

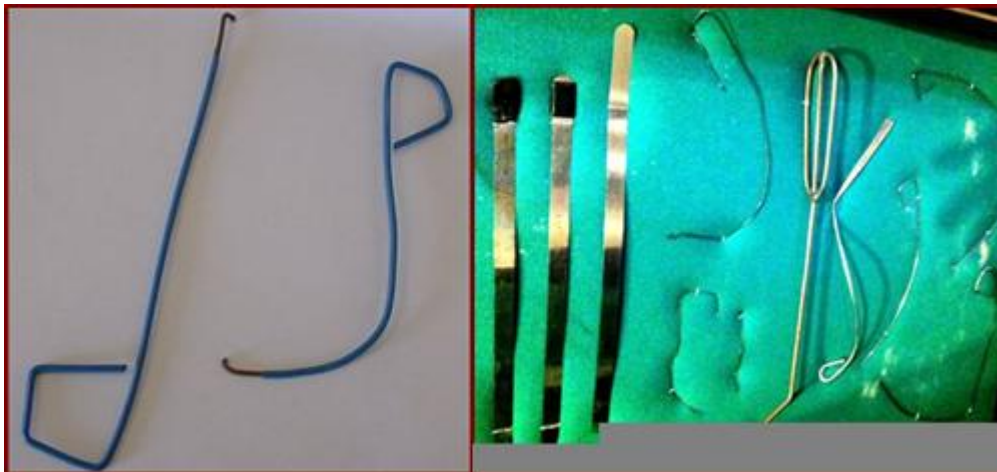
PART TWO:

MONKEY PAW – “SLIDER”

For all the fancy technology that was added to machines, they still relied on some old-fashioned mechanics. The monkey's paw (or "slider") invented by Tommy Carmichael exploited this. The contraption was essentially a guitar or piano string attached to a bent metal rod. Carmichael would jam it into the machine through an air vent and fish around for the switch that released the coin hopper. The paw would then flick and activate the switch, and the machine emptied the hopper.



COAT HANGERS & WIRES & “SPOONING”:



Coat Hangers

Spooning Devices

All sorts of devices were used in the old days to attempt to cheat coin slot machines. Metal devices, some as simple as a coat hanger were inserted up the coin pay chute or air vent of the slot machine. Notice the Rocker Arm at the top of the coin hopper used to count coin payouts. The coins in the cement mixer would be lined up on a ringed ridge for payment. The coins would pass under the rocker arm and be counted as the coin lifted the arm...a simple spring would pull the rocker arm back down.



Using a coat hanger or stronger piece of metal rod, the cheat attempted to lift the rocker arm so coins would pass without being counted. If the cement mixer rotated too long without counting any coins, it would think the hopper was empty and display a Hopper Empty or Time Out message on the screen and shut off the machine. The cheat would have to lower the rocker arm at regular intervals to accommodate.

Some slot cheats were apprehended with their hands beat up and bruised. They were attempting to insert a very rigid metal rod up the chute to engage the rocker arm and break the spring. It was very difficult to attempt this cheat without missing several times. When the thief missed, they ended up punching the inside of the coin tray and beating the crap out of their hands. If successful, the cheat would not have to continually raise and lower the rocker arm. The arm would get bounced up by the passing coins and several coins would fall without being counted before the arm fell again.

BV DEVICES

The natural progression of slot operations was to begin accepting cash at the machine. Up to this point, patrons had to buy rolled coin from slot change booths or change attendants.

Many of the first generation bill acceptors; (Bill Validators) had weaknesses which were exploited by slot cheats.



Mis-Made Bill:

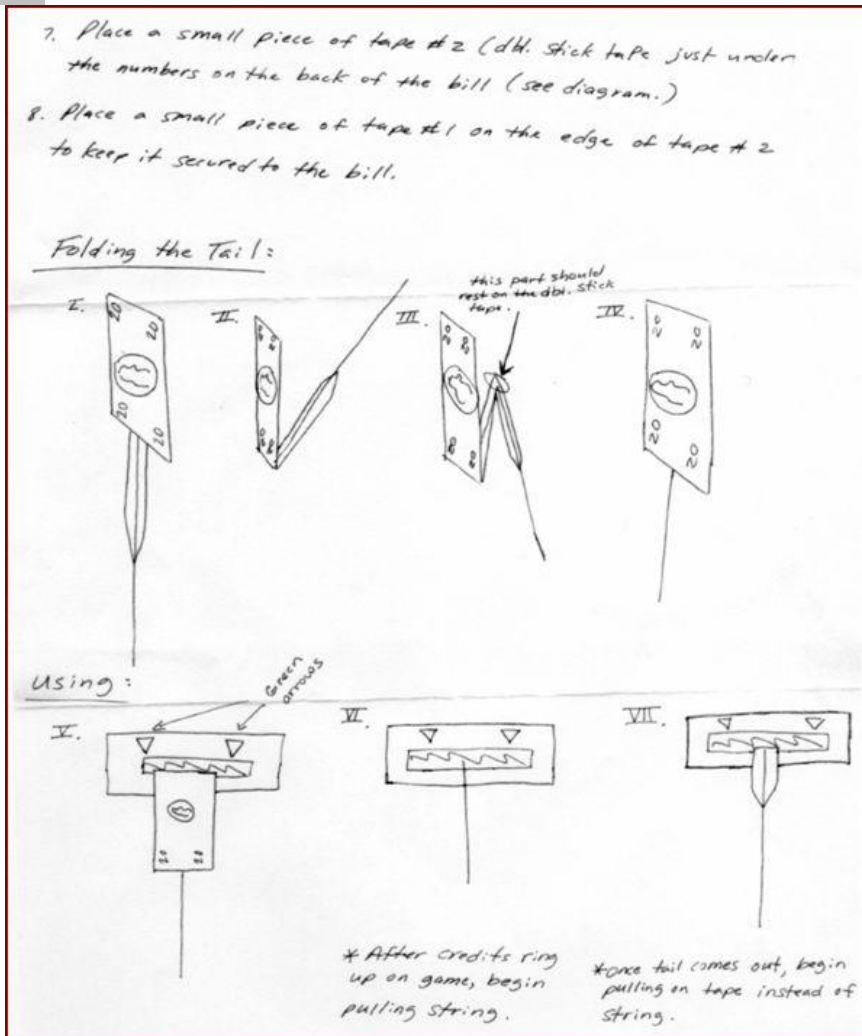
Figure 1



Figure 2

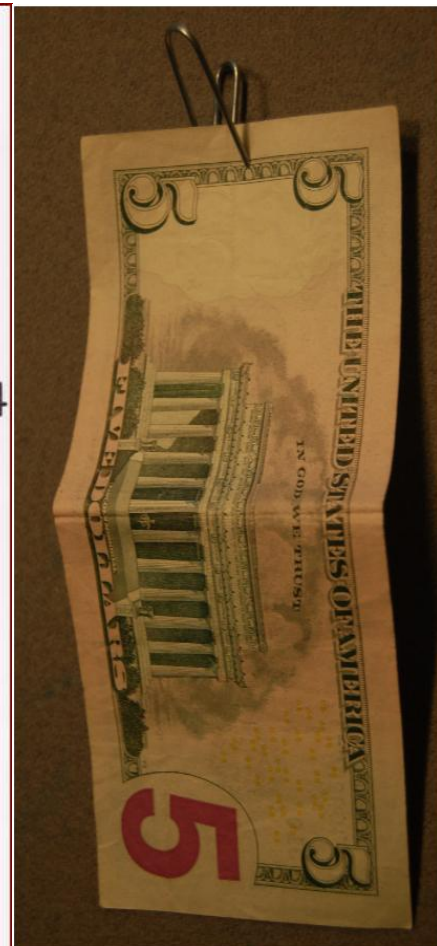
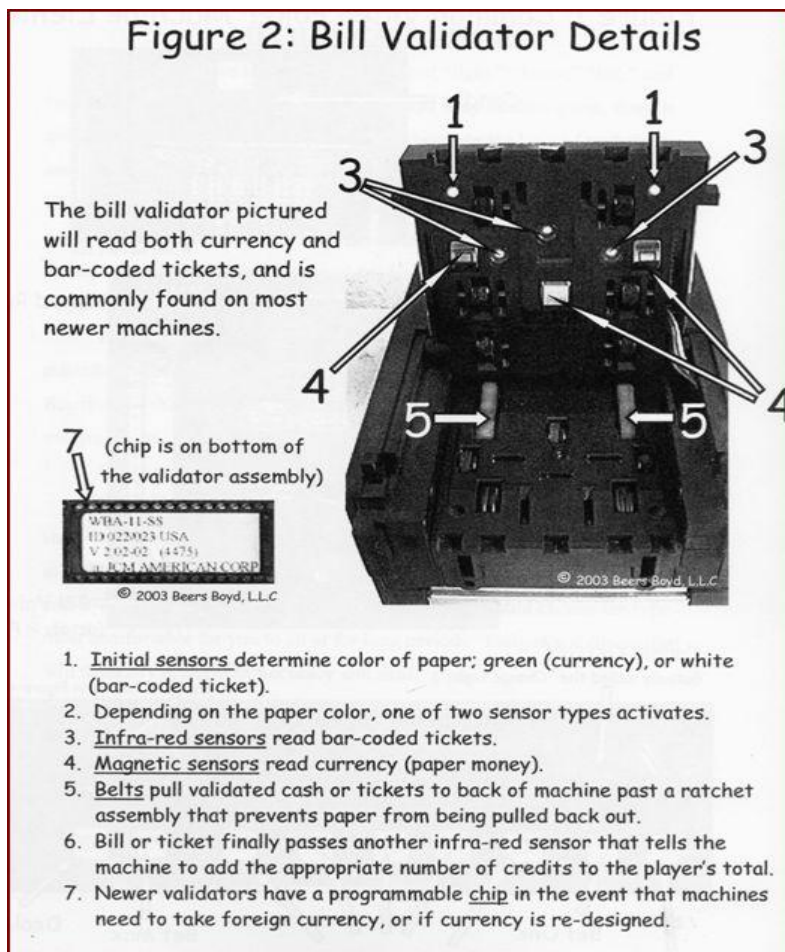
The above pictures illustrate one such weakness. Slot cheaters found that certain BV's read only the center of the inserted bill, others read the corners only. The bad guys would cut a half inch strip from both a one dollar bill and twenty dollar bill and swap them. They would insert a mis-made bill as in Figure 2 into a BV that read the center of the bill. They would receive \$20.00 in credits. They would use the same two bills to make a mis-made bill with the one dollar strip inserted into the twenty dollar bill. They would find a BV that read the corners of the bill and receive another \$20.00 in credit. (*"An awful lot of work to steal \$19.00"*)

ZIP STRIP



It didn't take the Coin Stringers long to attempt Stringing paper bills. Above is an illustration of what is called a "Zip Strip." The intent is fairly obvious...A string, sometimes dental floss, is attached to a hundred dollar bill. The bill was usually coated with Zinc Stearate ("Zinc Soap") to make it slippery. (Magicians know Zinc Stearate as *Fanning Powder*...used to make playing cards easier to fan.) The Zip Strip is inserted into the BV and once the credits are received, the bill is pulled back out.

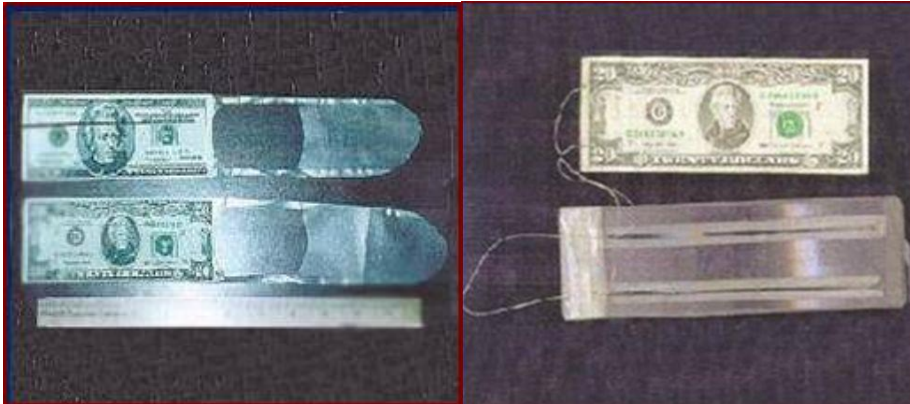
A “*Cat & Mouse*” battle occurred between the Zip Strippers, Counterfeiters and the BV manufacturers. Below is an illustration which lists the security features of a standard Bill Validator. Note Point #5 which prevents a Zip Strip from being pulled back out of the Bill Validator.



In an attempt to defeat the “Ratchet” (AKA “Paw”) slot cheats would attach a paperclip to a bill. They were trying to hook the paperclip onto the Paw and hold it down. If successful, they could then pull bills back out of the BV. Because we never discovered an abundance of paperclips in the BV Cans it is my opinion this cheating method was not very good.

-18- Slot Presentation

Other BV cheating devices were and still are very effective.



This little device is often disguised to look like real legal tender. This camouflages two prongs that, when stuck into the bill validator, make the machine think \$100 has been inserted. BV Accelerator or Intruder



This is looking at the device from the side which is inserted into the machine. The two plastic strips align the LED's with the scanner cells in the machine. The bill wrapped around the device is just for camouflage so that a passerby sees currency in the cheaters hand...not a cheat looking device.

Pictured below are devices advertised on line. They purport to cause credit acceleration on all manner of slot machines and Bill Validators and change machines. AKA "BV Jammers" or "Slot Jammers"



867b BILL ACCEPTOR INTRUDER

This hand held, concealable test device will cause various affects on different machines. This device was specifically designed to affect many types of bill acceptors such as those found on vending machines, gambling machine and bill changer machines. Battery powered and portable. Complete instructions are included. Many vending machines hold in excess of \$50.00 change, while bill changer machines can hold in excess of \$500.00. Device will work on both 120 and 220 volt systems, making it effective anywhere in the world.

Price: \$249.00 U.S. Dollars

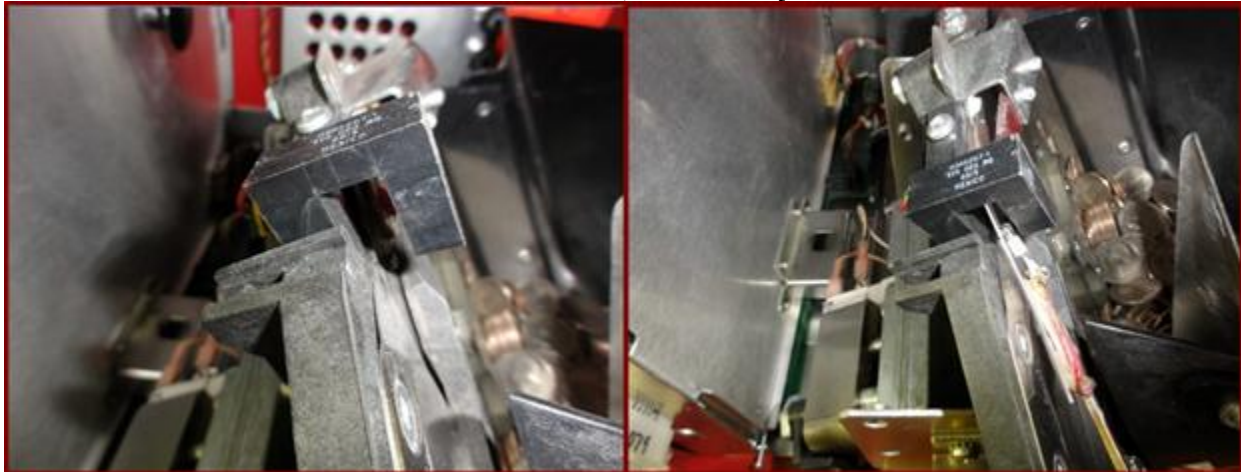



The obvious question is, "Why would you sell me a cheating device for \$249.00 if it really worked?" "Why not just use it yourself & get rich?" "Why would you give up your secrets to law enforcement and slot machine manufacturers?" The answer is of course..."*They Don't Work.*"

Pictured here is a device which cost \$7.00 to construct and was never sold on the internet. Invented by legendary slot cheat Tommy Glenn Carmichael, the “Light Wand” (with various templates for several slot machine types) did however sell on the street for between \$15,000.00 & \$30,000.00.



The obvious question is, “Why would you pay between 15k & 30k for a device Which costs \$7.00 to build?”...The answer is, “It actually does work.”



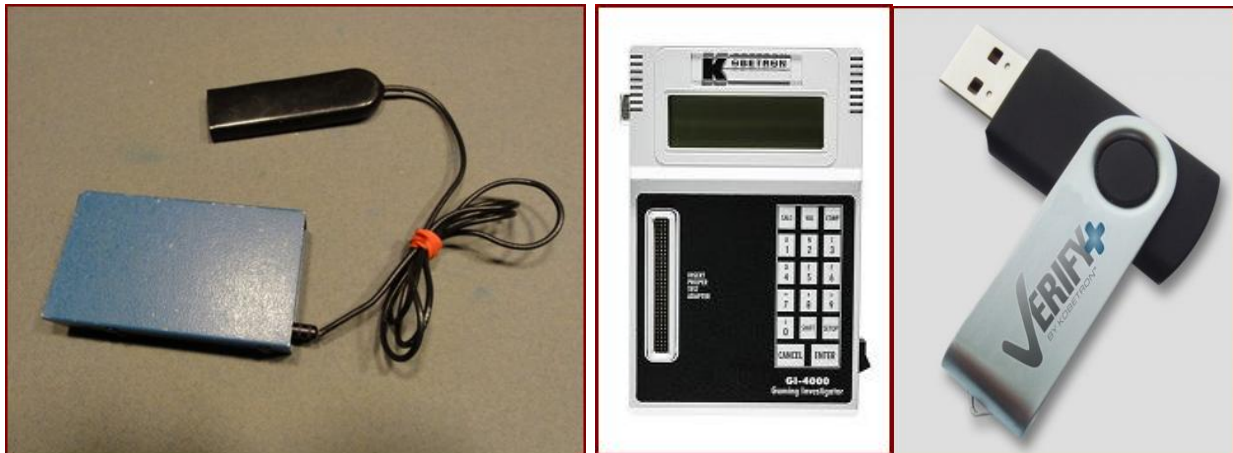
Notice the square optics through which coins pass, break a beam of light and get counted. The Light Wand was inserted up the coin payout chute and positioned to one side of the optic counter. When turned on, the Light Wand confused the optic reader into thinking it was seeing its’ own opposite light. The plastic deflector allowed coins to pass and fall into the coin tray without being counted. The device had to be continually turned off & on so the machine would not “Time Out” thinking the Hopper was empty.

Over the years, slot cheaters have gained entry to slot machines by various methods...some clever, some not. Stealing a slot key or corrupting a slot employee to allow a key to be copied have been accomplished throughout the industry. Slot cheats have also distracted a slot tech who keeps the slot key in the lock while working on a machine. The slot key is removed and a quick impression is made...like a bad movie. Various lock picks are available to pick slot machine locks. Notice the otoscope used by a doctor to examine your ear or nose. Next, notice the otoscope with various lock pick attachments.



The otoscope is used to “Hot Read” the lock tumblers by illuminating and viewing the key pathway. A key decoder is used to gage tumbler depth and allow a skilled locksmith (or cheat) to cut a duplicate key.

Once entry is gained to the slot machine, the cheater can attempt a host of cheating methods from manually setting jackpot pays to downloading a backdoor program (known as an Easter Egg) onto the EPROM. A device similar to the one pictured below can install an Easter Egg which can sit dormant until a programmed set of criteria is satisfied. The cheater may require a nonsense sequence of coins or credits to be played in an exact order to trigger the Easter Egg. Suppose on a five coin (or credit) multiplier, the Easter Egg required a sixteen part nonsense sequence such as; Play 3 then 5 then 4 then 4 then 3 then 2 then 1 then 5 then 2 then 2 then 1 then 3 then 3 then 2 then 5 then 4...THEN PLAY 5 and go to the maximum jackpot pay and erase the Easter Egg.



Kobetron Signature Verification Tools

By erasing the Easter Egg, the cheater leaves no evidence of tampering even when the EPROM is verified by a Kobetron device. In order to address the Easter Egg program, slot manufacturers now erase or scribble over any excess space on the EPROM. In effect, the EPROM is shrunk down to the exact size necessary to operate the slot machine with no space for an Easter Egg.

END PART TWO: