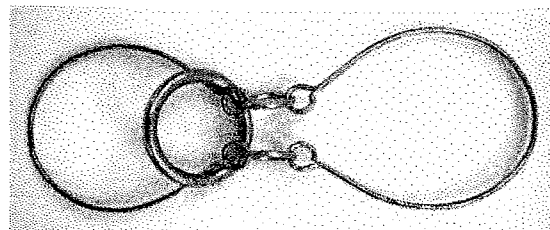
Cairns, Australia

A US locksmith replied:

"Being a bit of a joker, I will suggest that you relube with pepper. After all, it's much like graphite. In appearance."

*(By the way, in case any readers didn't spot it, the joke in the cartoon in the last issue is that the pig on the right has a money slot — i. e. a piggy-bank!)*

## **The Handcuffs Puzzle (i. e. Horseshoe)**



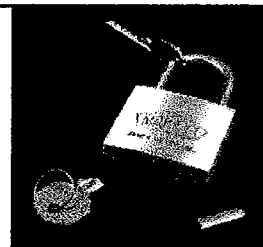
Object: Remove the large silver ring from the connected 'handcuffs'.

Difficulty: Easy - Medium

Previously known as the 'horseshoe puzzle', it is now often sold labelled as 'handcuff puzzle' (which it resembles).

Because of its simple appearance, this puzzle is a great one to leave lying around at home or at the office. At a glance, people generally recognize it as a puzzle and recognize what they have to do. Assuming it to be as simple as it looks, very few people can resist the temptation to impress others with their ability to solve this puzzle quickly, however only the seasoned veteran likely has the confidence and skill to do so without stumbling.

As early as 1915 boxes of puzzles were being sold in Germany which included this puzzle (then called the Ring of the Nibelungs) which was shaped from wire. Other versions have been made to look more like horseshoes rather than round wire. The puzzle is widely available from shops selling puzzles.



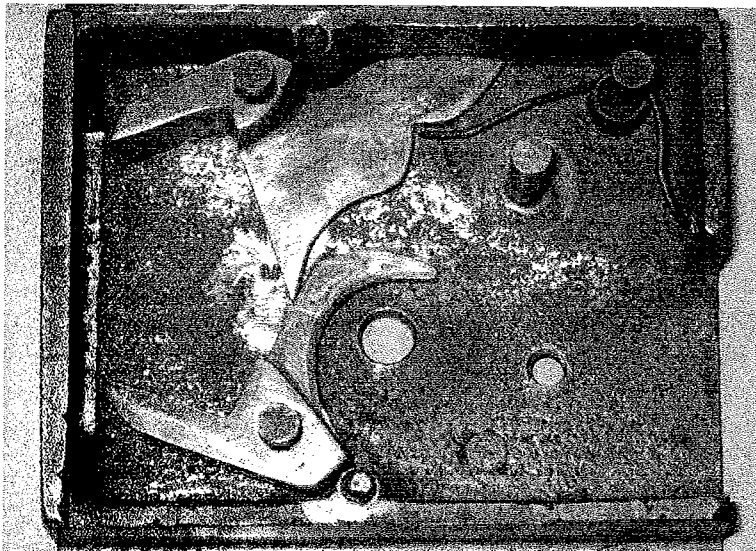
## **DanLock: the Trick Lock**

DanLock is an original puzzle lock designed by Dan Feldman, Israel. It comes with two keys: one key is attached to the shackle and the other one is broken... It is your job to open the lock, and then to get it back to its original state. A limited quantity is now available for sale: contact [feldman@bezeqint.net](mailto:feldman@bezeqint.net)

<http://www.geocities.com/danpuzzles/danlock/>

# Timlins-Willis safelock: additional information

*Timlin-Willis safe lock case, showing 'protector-like' hooks which support the bolt in the absence of the key.*



[Several people asked about this lock, shown in Issue No. 28, July 2005. Ian Webb sent further information and another picture.]

The lock is used in both stand alone safes and strongroom doors.

The hooks are below the bolt lathe. The two hooks are activated by a cut at the tip side of the bolt step of the key. I think they would give some added protection and strength against an end attack on the bolt. As in it being punched back into the lock, which is still a common method of opening safes. It does give protection against picking as the two hooks have to be pushed out and held out past the edges of the bolt so that pressure can be applied to attempt picking.

The hooks are combined with pick resistance on the levers directly behind the bolt stump. As soon as pressure were applied to the bolt it would move back, the stump would come back into the anti-pick notches on the levers' fences and the hooks would

engage behind the bolt — locked solid at this point.

If you are able to move both the hooks out of the way and then apply pressure to the bolt, then again the bolt will move back and the bolt stump will engage in the anti-pick notches. To move the levers far enough out from the anti-pick notches the hooks will be released and fall back in behind the bolt.

Picking would theoretically be possible with a specially-made Hobbs pick with a longer 'bolt step' to act on both the hooks and the talon. If during picking you were lucky enough to actually have the levers positioned correctly but had not pushed the hooks out, the bolt would withdraw quite a distance but then lock solid. It is impossible to push the hooks out past the edges of the bolt without losing all of the levers. The hook actuators push the bolt fully out past where any levers would be held up in the picked position. I have attached one other picture that may help on the TIMLIN'S, I hope this is of some help.

*Ian Webb*

*(Continued from page 13)*

occupied for some time. Well it kept me occupied . . . DanLock is the creation of Dan Feldman and is not to be confused with three other puzzle padlocks that he produced a year or so ago. It is available from him for US\$70 (post paid).

Up to now the solution he sends out with the puzzle is incomplete, which has led to unnecessary correspondence, complaints, etc. However, Dan tells me that he is revising the solution, so this won't happen again. It raises the question as to whether solutions should accompany puzzles or not. My own preference, as stated many times before, is that they should not, but that they should be available on re-

quest. I know it involves the manufacturer in more work, but nothing can be perfect.

*Edward Hordern*

Published in **Cubism For Fun** (CFF) No. 45, Page 30, February 1998

CFF Contact: [rvgr01@hotmail.com](mailto:rvgr01@hotmail.com)

<http://www.geocities.com/danpuzzles/danlock/DanLock1.htm>

<http://www.geocities.com/danpuzzles/danlock/>

# GIANT padlocks!

## Crown Lock

**S**o many kinds of locks are available these days. But the credit of introducing the most wonderful lock goes to a Pakistani, named Sheikh Mohammad Rafique. The lock is marvellously huge, The lock is in perfectly usable condition. The manufacturer claims it to be a world record. The lock was handmade in 1952 by Sh. Mohammad Rafiq and it took three consecutive years to complete. After the death of Sh. M. Rafiq it was given to his son, Mohammad Zafar Iqbal. This lock is currently in the custody of "Crown Lock House, Lahore, Pakistan" whose Managing Director is Aaqil Hamid.

### Lock measurements:

Weight with two keys	52kg-300gms
Weight without keys	50kg-600gms
Weight of one key	850gms
Weight of two keys	1kg-700gms
Length of lock	547mm
Width of lock	307mm
Thickness of lock	105mm
Handle thickness	60mm
Width of key	68.4mm
Thickness of key	25.3mm
Length of key	273.5mm

Aaqil Hamid (Managing Director)

Crown Lock House  
147-Aalamgir Market  
Lahore - 54000  
Pakistan

Tel:+92-42-7242352, +92-42-7653811, +92-42-6361424

Fax: +92-42-7248174

Email: [wblock@usa.com](mailto:wblock@usa.com)



More big padlocks:

<http://www.recordholders.org/en/records/padlock.html>



**T**he 100-year-old company that in 1961 made the world's biggest padlock (weighing 80 kg) for one of the pavilion gates at the World Trade Fair in Delhi has now (2002) built a 50-kg lock for a one-tonne iron gate at Jagannath Temple of Puri.

Owner J.P. Singh says they were thrilled to get the order. "As a Vaishnav family, we felt it was the Lord's wish and I told the temple representatives we'll not charge them anything."

It took Trusty three months and Rs 30,000 to complete the task. The lock has three, 14½-inch keys made of brass and gunmetal.

The company also makes normal-sized handmade padlocks. Born out of a century of innovative engineering only. TRUSTY Lock offers handmade locks — used in high security zones as they are much more sturdy and are virtually impossible to unlock with a duplicate key. As a matter of fact, their keys cannot be duplicated. In its fourth generation the present proprietor J.P. Singh feels that the manufacturing of totally hand made locks is a work of exclusive art. Avoiding automation he inherits and enhances this art guiding his son V. P. Singh to retain this traditional Art of making locks manually.

Any design or specification can be carried out while making any of our locks.

A handmade lock is a costly possession but gives ultimate security, **AND SECURITY KNOWS NO VALUE.**

The rest of the world has turned to machines whereas India still lives with this traditional art under the banner of TRUSTY who proudly say "Abhayam Sarva Bhutebhyo."

Trusty Locks

Amirchand Durga Prasad Singh

113, Manohardas, Katra,

Kolkata-700007.

É 91-033-2386520,91-0332389215,91-0332384514

email: [veerucal2000@yahoo.com](mailto:veerucal2000@yahoo.com)

