Forcible Entry Notebook

by Captain Robert Morris, L-28

Doors that Swing Toward You (Outward)--Part II

Additional security may be installed on these doors by bolting a *metal shield* to protect the space between the door and the frame. It may be a full-length or partial shield. Dealing with the shield will require an additional step. (Figures 1 and 2)

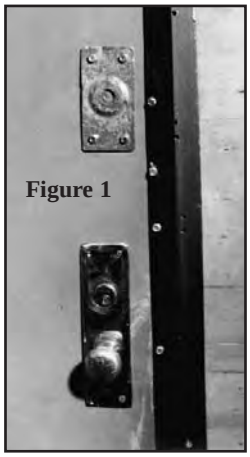


Figure 1

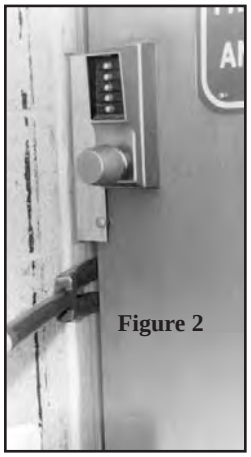


Figure 2

These are some of the techniques used:

1. Drive *adz* end of the Halligan Tool under the edge and push tool toward the door. Work *adz* between door and frame. Drive in to establish a gap. (Figures 3, 4 and 5)

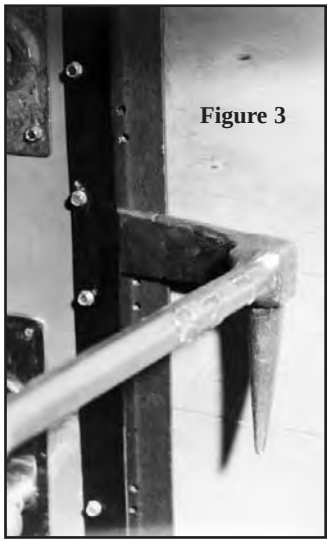


Figure 3


Figure 4

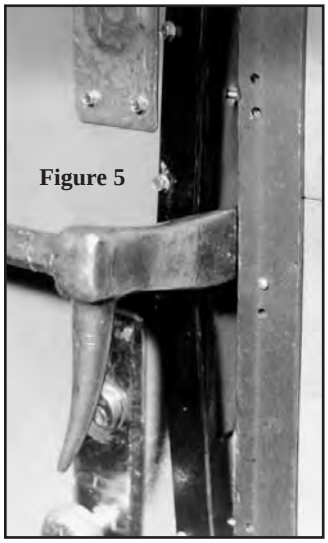


Figure 5

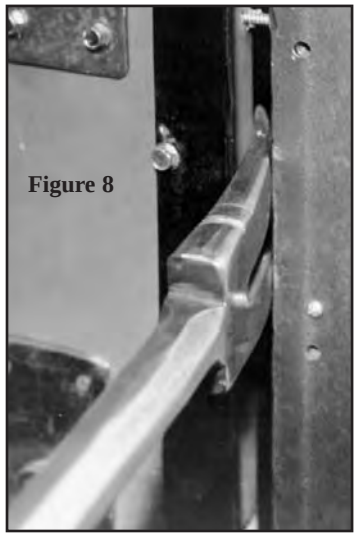


Figure 8

all photos by Captain Robert Morris

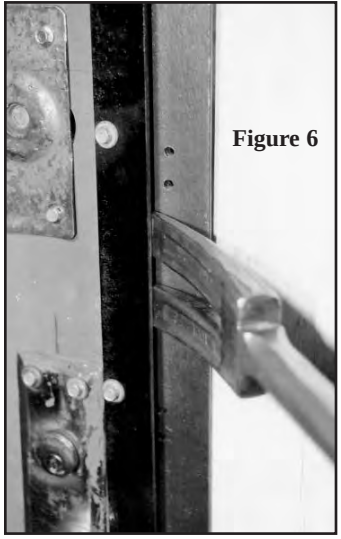


Figure 6

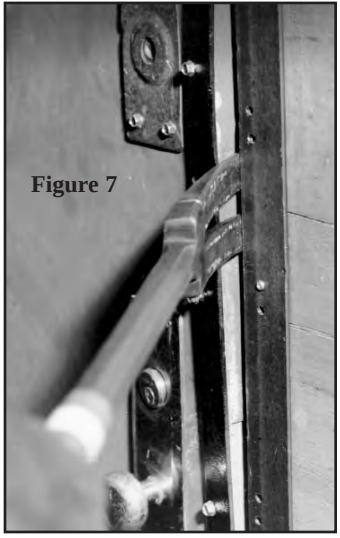


Figure 7

2. Drive the *fork* under the edge. Push tool back toward door, working the *fork* between the door and frame. Reverse tool, if needed. (Figures 6, 7 and 8)

3. Drive the *adz* between the door and the shield. Bend the *shield* away to allow entry of the Halligan Tool. (Figure 9)

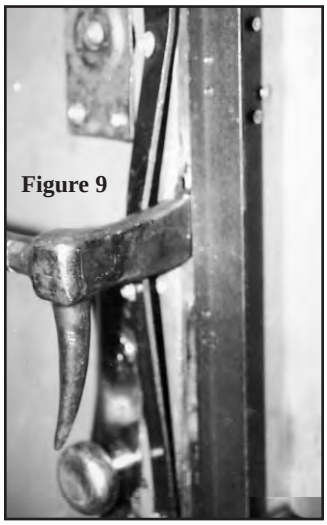


Figure 9

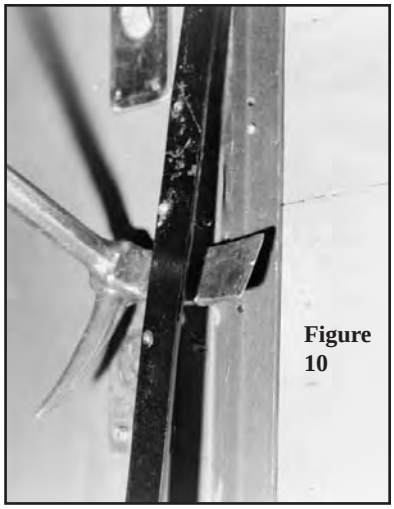


Figure 10

4. Shear the bolts and remove the shield. (Figure 10) Pry, bend or--as a last resort--remove the shield. Then, proceed to the Gap, Set, Force, using techniques shown in the "Forcible Entry Notebook," 3rd/2000 issue of *WNYF*.

About the Author...

Captain Robert R. Morris is a 27-year veteran of the FDNY. He was assigned previously to Engine 60, Ladder 42, Rescue 3, Engine 42, Ladder 44 and Engine 69. Currently, he is assigned to Ladder 28. He is a Contributing Editor for Firehouse Magazine, *a regular contributor to* WNYF *and a frequently requested speaker at fire service seminars held throughout the country.*

The Angle Iron

by Captain Robert R. Morris

The steel angle iron is bolted to the edge of an inward swinging door. It provides additional security and is common in multiple dwellings, such as tenements. Use this device to your advantage. (See Figure #1.)

Place the fork (bevel to door) between the angle iron and the door frame, six inches above or below the lock. (See Figure #2.)

Drive the Halligan tool in until the tips hit the door. (See Figure #3.)

Push the tool toward the door slightly and drive in. Set tips between door stop and door. (See Figure #4.)

Push tool sharply toward the door, using the angle iron as a fulcrum, forcing the door in. ***Note:*** Tips of the tool are locked behind the door stop. (See Figure #5.) This move pushes the door in and may force it but, at the very least, will make it easy to drive the fork in.

Work the tips of the tool in between the door and frame and drive in until set. ***Note:*** Arch of Halligan is even with door stop. This means the tips of the tool are locked on the inside of the door frame. (See Figures #6, #7 and #8.)

Figure #1--When performing forcible entry, Firefighters should use the angle iron to their advantage.

Figure #2--Place the fork (bevel to door) between the angle iron and the door frame, six inches above or below the lock.

Figure #3--Drive the Halligan tool in until the tips hit the door.

Figure #4--Push the tool toward the door slightly and drive in. Set the tips between the door stop and the door.

Figure #5--Push tool sharply toward the door, using the angle iron as a fulcrum, forcing the door in. This move pushes the door in and may force it but, at the very least, will make it easy to drive the fork in.

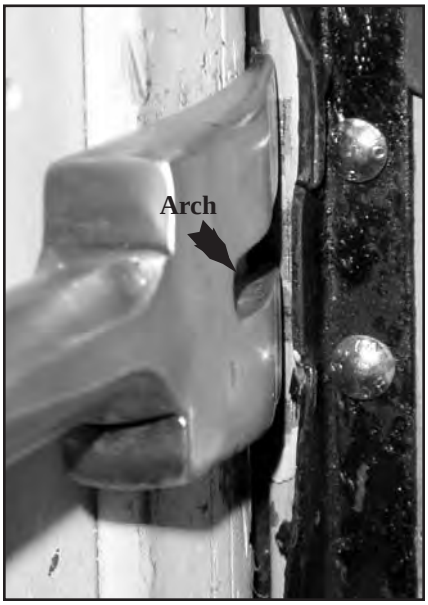


Figure #6--Work the tips of the tool in between the door and frame and drive in until set. Note the arch of the Halligan is even with the door stop.

Push tool sharply toward the door to force it. (See Figure #8.)

The angle iron makes a good purchase point and will increase the distance you can push the door in. It also causes less bending of the door and more force is placed on the locks. The angle iron will interfere with the use of the Rabbit and the Hydra-Ram tools.

Angle iron with a shield

A newer type of device is an angle iron with a metal, J-shaped shield screwed into the door frame. (See Figure #9.)

The technique is modified by driving the fork of the Halligan between the shield *and* the door frame. (See Figure #10.)

Drive the fork in until the tips hit the door. Then push the tool toward the door. This will pop the shield off the frame or bend it out of the way. Then, re-set the tool and drive in until the tool is set as in Figure #7. Force the door as illustrated in Figure #11.

Figure #7--The tips of the Halligan tool are locked on the inside of the door frame.

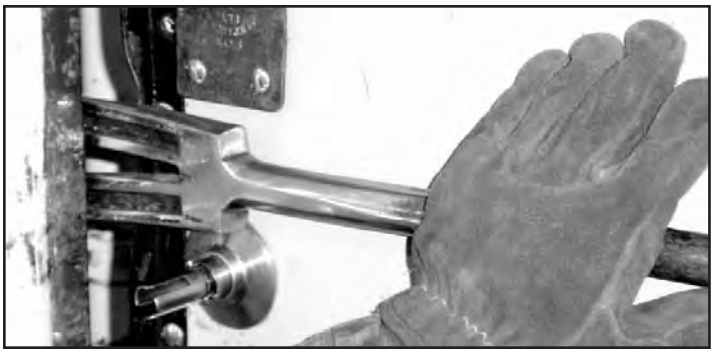


Figure #8--Push tool sharply toward door to force it.

Figure #9--A newer type of device is an angle iron with a metal, J-shaped shield screwed into the door frame.

Figure #10--The technique is modified by driving the fork of the Halligan between the shield *and* the door frame.

Figure #11--Push tool in sharply to force the door.

About the Author...

Captain Robert R. Morris is a 32-year veteran of the FDNY. He is assigned to Rescue 1. He was assigned previously to Engine 60, Ladder 42, Rescue 3, Engine 42, Ladder 44, Engine 69 and Ladder 28. He is a Contributing Editor for Firehouse Magazine, *a regular contributor to* WNYF *and a frequently requested speaker at fire service seminars held throughout the country.*

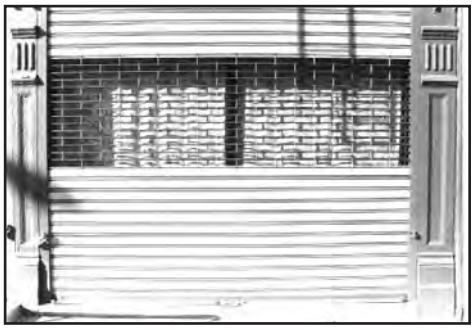
Forcible Entry Notebook

by Captain Robert Morris, L-28

Roll-Down Security Gates

As part of this special, turn-of-the century issue, it was suggested that some subjects be re-visited for the newer members now on the job. First covered in the 4th/69 issue of WNYF *by Deputy Chief Daniel A. Kane, this installment of the Forcible Entry Notebook will bring readers up to date on roll-down security gates.*

Roll-down gates are a common feature on all kinds of structures. These gates, in general, will cause a delay in entry. Knowledge of these gates and skill in forcible entry with them are critical.



(Above) A combination gate with steel interlocking slats on the top and bottom and an open grill in the center. This gate is operated manually.

unless noted otherwise, all photos by FDNY Photo Unit

Construction

Roll-down security gates have these basic features:

• *Curtain*--the metal material, which rides up in a steel channel rail (guide) on each side

• *Method of operation*

• *Locking devices*

Additionally, the curtain, itself, can be broken down to these elements: • Steel interlocking slats • Open grill • Combination--steel slats top and bottom, open grill in the middle

The curtain will roll up around a steel pipe on the top of the gate.

Method of Operation

Manual Gate is lifted by hand with a spring assist. These usually are seen on smaller sized gates. The gate is locked by means of removable pins locked to the guide rail with padlocks or slide bars at the bottom of the gate.

(Left) The chain used to lift the gate is locked behind the angle iron cover. (Middle) Chain-operated gates--The chain is removed from the angle iron cover and is ready to hoist the gate. (Right) On a modern storefront, the chain is locked behind a small access door.

Chain-operated A chain hoist is used to lift the gate. The chain is located on either side and locked behind a hinged angle iron or inside the storefront behind a small access door. The chain is kept behind a metal bar inside. The chain must be pulled out to lift the gate. Padlocks and other security may be used as well.

(Above) Electric motor-operated gate with metal housing removed. If time permits, the auxiliary chain and clutch cable may be used to open. The roller chain may be cut and the gate lifted by hand. *Note: These operations are performed from a ladder.*

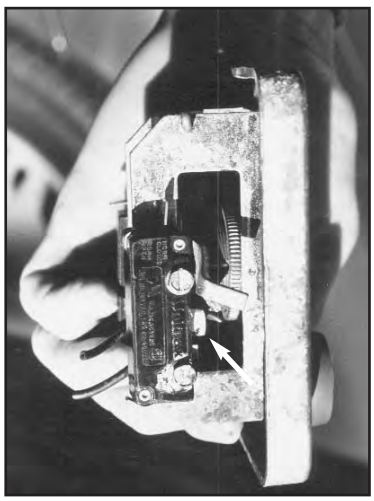
Electric Motor

A motor is used to lift the gate. A keyed switch, mounted on the exterior, is the most common means of activation. The large metal housing that contains the motor will help identify this type. An auxiliary chain hoist and clutch cables are kept in the housing. Padlocks and other security may be used as well.

Forcing the Keyed Switch

1. Remove the four screws and pry off the cover.
2. Push the button on the micro-switch with a screwdriver.
3. Avoid touching any electrical connections.

(Right) Forcing the keyed switch--Remove the four screws and *pry off* the cover. (Below left) Push the button on the micro-switch with a screwdriver. Do not touch any electrical connections. (Below right) Key switch may be locked in a steel box.



Basic Forcible Entry Procedures

• Cutting or forcing the locks is the most reliable and common procedure. (A future article will be devoted to padlocks.)

• Cut or break the hardware or fastening. This includes cutting the hasp and pulling the pin and lock out. Cut the hasp and *not* the pin *or* cut the guide rail and bend the lock and pin out. (This may not always be possible.)

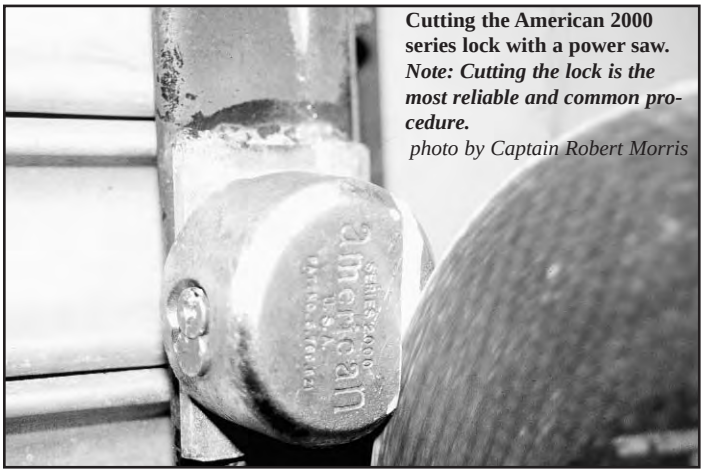
In general, the power saw with a metal cutting blade is the best tool for this kind of operation.

(Above) American 2000 lock with shield and pin.

(Above) Case-hardened padlock secures a removable pin to the guide rail.

(Below) Slide bar at the bottom of gate.

(Above) Bottom of gate is locked to a removable eyebolt in the sidewalk.

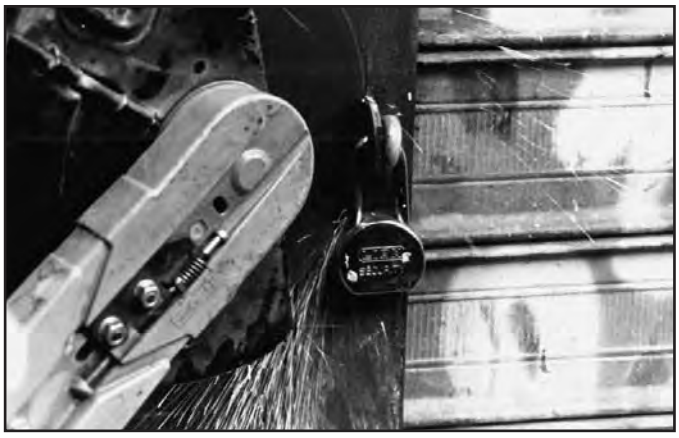


Cutting the American 2000 series lock with a power saw. *Note: Cutting the lock is the most reliable and common procedure.*
photo by Captain Robert Morris

(Left) Make two horizontal cuts on the channel rail.

(Left) Bend the rail and pin out.

(Below) Cutting the hasp from the channel rail. *Do not cut the pin!* Pull out the lock and pin.



Cutting the Gate (Curtain)

When the locks cannot be removed quickly or when working on electrical motorized gates, cutting through the gate is a reliable method. Several techniques can be used. *Inverted "V"* Make two connecting cuts with a saw to form a large triangle (an inverted "V"). A slat on each side is pulled out to create a clear opening.

(Right) The first cut is made at an angle from the top to the bottom of the gate.

(Right) The top of the second cut is left unfinished until both sides are cut. Then, join the cuts. This allows the gate to stay in place during operations.

(Left) A large opening is made. The slats on each side should be removed to create a clear opening.

(Below) Slats may be removed by driving the pike end of the Halligan into the gate and pulling toward the center to make a full opening.

Technique Tip: Leave the apex of the cut unfinished until both sides are cut. Then, join the cuts. This allows the gate to stay in place during operations.

Slash Cut A similar procedure is to make one vertical cut with the saw, top to bottom. Pull out a slat on each side to open. On most, the curtain above will roll upward. Pull out any additional slats to make a clear opening. The slats held in by locking pins should be bent or twisted out of the way.

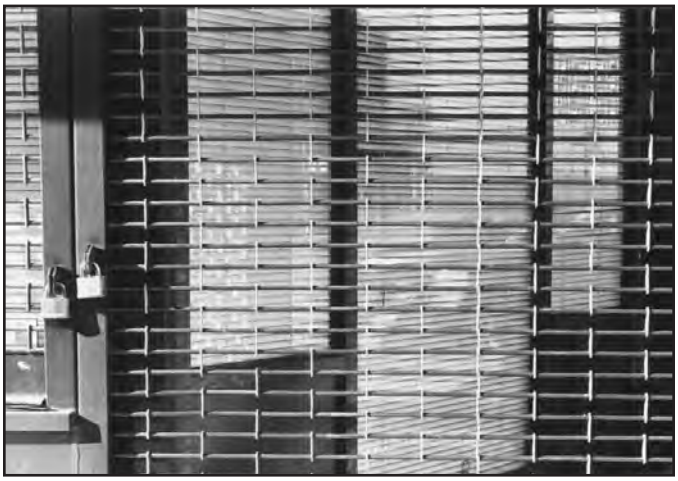
(Left) Make one vertical cut from top to bottom.

(Left) Pull out the slats on each side *above* the highest lock. This allows the curtain to roll up on most gates.

(Left) Pull out any additional slats to make a clear opening. Slats held by locking pins should be *bent* out of the way.

Open Grill Gates

The "Box" Cut Make a vertical cut approximately 12 inches from each side. Connect them with a horizontal cut. This will allow the whole section to drop out and create a clear opening. At fires, where rapid entry is required, the forcible entry techniques used *must* be quick and reliable.



(Above) Use the box cut on open grill gates.

(Left) Make two vertical cuts 12 inches from each side.

(Right) Make a horizontal cut at the top to connect the two vertical cuts. The whole section will drop out and create a clear opening.

About the Author...

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The Chinese Padlock

We now are encountering a new type of padlock that strongly resembles the American 700 series, case-hardened lock. This lock has the same general shape and size of an American lock, but it is much weaker and can be opened quickly. At first glance, they look identical, but they can be recognized by three distinct features:

1. The Chinese Padlock has a bright, shiny, chrome-plated body. The American lock has a satin finish.
2. The Chinese Padlock has a logo with the inscription, *Camel, Guard, Lion.*
3. Near the keyway, the word, *China,* is cast into the body of the lock.

This lock can be seen on gates and doors and particularly in HUD and warehoused apartments.

American 700 is on the right.

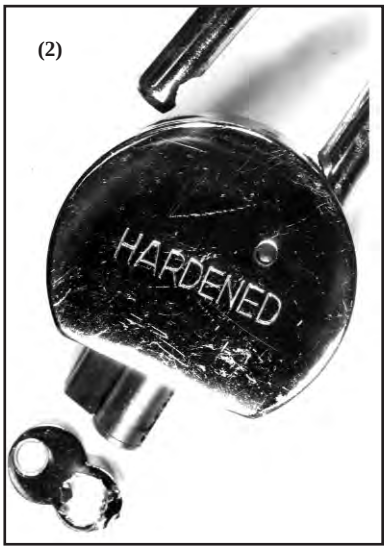
all photos by FDNY Photo Unit

(1) Pry off the cylinder guard by placing the blade of a screwdriver under the "tooth" of the guard and pry up. This guard is soft metal and will bend rather easily. (Use a quality screwdriver, such as a Craftsman.)

Forcible entry procedure:

The fastest way to force this lock is to pry off the cylinder guard over the keyway. Remove the cylinder and open the lock with a key tool or a simple screwdriver.

(2) Shake the lock to allow the brass cylinder to fall out. It is loosely fitted and will fall out under its own weight.



(3, 4) Put a key tool or the blade of the screwdriver into the hole with the "pie-shaped" cylinder and turn clockwise to open.

(5) The key tool can be fabricated from the brass cylinder or a one-half-inch eyebolt with a 3/8-inch slot cut into it.