• *Restricted to the Use of Law Enforcement Officials*

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J. Edgar Hoover, Director

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TO ALL LAW ENFORCEMENT OFFICIALS:

If there is any idea in law enforcement to which I am unalterably opposed it is that of creating a national police force and transferring to it many of the functions now performed by the state, county and city police organizations. I have opposed it in the past and shall continue to do so, believing any such plan to be a mistake that we had best recognize and label as such from the beginning.

This nation has no place for a national police force. Such an instrument is typical of the centralism of the totalitarian state where all authority--absolute authority--is vested in one all-powerful national government. It is quite well adapted to the ends of tyranny but it is not adapted to the ends of democracy. In the great area of self government left to the states, counties and cities, the enforcement of their laws and ordinances is not only their own duty but also their own right, and it must be left to them so long as their legislation and enforcement fit within the fundamental guarantees provided by the Constitution.

Nor does this nation need a national police force. Modern methods of police training and communication can be utilized in every community. Scientific assistance from the FBI Laboratory and fingerprint arrest records from our Identification Division, prepared from arrest records submitted by the law enforcement agencies all over the nation, are freely available. Cooperation between the various police agencies is good, and growing. If every police organization takes advantage of these opportunities and every community honestly supports its police officers in the proper discharge of their functions there is no reason why we should not have the best of law enforcement under our present system.

Very truly yours,

J. Edgar Hoover

John Edgar Hoover
Director

Fraudulent Check Passers Victimize Unwary Citizens

Versatile Schemer

The bad-check passer of today is a versatile schemer. He can quickly become a United States serviceman of any rank, a doctor, a titled nobleman or a representative of a foreign country. He enjoys unmerited luxuries, vacations in Florida, new clothes, spending money, and the latest model car—thanks not alone to his own bravado and "good front" but to his ability in many instances to dupe unsuspecting victims.

Measure of Success

Each day throughout the Nation the bad-check writer—both the professional and the amateur—is securing thousands of dollars from American citizens. Professional confidence men have passed checks totaling millions of dollars over the years. Other individuals, pursuing this criminal occupation only on an intermittent and occasional basis, success is measured by his ability to beguile and captivate his prospective victim. The amateur, or occasional check passer, may not have developed a special "line" or story when in the act of attempting to cash a check, but the professional, the man who travels about the country living on the proceeds of his bad checks, generally has worked out a mode of approach which from previous experience he has found to be successful.

Base of Operations Unlimited

The roving check passer creates a major problem for law enforcement. This individual is constantly seeking new areas to exploit. He usually travels fast and spends little time in one community. He may pass a check on the west coast today and next week one of his bogus checks may appear on the east coast. Thus our present day system of communication and transportation, a boon to law enforcement, also works to the advantage of the criminal.

Federal Jurisdiction

The Federal Bureau of Investigation has jurisdiction over the activities of fraudulent check artists who operate interstate. Specifically, Federal law prohibits the interstate transportation of any falsely made, forged, altered, or counterfeited check with knowledge of the false character of the check. Violations of this statute occur when such a check is cashed in one State and drawn on a bank in another State inasmuch as the check is transported interstate by the bank through clearinghouse channels.

National Fraudulent Check File

Several days or sometimes weeks may pass before a check is determined to be worthless. Local law enforcement officers often have little chance to apprehend the passer after the check has been cashed.

America's law enforcement agencies, local, State and national, are doing their best, using the latest scientific developments, to defeat the fraudulent check passer. To assist in identifying, locating and prosecuting these check passers, the FBI Laboratory maintains the National Fraudulent Check File which is available for use, free of of charge, by any duly constituted law enforcement agency. A central depository for spurious checks passed throughout the country, the National Fraudulent Check File identifies many of the fraudulent checks passed each year. As of October 1, 1951, approximately 16,221 fraudulent check specimens were being maintained in the National Fraudulent Check File. This file, established in 1936, serves as a clearinghouse for the Nation in the identification of handwriting and other marks contained on checks submitted to the FBI by law enforcement agencies throughout the country.

During the 1951 fiscal year, a total of 15,643 fraudulent checks, having a face value of $2,247,-354, were received by the FBI for examination. Over 64 percent of these checks were identified with checks previously on file.

Making the Comparison

The checks are filed according to the method of preparation, for example, by handwriting, hand printing, and mechanical methods such as typewriting and check writing. Each fraudulent check received is searched through the appropriate section of this file. Each specimen is examined for all points of similarity and identity as to the general make-up, form and type. Some fraudulent checks are written entirely by hand. Others appear on the most expensive protective paper, apparently validated by perforations made with a check writing machine and filled in with legends written on typewriters, then rubber stamped as to date.

Identification Made

If an identification is made with a specimen in the National Fraudulent Check File, the submitting agency will be furnished not only with background information about the individual involved, but also, if available, with his fingerprint record and photograph. In many instances, the subject may already be in custody, and the contributor will then be informed as to the individual's location. If the fraudulent check cannot be identified, a photographic copy is placed in the file for comparison with other checks subsequently submitted for examination.

Investigation

When a law enforcement agency receives a report of a fraudulent check passing, the investigating officer should immediately obtain possession of the original check. He should obtain a full and complete description of the passer, as well as determine whether the check was written in its entirety in the presence of the victim or only endorsed in his presence.

Submitting Fraudulent Checks

The submission of a fraudulent check to the FBI Laboratory for examination and comparison with the National Fraudulent Check File should be accompanied by all the information available concerning the passer and his method of operation. This information should include a complete physical description, a brief statement as to his particular method of operation, the type of credentials he used, his mode of transportation, and any previous record of check-passing activities.

Section of the Fraudulent Check File maintained by the FBI Laboratory for all police organizations showing the method of comparison by classified handwriting characteristics.

Follow Up

Following the apprehension of a check-passing subject, intensive questioning should ensue in order to ascertain his recent itinerary and any of his known associates. A complete description together with numerous handwriting specimens of figures and words appearing on the checks should also be obtained on check forms. Such a follow up may make it possible to clear up other check-passing cases of like nature.

Cooperation

Arrests may be accelerated by informing the public and advising the citizens in your community to be on the alert for bogus check passers. Apprehension will also be facilitated by furnishing other law enforcement agencies with information concerning local check-passing activities and by utilizing the National Fraudulent Check File as a method of correlation and distribution for those cases which do not have a purely local aspect.

Past Performanee

Indicative of the elaborate and thorough methods of operation of the bad-check passer are the ac-

tivities of Courtney Townsend Taylor, who was apprehended in Mobile, Ala., February 16, 1951, as a result of the circularization of his mode of operation to various business establishments there.

Taylor had many check-passing schemes in his repertoire. One of his most interesting schemes was that in which he obtained check forms purporting to be those of a widely known business concern. He would approach a printer representing himself as the district sales manager for the reputable business establishment with the statement that he had run short of certain promotional-type sales agreements and that the delay in getting additional ones from his home office would cause his crew of assistants to remain idle for a number of days.

With the request that the printer make up some new sales agreements, he would produce a cut which he had previously had made of the business' trademark. These sales agreements would consist of one sheet of paper. The upper portion would bear the same design and printing as would appear on a check and the lower portion would contain the agreement for the signature of a merchant. Ordering in lots of 500 to further lull the suspicions of the printer, Taylor would then cut off the top half or check portion of the sales agreements and with the use of numbering and date stamps, a typewriter for the payee's name, a check-writer for the amount of the check, and the inscribing of a fictitious officer's signature, an apparently bona fide check was ready for use and Taylor would be in business.

Printed His Own

At other times Taylor printed his own checks as well as the necessary identification cards to go with them. During one month in 1950, Taylor, with the assistance of an accomplice, printed up check forms on 32 widely known business establishments and divisions of State and city governments. Full sets of identification cards, some in blank and some made out to various aliases, were also printed up. Taylor himself handled the type forms and designed the forms and identification cards which they printed.

With the assistance of his fictitious identification cards, Taylor passed his checks, usually making substantial purchases for which he received the difference in cash. It was his policy never to cash checks in hotels, night clubs or restaurants since he believed that these employees were usually held personally responsible for any bad checks cashed by them.

From April 1950 to February 1951, Taylor was responsible for passing over 700 fraudulent checks amounting to approximately $50,000.

On the Loose

Numerous unidentified check passers are at large today. Fraudulent check specimens received at various times are searched and examined in the Fraudulent Check File and copies are maintained for comparison with subsequent specimens submitted.

The FBI Laboratory has received numerous checks from local law enforcement agencies and FBI offices which are similar in make-up, form and general handwriting characteristics. These checks have been passed in various parts of the United States from New York to California during the past several years. Specializing in bogus pay checks drawn, for the most part, on reputable business concerns, these individuals operate mainly in grocery or food stores. Using the aliases Robert Timmons, Henry H. Gaddis, George H. Nelson, Bruce T. Ferguson, W. W. Hunter, T. L. Perkins, W. H. Munson and others, the passer enters a grocery store and makes a substantial purchase of groceries, tendering in payment a counterfeit pay check drawn usually on a local or State bank, thus avoiding a violation of Federal law. For the most part the passer is calm and unhurried in his actions and spends considerable time in choosing items of food in the victimized grocery store.

These checks have also been passed at camera shops where the passer exhibits considerable knowledge about photography.

TOOLMARKS

Every tool has individual characteristics. When a tool is used, it generally leaves distinctive markings which can be identified in the FBI Laboratory. It is possible to identify chisels, pliers, pinch bars, hammers, wrenches, axes, and many other tools by comparing objects with which they may have come in forcible contact with test marks made with the suspected tools. Toolmark examinations cover a broad field, but are particularly applicable in burglary cases.

CAR THEFT RINGS

Look carefully for all phases of the operation of a car theft ring. In some rings, each phase of the racket is handled by a different operator. One man steals the vehicle, another changes the numbers and yet another handles the papers. One of the more important tasks is disposal of the altered automobile. The man who does this job must convince the buyer that he is legitimate.

STOLEN AUTOMOBILES

Has a vent glass been replaced? If so, perhaps the original was broken by a thief to obtain entry.

Are there tool marks on the body surrounding the vent glass? Such marks are often left when the glass is pried open.

Are there new tags on the automobile in the middle of a tag year? Thieves often buy new license plates for a stolen automobile to get it registered in the name used in making the sale.

Are the tag bolts new? These bolts generally rust within 3 or 4 weeks after being put on the car. If the tag is old and the bolts are new, perhaps the tag was stolen and placed on the car with new bolts.

Has the ignition switch been tampered with? Check the coil wire to see if it has been stripped of insulation near the point where it enters the coil. Absence of insulation indicates a "jumper" may have been used.

Fake Automobile Titles

Successful auto theft ring investigations require close attention to titles, registrations and transfers of automobiles suspected of being stolen. There have been many cases in which a single title or other document, examined alone, appears legitimate, but when compared with other documents or information reveals both a theft in a case under investigation and a pattern followed in other thefts. This possibility is to be anticipated in every stolen car case. Since an atmosphere of legality makes the stolen car racket both safer and more profitable, professional thieves develop ingenious systems for documenting the automobiles they handle.

One "successful" thief, now serving a prison sentence, started each chain of operations by buying an automobile legitimately from a dealer in Detroit, Mich. There being a delay in obtaining the usual title, ownership of the new car at the time of sale was passed by means of a new car dealers invoice bearing a notarized affidavit by the authorized dealer that the car was new and had not previously been sold, licensed or titled anywhere. Using this same invoice, the thief sold the car to a dealer in the State of Washington and shipped it there by truck. Once the new car was out of the way, the stage had been set for the theft operation.

Approximately 1 month later the Michigan title to the new car was received. After this title came into his possession the thief stole another car of the same make, model and description. The motor number was ground off the stolen car and replaced with the number appearing on the legitimate title. The serial number plate was removed and replaced by the plate removed from the legitimate automobile before it was resold. When these operations were completed, the stolen car matched the Michigan title in every detail. It was then taken to Texas and sold to a used car dealer, using the Michigan title as proof of ownership.

According to the thief's calculations, this system contained little chance of discovery until such time as an attempt was made to title both the legitimate car and the stolen car in the same State. By selling the two cars in two widely separated States even this chance was kept to a minimum.

The experienced investigator will note that there was also an element of risk in the absence of a serial plate on the original automobile, had this absence been noticed and made the subject of inquiry.

Second System

To speed up his operations, the thief obtained a supply of new-car dealer's invoices from a printing firm and by means of a rubber stamp entered on the form the name and address of a nonexistent dealer. Under this system, the invoice was made out in conformity with the data on the stolen car excepting only one or more of the last three digits in the motor number. For example, if the motor number ended in the digits 123 the thief would write these on the invoice as 132 or some other variation. The theory was that should anyone notice a discrepancy between the actual motor number and the transposed number shown on the invoice he would assume a typographical error in preparing the invoice and accept the automobile as legitimate. There is possibly some merit to the theory. Most of the stolen cars handled by the thief were documented and sold in this manner.

One Mistake

The inevitable error, fatal to the entire system, came when the thief prepared the papers for a stolen 1950 model Cadillac on which he had actually changed the motor number. After changing the number, the thief made up the usual fictitious new-car dealer's invoice and transposed the last three digits in the manner described. This car was sold in Texas and then transported to California where it was found on a used car lot by an authorized Cadillac dealer who was interested in learning the origin of late model Cadillacs coming into the State.

Something was obviously wrong. The motor number on this model should have been identical with the serial number, but it was not. The thief, from ignorance, oversight, or carelessness, had failed to make the two numbers correspond. Inquiry made to the factory brought a report that the car had been stolen. Investigation revealed the name of the man later convicted and the fact that he had handled this car.

As it sometimes happens, other evidence came to light almost simultaneously. A Texas dealer applied for title on a car he had bought from the same thief. State authorities refused title because a title identical in all details was already on file. After some inquiry the dealer now applying for title checked back through his records and found that his firm had previously purchased and sold another automobile with exactly the same description, motor number and serial number as the one for which he was now seeking title.

Examination of the second car, the one purchased from the thief and for which title was now being sought, revealed that it had a changed motor number.

When the thief was arrested by the Dallas, Tex., Police Department, he was in possession of a stolen car and numerous papers. Following investigation by police and the FBI in Texas and Washington, the thief entered a plea of guilty to the theft and interstate transportation of 13 automobiles. Sixteen other cars were located and recovered.

ANTITRUST

Investigations of monopolies and alleged combinations and agreements in restraint of trade or commerce are conducted by the FBI.

Fast Work Solves Vermont Theft

It was pay day for the city firemen in Burlington, Vt., one morning in March 1951, when a young man sauntered up to the cashier's window in the office of the city treasurer and asked for the fire department payroll. When requested to identify himself, he gave the name of a man known to be on the payroll. The metal box containing nearly $3,000 was taken from the vault and turned over to the caller, who strolled out of the office and disappeared.

Less than an hour later a second man appeared at the cashier's window and asked for the fire department payroll. This time the caller was the man certified to obtain the money. There was a quick call for law enforcement.

Things moved fast in Burlington during the next few hours. Chief of Police Donald P. Russell put out an eight-state alarm, notified the Vermont State Police and assigned detectives to check all outgoing trains and busses. By evening Chief Russell and Sgt. William W. Corbett had questioned more than a dozen suspects, all of whom were able satisfactorily to explain their whereabouts at the time of the theft.

The public alarm proved to be the action which paid the best dividends. Early in the evening an anonymous call from a person later found to be a local citizen provided the police with information which led to recovery of a part of the loot. Questioning of the principal suspect and a search by police and Sheriff Dewey Perry resulted in locating another $1,337 in an automobile used by the suspect. The original suspect and the automobile owner, who also participated in the crime, entered pleas of guilty. A third suspect alleged to have had a part in the planning of the crime was found to be in military service and was delivered to military authorities for prosecution.

Chief Russell and Sergeant Corbett are graduates of the FBI National Academy.

ELECTION LAWS

If two or more persons conspire to deprive a person of his right to vote or to have a vote counted as cast in an election involving candidates for Federal office, Federal statutes under the FBI's jurisdiction have been violated. The purchase or sale of votes in a general or special election also is prohibited.

IDENTIFICATION

Whorl Patterns in Fingerprint Classification

See Previous Article

In the January 1952 issue of the *FBI Law Enforcement Bulletin*, there was an article entitled, "Whorl Patterns in Fingerprint Classification," which discussed the plain whorl and the central pocket loop whorl.

This month's identification article discusses a third type of whorl, the double loop. The double loop, in most cases, is the simplest and easiest type of whorl to recognize. A double loop consists of two separate loop formations, with two separate and distinct sets of shoulders, and two deltas. Figures 1, 2, and 3 are typical examples of the double loop whorl.

Loop Formation

In a plain loop the ridge or ridges must enter on one side, recurve and go or tend to go out the same side. The ridges forming the loops of the double loop whorl do not have to meet this requirement. They may go out the same side or they may go in a different direction so long as the loop formation requirement is fulfilled. Figure 4 illustrates a double loop whorl in which the ridge A making the formation does not go out the same side from which it entered.

Figure 1.

Appendages

The appendage rules set forth for the plain loop must also be observed in the double loop whorl, i. e., an appendage abutting upon the outside of a recurving ridge at right angles between the shoulders spoils that particular loop formation. If the innermost loop is spoiled by an appendage,

Figure 2.

the next loop toward the outside of the pattern will be considered. An appendage connected to a recurving ridge at any angle other than a right angle is regarded as flowing off smoothly and does not spoil it. Questionable cases which could affect the interpretation should be given the pre-

Figure 3.

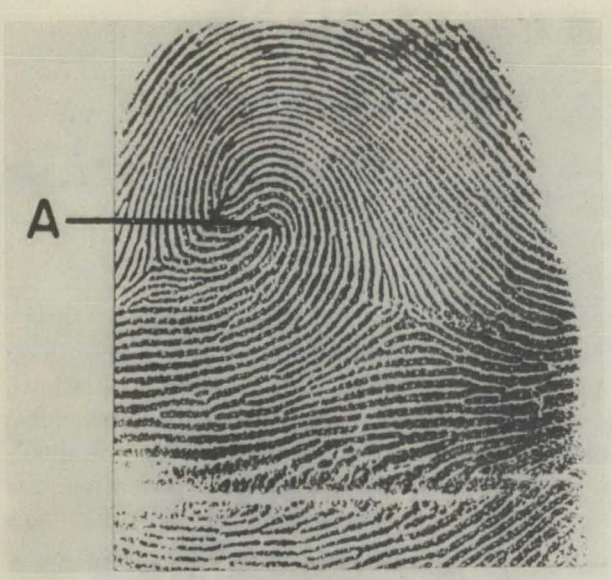

Figure 4.

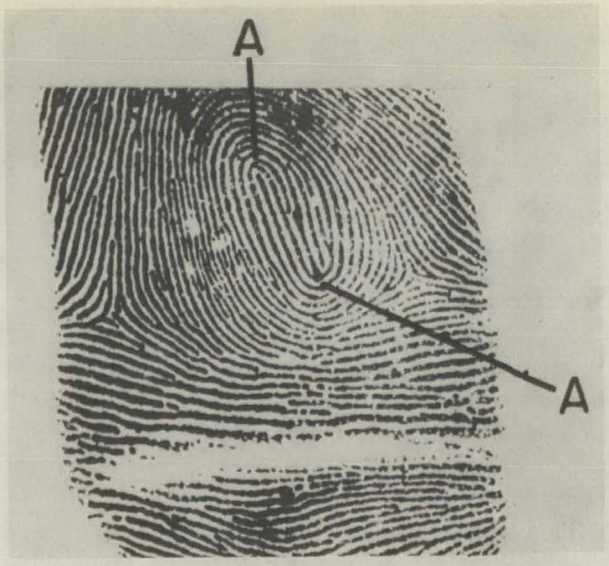

Figure 6.

ferred classification and referenced to the other possibility. In figure 5 one of the loop formations has an appendage at right angles between the shoulders; therefore, the pattern is classified as a plain whorl and referenced to a double loop whorl. In figure 6, the appendages flow off smoothly and leave the recurves intact.

Separate Loops

The term "separate" is very important when applying the double loop definition. The requirement that the two loops be "separate," confines the double loop classification to some extent. It eliminates from consideration what is termed the "S" shaped type core. The "S" type core cannot be classed as a double loop since the same ridge forms both loop formations and cannot be said to be "separate". Figure 7 illustrates the "S" shaped type core and would be classified as a central pocket loop whorl.

The "separate" loop formation also eliminates from consideration, as a double loop, the interlocking type core and the formation with one loop inside another. The names for these two core formations obviously signify that they cannot be considered as being "separate." Figure 8 is an example of the interlocking type core and figure 9 is an example of the formation with one loop inside another. Figures 8 and 9 would be classified as plain whorls.

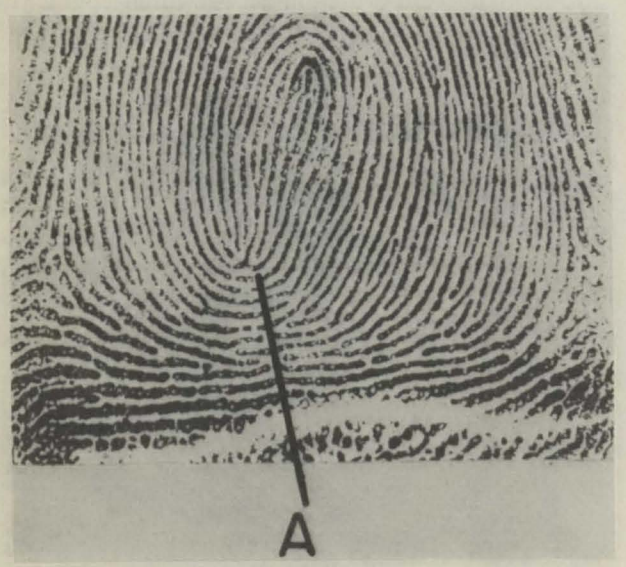

Figure 5.

Figure 7.

Figure 8.

Figure 10.

The requirement "separate" does not mean that the two loops may not be connected. They may be connected by an appending ridge provided that it does not abut at right angles between the shoulders of a loop. Also, care must be exercised that the loops, if disconnected, would not fall into the interlocking type core classification. Figure 10 meets all the requirements for a double loop whorl even though the loops are joined by an appending ridge.

The loops of a double loop do not have to meet the requirements of a plain loop in that no ridge count is necessary. In this connection, the delta may not be located on an only looping ridge and be classified as a double loop. The basic essentials of a whorl, i. e., two deltas with recurves in front of each, must always be fulfilled in the double loop whorl.

It is not a necessary element that the loops be the same size, neither does it matter if they are the same length.

Figure 11 illustrates a double loop whorl in which a ridge count would not be secured from loop formation A.

In conclusion, three requirements must be met in order to classify a whorl as the double loop type. If the classifier will analyze doubtful patterns and determine one by one if all three requirements in the definition are present, no difficulty should be encountered.

Figure 9.

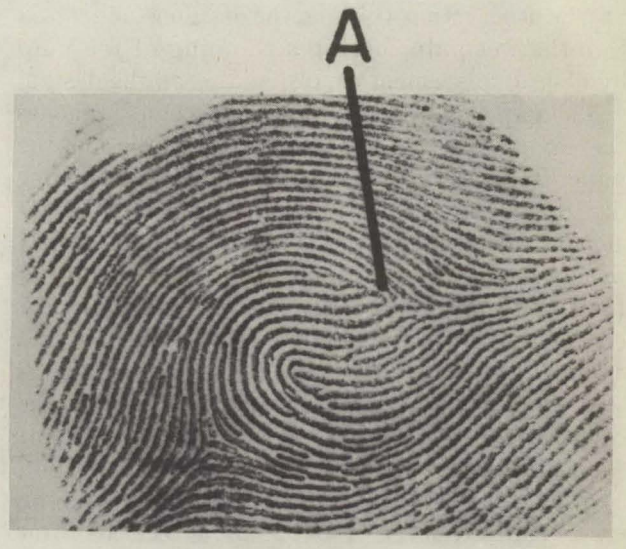

Figure 11.

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SCIENTIFIC AIDS

Watermarks and the Investigator in Document Cases

Ancient Device

Watermarking has been familiar to the public since it was first introduced by the Italians in the thirteenth century. Watermarks have proved invaluable to buyers of paper as a simple method of recognizing standard brands. Down through the years, manufacturers, stationers, and printers, and even customers, have come to look upon the watermark as a method of advertising their goods.

The custom of watermarking has been chiefly confined to writing papers and book papers, although a few newspapers also use it. Due to the fact that the thinning or thickening of the pulp in producing the watermark interferes with the perfect reproduction of illustrations by lithograph or halftone processes, as a rule, watermarking is not used for printing papers on which fine details are shown or extremely accurate reproductions are required.

Making the Impression

Watermarks are placed on paper by a device called a "dandy roll." This is a woven wire gauze covered skeleton roll having the watermark device soldered or sewn to the face of the roll. Vulcanized rubber designs in the form of bands may also be used. In revolving, the design is impressed into the wet pulp causing a thinning of the pulp by fiber displacement corresponding to the design.

The paper is in a very wet state when it reaches the dandy roll. In the process of completion, the paper is elongated about 5 percent in the machine direction and contracted across the machine direction about 4 percent. Consequently, the watermarks on the dandy roll must be distorted so that they will appear correctly on the dry paper. A circle appears on the dandy roll as a very distinct oval and any portrait work to be distinguishable as such in the paper must be distinctly unlike the copy on the dandy roll. A sufficient number of the watermarking designs is put on the dandy roll so that one complete watermark will appear on each trimmed sheet of paper or letterhead after the mill sheet has been cut and trimmed for sale.

The cameo or relief method of watermarking is sometimes supplemented by an intaglio dandy roll. Instead of the designs appearing light on looking through the paper, those produced by an intaglio method show darker on looking through the paper and are known as "shadow" marks. This also has the advantage of being visible on the surface without undue prominence.

A third method, which is generally used on sulfite papers, consists of using a rubber or steel embossing roll. These rolls are pressed against the fibers at a point in the process where they have lost considerably more water than at the point where the dandy roll watermark is ordinarily impressed. These band or pressure marks can be distinguished from the true watermark of the dandy roll or the "shadow" mark of the intaglio dandy roll. The pressure mark tends to be lighter along the edges of the lines. Furthermore, soft X-ray photographs do not disclose the presence of these marks made by an embossing roll. A watermark made by a dandy roll can be photographed with the aid of soft X-ray regardless of handwriting, typewriting or printed matter which may obscure it.

Examination

In the examination of questioned documents, particularly in extortion or kidnaping cases where the author is unknown, in most instances paper cannot be traced to its source in the absence of a watermark on the paper. If the watermark is present, it may furnish a valuable lead aiding in the solution of a case.

In one extortion case involving a number of threatening letters against public officials a watermark "sage Bond" was found on one sheet with a fragmentary letter "T". The completed watermark was determined to be "Telco Message Bond." Only two paper companies, one in Pennsylvania and one in Maine, produced this type of paper. Known samples secured from the Pennsylvania mill eliminated it as the source of the questioned

paper. The product of the Maine mill was found to be similar in all respects to that of the questioned letter. Local investigation disclosed that a public utility company had purchased large quantities of the "Telco Message Bond" paper. This paper was sent to a local stationery house where it was placed in stock and ordered as needed by the branches of the utility company. Investigation of employees recently discharged from the stationery house resulted in the location of a suspect who had been discharged for striking a fellow employee on the head with a shovel. The suspect's fingerprints were found to be the same as latent fingerprints developed on the extortion letters and the handprinting of the suspect was the same as that in the anonymous letters. The suspect admitted being responsible for the extortion letters and said he had carried home waste paper cutting from the stationery concern since he could not bear to see it thrown away. He was given a sentence in a Federal penitentiary.

Dated Marks

In some cases, paper carries a dated watermark showing the year it was made. If a watermark is not dated, it can frequently be shown that the watermark was not used before a certain time. One of the most common methods of determining this is by the changes in the design, size, position, and arrangement of the various portions of the watermark. Occasionally, broken watermarks are printed for some time before the defect is discovered. The mills producing paper keep samples which can be used to verify the time a particular watermark was first used and when it may have been discontinued.

There are relatively few companies in the United States which make dandy rolls and these companies keep accurate records on their use, where they are sold, and when they are installed and removed from the paper machine.

In the examination of watermarks, ordinarily a single impression is not sufficient to determine whether defects are present and the cause of such defects. Temporary defects in the watermark may be caused by the dandy roll's picking up pieces of lint or dirt which may give the impression of a permanent defect.

Some paper companies have a code system to indicate the year a particular piece of paper was made. By referring to the company the exact date the paper was first made can be determined.

Watermark Index

In the FBI Laboratory, an index of many thousands of watermarks is maintained in a special file to assist in the location of the source of the sheet of paper bearing a watermark. The U. S. Patent Office has a complete file of all registered watermarks. However, it is noted that considerable time may elapse between the first use of a watermark and the time it is registered with the Patent Office.

Circumstantial Evidence Fails Under Examination

Millions of cattle range on extensive ranches in Western States and the Mid-west. The cattle business has been thriving.

The same conditions which have brought a business boom to the cattlemen have also brought cattle thieves back into operation on a large scale.

Recently the head of a slaughtered cow was found on a ranch in Texas. The head had been severed and the carcass dragged some 200 yards distant to a public road, where it was loaded into a car.

An immediate investigation by the local sheriff's office was instituted at the scene of the crime. It was determined, from the presence of a cartridge case which was found near the head of the animal, that the cow apparently had been shot by a .22 caliber rifle.

Footprints in the soil at the scene indicated that one of the thieves was wearing cowboy boots and the other was wearing rubber boots. The imprints of the rubber boots left a well-defined design easily identified. Specimens of the soil and vegetation at the spot where the cow was killed and at the place on the road where the cow was loaded into some type of motor vehicle were obtained. Hair and blood specimens were obtained from the head of the cow and specimens of blood were taken from the soil and vegetation at the point where the cow had been loaded in the vehicle. It was also noted that the tire tracks left along the road at the point where the cow was loaded were of a well-known brand tire which was easily identified from the imprints. The officers carefully marked the specimens taken and preserved them for future reference.

Two men, logical suspects, had been seen in the

immediate vicinity on the evening prior to the time the cow was shot. It was also learned that these men had had car trouble and their automobile had been towed to a nearby garage. The automobile was searched and the officers found a blood-stained butcher's apron in the trunk compartment, and a pair of rubber boots, also blood-soaked. The boots contained hair specimens resembling the hair which had been obtained from the head of the beef at the scene of the crime. Soil and vegetation specimens found in the car also resembled the soil and vegetation specimens obtained by officers at the ranch. A butcher knife, containing blood stains, was also found in the trunk compartment of the car.

The design on the tires of the suspect car resembled those found at the crime scene. The boots taken from the automobile appeared to compare both in size and design with the tracks at the scene of the crime. Debris from the floor of the car which belonged to the suspects and from the boots in the suspect's car, including hair, soil, particles of grass, the knife in the back seat and blood samples from the butcher's apron, the knife, and the boots were collected.

The circumstantial evidence which piled up in the case seemed to have virtually assured a conviction. In order that the case might be strengthened by scientific crime detection methods, however, the collection of evidence was taken to the FBI Laboratory at Washington, D. C., for examination.

Results

The FBI Laboratory determined that the blood found at the scene of the crime and at the spot where the cow had been loaded was of bovine origin, as were the hair specimens found at these spots. The laboratory concluded that the blood found on the boots in the suspect's car was rabbit blood with some particles of fowl blood also contained therein. It was further concluded that the hair found on the boots was rabbit hair.

The laboratory also determined that the soil and vegetation specimens found in the suspect's car were not identical with the soil and vegetation specimens found at the scene of the crime.

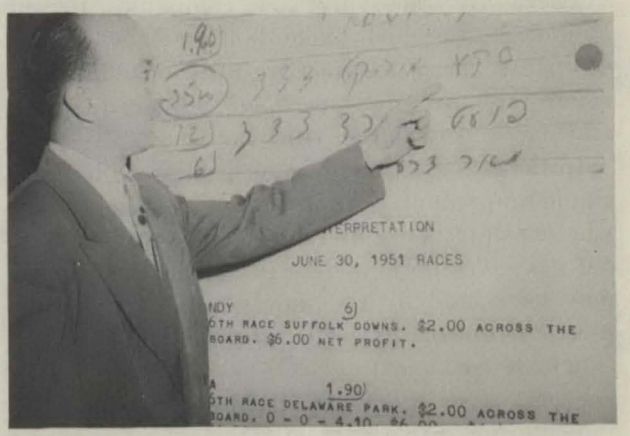
Results of the FBI Laboratory's examination of this evidence exonerated the two otherwise logical suspects. Scientific crime detection methods again balanced the scales of justice, and in this instance established innocence rather than guilt.

FBI Laboratory Solves Bookie Cipher

When an individual with a known police record began arriving in Lancaster, Pa., regularly on the 12:50 p. m. train from Philadelphia, officers of the Lancaster Police Department became suspicious and began watching his movements. Later, police officers raided a garage and found the suspicious individual and the owner in possession of evidence that they were accepting horse bets over separate telephones. Racing newspapers, a radio tuned to a nearby station broadcasting race results, handwritten slips bearing horse racing notations and five sheets of paper containing unintelligible symbols were picked up in the raid.

Five pages of symbols found during the raid were sent to the FBI in Washington. An FBI Laboratory technician analyzed these five sheets and determined that they contained the names of horses running on several well-known race tracks, written phonetically in Hebrew script. Cipher symbols were also found which revealed tracks, amounts and types of wagers, often accompanied by notations showing the bookie's net profit or loss. A complete decipherment and explanation of horse race wagers appearing in the five pages of symbols were prepared in the FBI Laboratory and forwarded to the Lancaster Police Department.

The FBI Laboratory technician was called upon to testify at the trial and by means of photographic enlargements of portions of the evidence he was able to demonstrate to the court the system and interpretations for the symbols used by the subject to record horse race wagers. Following this testimony the subject entered a plea of guilty and was sentenced to 9 months in jail, $300 fine and costs.



FBI Laboratory technician points out system and interpretations for the symbols used to record horse race wagers.

Analysis of High Traffic Accident Rate in Virginia[1]

by CAPT. W. L. GROTH, *Deputy Administrator, Governor's Highway Safety Committee, Richmond, Va.*

Note.—This article was written as an analysis of the factors behind traffic injuries and deaths in Virginia. But it is not the story of Virginia alone. It is also the story, as shown by the accompanying statistical table, of many other States. Injuries and death from motor-vehicle accidents are a major police problem everywhere.

The "Accident" Toll

Despite mounting official effort in the various fields of traffic safety, which have received national acclaim, Virginia saw 1950 close with a dismal record of 915 motor-vehicle deaths, 21,840 injuries and $46,000,000 literally cast away. This, at a time when our manpower and other resources were being heavily extended to carry on a bloody war. In 1950 motor-vehicle deaths in the Nation amounted to 35,000, of which 21,000 were of employable or military age, thus bringing an economic and military wastage in dead alone of 15,000 man-years.

While something can be said to explain it, nothing can justify this disgraceful situation. The fault lies, perhaps, in the swift and heavy impact with which the automobile struck the American public. We are unprepared for its Gargantuan growth and unaware that Frankenstein's monster paled into Peter Rabbit beside it. The 50 years of its being simply have not been enough for us to develop a proper code of ethics for its use and sufficient inhibitions as to its potentialities.

While we are careless sometimes with certain agents producing or augmenting fire, we respect the actual flame since fire has been with us almost since man first struggled upward and we have had a long time to fear it and to designate its proper and improper uses. Deaths in Virginia last year from all types of burns numbered but 218 against the automobile's 915.

We have also a healthy respect for firearms and those who use them the most respect them the most. They were first reported at the battle of Crécy in 1346 but development was slow and, in a period of 15 years more than the automobile has had to expand, we find the "arme blanche" and arrow still prevalent at Agincourt in 1415. Accidental discharge of firearms killed only 63 people in Virginia last year. The revulsion and fear felt for poisonous snakes needs no clarification, yet no one died from their bites last year in Virginia.

Lack of Restraint

There is no fear of the automobile in any way kindred to that felt for firearms, fire or reptiles and no similar social restrictions on its improper use.

The first practical automobile, equipped with the internal combustion engine, was built and operated by the Duryea Bros. in Springfield, Mass., in 1893. Barnum and Bailey exhibited it as a freak in 1896 but the same year marked also the first commercial sale. By 1912 there were a million in the Nation, and Henry Ford with his "Model T" had materially helped to shove the number past the 7 million mark at the close of World War I. Today, the Nation's motor vehicles, exclusive of military vehicles, number about 50 million!

Speed and force of impact were hampered at first by the inability of the early manufacturers to visualize a distinct body for their products and, until about 1905, they were little more than engines attached to buggies.

Light and slow, with no heavy traffic to worsen driver conditions and with roads incapable of sustaining even moderate speeds, the automobile did not claim its first victim, a pedestrian, until the closing days of the nineteenth century. In spite of the subsequent and unprecedented slaughter—we will reach 1 million by December 1951—present-day manufacturers heed the public cry for speed and more speed as well as heavier cars to heighten force of impact and strengthen the deadly pull of

[1] From the University of Virginia News Letter.

centrifugal force or momentum inertia. Broad, straight highways, built to accommodate heavy traffic loads are a call to action for the heavy-footed driver. Myriad protruding gadgets are a mark of affluence even though they skewer the body of a crash victim with the efficiency of a stiletto or lacerate it as would a meat cleaver. To use the inertia-resisting seat belt which is universal in the planes of our armed forces would brand any one as a cautious eccentric.

Virginia's over-all program of education, enforcement and engineering has been judged by the impartial National Safety Council to be one of the Nation's best but the same organization places us eleventh from the bottom among our 48 States on our rate of deaths per 100 million vehicle miles traveled. No one thing is going to lessen appreciably Virginia's highway slaughter; nor will any stimulation of official activity have this result. The solution of the problem lies too deep in the minds of the individual drivers and walkers.

No Code of Conduct

A strong accident factor, perhaps the strongest, is the moral attitude of the public. Because a proper ethical code for driving and walking has never been accepted, the reckless, irresponsible or drunken driver suffers no social disrepute. He can saturate his brain with alcohol and become a deadly menace of the highway, yet, in the eyes of the very people whose lives he endangers, he suffers far less social disrepute than if he were arrested staggering along the sidewalk. Should an individual deliberately handle a pistol carelessly or leave a fire untended close to his neighbor's house and refuse to remedy the situation upon request, the neighbor would have no hesitation in calling the police and it is safe to say that diplomatic relations between the complainant and arrestee would be somewhat strained.

Let the same offender tear down a residential street at 50 and not one word will be said, not only to him but to the police. This stands in the face of the marked disparity in deaths caused by the three agents.

For some unfathomable reason, people who would neither cheat nor violate other laws think it a commendatory action to violate a traffic law and escape unpunished. In this attitude they are supported by their friends. Disregard for traffic laws is carried further in the individual reluctance to testify against an offender in a traffic case and the "There, but for the grace of God, go I" attitude the average juror assumes in a drunken driving case. This might be understandable to some extent were it not necessary to point again to the 35,000 lives lost to automobiles last year.

Closely related is the shedding of all self-control, courtesy and concern for fellow men by otherwise socially minded and considerate people when they drive. The boorish acts they commit, as grabbing right of way, jumping lights, blocking pedestrian crosswalks, using horns unnecessarily and speeding up when about to be passed, are all the more reprehensible in that they kill.

It Can't Happen to Me

"Accidents will happen, but they won't happen to me," reasons the driver and goes blithely on his lethal way. Thirty-five thousand dead men and women last year went to their traffic doom believing just that.

Perhaps were the word "accident" deleted from traffic terminology, public attitudes would improve. These crashes do not come about through bad luck but by overt, unsafe acts and gross sins of omission. One resulting from, say, bad brakes cannot be classified as entirely due to mechanical failure since a driver usually knows when they are beginning to fail and should have them repaired at once. By the same token, one occurring on a sharp curve or icy road equally belongs to driver fault since all curves should be negotiated with caution and an icy road calls for slower speeds and increased watchfulness. At the other end of the scale, a pile-up involving a drunken driver hovering about 80 miles per hour is close to destructive intent.

This attitude of irresponsibility is having its impact on younger people. A father who would punish his son severely for cheating in school or looting a fruit stand will allow the boy to witness him breaking any traffic law when it suits his convenience. As youths emulate adults, they follow the pattern in their own driving with the desire to go them one better. This trend is tragically reflected in the alarming rise in deaths involving 'teen-age drivers.

Not an inconsequential factor is the general ignorance both of the automobile's potentialities and of the natural laws governing movement. Three thousand pounds of speeding steel take a lot of stopping but stop suddenly when striking a fixed object or another car. Driver and passengers

then continue in a straight line at the same speed the car was traveling, as decreed by inertia, until they stop messily against the steering wheel, instrument panel or windshield. A car speeding around a curve must resist the powerful pull of centrifugal force which drags it on a tangent to the curve with only the friction between the points of contact of four small patches of rubber with the road.

Then there is force of impact. Taking a hypothetical "X" to represent impact with a fixed object at 30 miles per hour, a collision at 60 will generate not 2X but 9X. In other words, force of impact varies as the square of the speed and is all the worse in a collision where both cars move in opposite directions.

This ignorance is reflected in the fact that 9 out of 10 pedestrians killed are not licensed to drive. Allowing for those below driving age, it is still a significant figure. They simply do not appreciate the driver's limitations in stopping and swerving nor his relatively restricted vision, particularly at night.

Pedestrian Collisions

The problem is heightened by the very nature of Virginia's terrain. Urban crashes, because of reduced speeds, are generally less severe than those in rural sections and most deaths are pedestrian. However, with wide sparsely settled areas where reduced speed zoning is absent for long stretches, speed is built up to cause an alarming number of fatal gyrations involving only one automobile which loses a battle to gravity, centrifugal force or momentum inertia. Last year there were 785 crashes which killed one or more persons. Of these, 335 involved lone vehicles which went out of control to overturn or strike a fixed object. Considering that 215 crashes resulted in the death of one or more pedestrians and are not included in the number of crashes involving lone vehicles, and that other drivers who lost control of their cars would have left the road or overturned had they not struck another car in the process, deaths resulting solely from inability to control a car due to speed, exhaustion, alcohol, inattention or lack of skill make a healthy percentage of the 785 fatalities.

These tragedies do not happen at the legal limit of 50 but at speeds far in excess. Police can apprehend only a fraction of the violators and the general motorist attitude appears to be that it is a game to break traffic rules. Dangerous speed, incidentally, is not only that above the posted limits but too fast for conditions of traffic, the road, weather, the vehicle or the driver. Speed should be cut drastically at night and few people realize that they cannot stop within the range of their headlights while driving above 50.

Crashes Near Urban Centers

Heavy toll is taken also in areas where large concentrations of population are found and conditions vary between rural and urban. A glance at a spot map of accidents shows an enormous mass covering the Fairfax-Arlington area near Washington; the path is thick along Route 1 to a lesser mass surrounding Richmond and another large blot appears for the Norfolk-Newport News-Portsmouth area.

Deaths by months for the past 10 years have followed an interesting pattern. February is the month of fewest deaths, since it is short and there is little incentive for driving. Each succeeding month shows a death increase as spring appears and vacationists take to the road. Thus, from February until December deaths show a monthly rise which coincides with the calendar order of the months. The exceptions are January, which has a toll between that of June and July, and October, which shows a higher toll than that of November. The most dangerous day of the week is Saturday and the most dangerous hour is between 4 and 5 o'clock in the afternoon.

Problem More Acute

Now, the problem is more acute than ever and can be expected to worsen, due to general unrest incident to the present emergency. The year 1941, which was the worst traffic year of our history with 1,110 dead, is analogous to the present situation. A widespread disregard for law and moral let-down appear and their adverse effects are heightened by the influx of war workers and military personnel. Youth's uncertain future contributes to poor driver attitudes among young people.

Less tangible factors are the loss of trained policemen, engineers and teachers to better paying positions or military service and the deterioration of roads and vehicles which cannot be replaced or repaired due to shortages.

Final motor-vehicle deaths by States, 1948, 1949, and 1950

	Deaths			Percent changes		1950 population rate [1]	1950 mileage rate [1]
	1950	1949	1948	1949 to 1950	1948 to 1950		
				Percent	Percent		
Total United States	35,000	31,500	32,259	+11	+ 8	23.1	7.5
Alabama	836	687	697	+22	+20	27.3	12.3
Arizona	325	281	301	+16	+ 8	43.4	11.2
Arkansas	387	393	412	− 2	− 6	20.3	8.4
California	3,040	3,003	2,932	+ 1	+ 4	28.7	7.4
Colorado	387	318	344	+22	+13	29.2	8.1
Connecticut	258	201	255	+28	+ 1	12.9	4.0
Delaware	83	81	81	+ 2	+ 2	26.1	7.1
Florida	873	685	715	+27	+22	31.5	9.3
Georgia	899	746	782	+21	+15	26.1	9.8
Idaho	246	168	208	+46	+18	41.8	10.7
Illinois	1,973	1,791	1,939	+10	+ 2	22.6	7.4
Indiana	1,124	1,121	1,071	0	+ 5	28.6	7.8
Iowa	587	551	565	+ 7	+ 4	22.4	6.1
Kansas	534	497	489	+ 7	+ 9	28.0	7.1
Kentucky	678	613	512	+11	+32	23.0	9.5
Louisiana	591	520	524	+14	+13	22.0	9.3
Maine	162	160	181	+ 1	−10	17.7	5.9
Maryland	497	462	401	+ 8	+24	21.2	7.6
Massachusetts	530	471	445	+13	+19	11.3	4.3
Michigan	1,607	1,441	1,512	+12	+ 6	25.2	7.3
Minnesota	526	540	552	− 3	− 5	17.6	5.7
Mississippi	477	386	419	+24	+14	21.9	9.0
Missouri	888	799	818	+11	+ 9	22.5	6.5
Montana	202	162	164	+25	+23	34.2	8.7
Nebraska	306	256	269	+20	+14	23.1	6.0
Nevada	112	82	97	+37	+15	70.0	11.9
New Hampshire	87	72	91	+21	− 4	16.3	5.2
New Jersey	687	592	597	+16	+15	14.2	4.2
New Mexico	248	245	254	+ 1	− 2	36.4	9.0
New York	1,963	1,904	1,805	+ 3	+ 9	13.2	6.0
North Carolina	989	843	734	+17	+35	24.3	8.6
North Dakota	101	134	109	−25	− 7	16.3	5.5
Ohio	1,723	1,716	1,856	0	− 7	21.7	6.4
Oklahoma	500	523	510	− 4	− 2	22.4	6.8
Oregon	427	355	419	+20	+ 2	28.1	6.9
Pennsylvania	1,536	1,624	1,671	− 5	− 8	14.6	5.5
Rhode Island	79	58	54	+36	+46	10.0	3.8
South Carolina	677	548	521	+24	+30	32.0	12.3
South Dakota	178	134	140	+33	+27	27.3	7.3
Tennessee	740	676	660	+ 9	+12	22.5	8.8
Texas	2,410	1,957	2,059	+23	+17	31.3	7.9
Utah	188	174	220	+ 8	−15	27.3	7.5
Vermont	67	63	85	+ 6	−21	17.7	5.5
Virginia	913	810	730	+13	+25	27.5	9.2
Washington	502	441	508	+14	− 1	21.1	6.2
West Virginia	370	356	406	+ 4	− 9	18.4	7.9
Wisconsin	831	749	822	+11	+ 1	24.2	7.6
Wyoming	150	137	145	+ 9	+ 3	51.6	9.5

[1] Population rate is the number of deaths per 100,000 population. Mileage rate is the number of deaths per 100,000,000 vehicle miles. Total deaths for 1948 from National Office of Vital Statistics. Death totals for 1949 and 1950 are National Safety Council estimates. Individual state deaths reported by state traffic authorities, except for Louisiana, which was reported by the state registrar of vital statistics.

—*Public Safety for June 1951.*

As stated above, the crux of the whole matter is an improper attitude which can develop as time goes on into a proper one. Meanwhile something must be done to curb the present slaughter which keeps bloody pace with our annual increase of about 10 percent in traffic volumes. In addition to exploiting all existing activities, the following specific recommendations are made:

1. Provision for increasing the emphasis on high school driver-training courses. These not only provide for the physical training necessary for good driving but are tremendous influences for developing proper driving attitudes.

2. Strengthening of the Division of Motor Vehicle's hearings program to provide for the suspension of licenses of individuals with consistently bad records but who stay without the grounds for mandatory suspension.

3. Full use by the courts of their powers to suspend licenses, at their discretion, for periods up to 6 months upon one conviction of reckless driving. A powerful weapon is being badly neglected here.

4. Imposition of stiffer penalties by the courts with fewer suspended jail sentences for flagrant violations and immediate revocation of suspended sentences when the conditions are violated.

5. Provide for mandatory jail sentences, which cannot be suspended, for such deliberate acts as driving after suspension of a license or attempting to outdistance an arresting officer.

The grim foreboding of the future is apparent when we realize that traffic volumes today are 76 percent above those of 1941 when 1,110 died on our streets and highways. Yet improvement is reflected in a death rate (deaths per 100 million miles of vehicular travel) of 9.2 for 1950 as against one of 18.3 for 1941.

In spite of all possible official action, the problem remains largely an individual one. Enforcement does not end with arrest and cannot reach more than an infinitesimal fraction of those who daily violate our traffic laws; engineering has its place but the very factors which make driving easier and more pleasant invite speed—the killer, and education too often falls on barren ground.

Magnetic Chart Records Accidents

by JOHN W. STOVER, *Chief of Police, Bristol, Va.*

Observation over a period of several years revealed the many difficulties which officers and other witnesses encountered in using chalk and a blackboard as an aid in presenting testimony in traffic court. Particular difficulty was encountered in making charts of accidents and indicating variations and relative positions of vehicles and objects.

When we decided to try using toy vehicles, which could be placed or moved about on a diagram, magnetic vehicles were preferred, since all interested persons could more easily see a vertical diagram rather than a horizontal or table chart. Of course, with magnetic vehicles, either position of the diagram is possible.

It was believed we could make a suitable unit at considerably less cost than units which were on the market, and at the same time include types of intersections in the diagram which are peculiar to our city.

List of material used:

One piece 30- by 40-inch, 20-gauge, black, sheet metal.

Four plastic toy vehicles, 3 or 3¼ inches long and 1⅛ inch wide.

Four bar magnets, $^{13}/_{16}$ by ⅜ by ⅛ inch.

Two hooks.

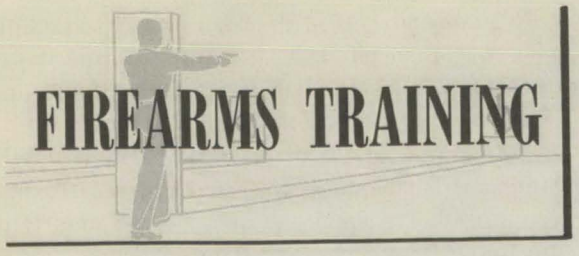
White, green, and black paint, and scotch tape.

The city fire department contributed the sheet metal (valued at $4 when new), painted the diagram on each side, and drilled holes on both sides and ends. Streets were outlined with masking tape prior to painting, and generally the width of the streets was in proportion to the width of the toy vehicles.

Three differently colored toy plastic automobiles and one truck were purchased for 20 cents and numbered. Four magnets costing 25 cents each were taken from a novelty toy. Two hooks upon which to hang the chart completed our purchases which totaled $1.25.

The magnets were glued to small pieces of wood which in turn were fastened to the underside of the vehicles. Difficulty was avoided by keeping the weight to a minimum.

When desirable, colored crayons are used in addition to the magnetic vehicles to help illustrate the testimony of the witness. The officers and the court are well pleased with this magnetic traffic unit, which is satisfactorily serving its purpose in this small city.

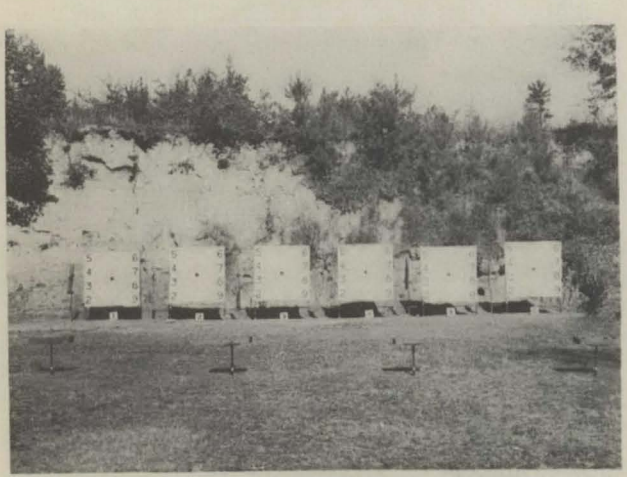


Columbus, Georgia Range Built With Small Cash Outlay

The Police Department at Columbus, Ga., has demonstrated that a firearms range in the modern style can be built without a big cash outlay. Cooperation, ingenuity, and hard work will make a small firearms budget go a long way. Columbus has the range to prove it.

Cooperation

When the site for the range was chosen, it was evident that the area had to be cleared and leveled. Prisoners from the city stockade did a good job of this basic task. Pipe was needed for ammunition stands and target frames. Friendly dealers donated all the pipe necessary. They also donated pieces of sheet iron out of which a shield was constructed for the instructor who operated the bobber targets. These same dealers later furnished, free of charge, old angle iron, cable wire, and iron posts for an incline carriage which was used to transport supplies from a storehouse to the range. When lumber was needed for the roof and doors of the small storehouse, the manager of the Columbus Slum Clearance Program told police to help themselves to all of the old lumber they wanted. Even bull's-eye and bobber targets were given to the police by friends who were interested in seeing a first-class range made available to the officers.



View of range looking toward the targets.

Ingenuity was shown in building and operating the targets. The range was made wide enough to accommodate six bull's-eye and six bobber targets at the same time. The bobber targets were spaced between the bull's-eye targets. A major problem presented itself in connection with the bobber targets. How could these targets be operated in unison without the installation of some expensive machinery which the city could not afford? Individual operation of the targets caused confusion and created a safety hazard. Detective O. C. Bryant of the Columbus Police Department soon developed an answer to this problem. Small lengths of pipe were fitted at right angles to the pipe supports of the bobber targets. These small lengths of pipe were placed near the bottom of the supports in such a manner that they jutted toward the rear of the targets. Then these small lengths in turn were joined by longer lengths of pipe which ran parallel to the target faces and led to a central control point about 12 feet to the left of the targets. This control point was protected by earth-filled oil drums and a shield of sheet iron. The control point featured a lever made of pipe which was fitted to the last length of pipe from the targets in such a manner that when the lever was moved in one direction, the target faced the men on the firing points. When the lever was moved in the opposite direction, the target turned at right angles to the men. All of the lengths of pipe were marked plainly by drilling small holes in them. For example, there were two holes in section 2, etc. This made an efficient, hand-operated device which could be put together or dismantled in a matter of minutes.

Mounting Frames and Ammunition Stands

Ingenuity was also demonstrated in the mounting of the target frames and ammunition stands. The target frames, which were made of wood, were fastened to supports consisting of lengths of pipe. The distance between the supports was measured, then small sections of the pipe wide enough in

diameter for the supports to fit in were sunk in the ground. They were placed in concrete so they could not be moved. It was then a simple matter to put up the targets because the supports had only to be slipped into the permanent bases or mountings. A similar procedure was followed in making ammunition stands and mountings for them. The stands were made of wood and fastened to the pipe supports. Mountings such as described above were installed at 15- and 25-yard firing lines. Only six positions were prepared at each of the firing lines since men were not expected or allowed to shoot on the bull's-eye and bobber targets at the same time.

Protection of Equipment

A small storehouse was built of concrete blocks and heavy timbers, so that all of the range equipment could be maintained safely at the range. Since no room was available for the storehouse on the range level, it was located at the top of the earth embankment to the left of the targets. Here ingenuity played a part again. In order to facilitate the moving of equipment from the top of the embankment to the range below, an incline carriage was devised. It was made out of old angle iron and was mounted on an old steel cable strung between two iron posts. A windlass was installed at the embankment end of the cable as well as a small but effective brake. Now, much of the hard work connected with the moving of the heavy target frames and other material to the range from the storehouse and back has been eliminated.

It can be seen readily that much hard work went hand in hand with the cooperation and ingenuity which have been described. Detective Bryant, with the assistance of city prisoners, built the targets, the ammunition stands, the storehouse, the cables and other items which make the range as complete as it is. Detective Bryant has also maintained the range and kept it in good condition. Chief of Detectives H. T. Whitely, who handles the regular police firearms training, has spent much time and labor on the range.

Costs

The items which had to be purchased in building the range were few and relatively inexpensive. Some lumber was bought for use in building the target frames. Nails and bolts were required and concrete blocks and a small amount of concrete were needed for the storehouse. A reloading machine was also purchased so that cost of ammunition would be held as low as possible.

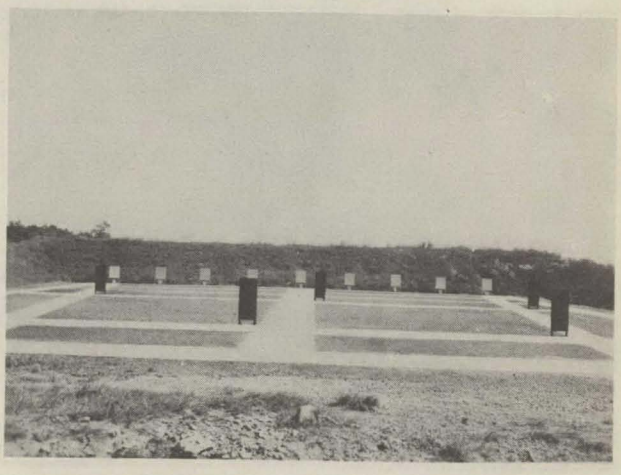
Thus, with the expenditure of comparatively little money the Columbus Police Department became the proud possessor of a firearms range which plays an important part in police training. All law enforcement officers in Muscogee County have access to the range.

Newport, Ark., Range

Early in 1949 Newport, Ark., Chief of Police John Moore recognized the lack of suitable facilities for giving local officers firearms training. He began in earnest to develop plans for a range suitable and large enough to accommodate an organized and systematic training program for interested peace officers. For a period of some 12 months Chief Moore talked with civic leaders and, through the backing of the Newport City Council and the moral and financial support of civic-minded organizations, succeeded in providing officers in northeast Arkansas with a fine pistol range. This pistol range represents an investment of over $2,000 in cash in addition to an untold amount of time and energy spent by local officers and other civic-minded citizens.

After more than 1 year of continuous planning and work on the part of Chief Moore and other members of the police department, the Newport, Ark., Police Department pistol range was formally dedicated on October 12, 1950. The dedication took place during the Annual FBI Law Enforcement Conference held in Newport and attended by approximately 200 officers from all

(Continued on page 24)



Newport, Ark., Police Pistol Range.

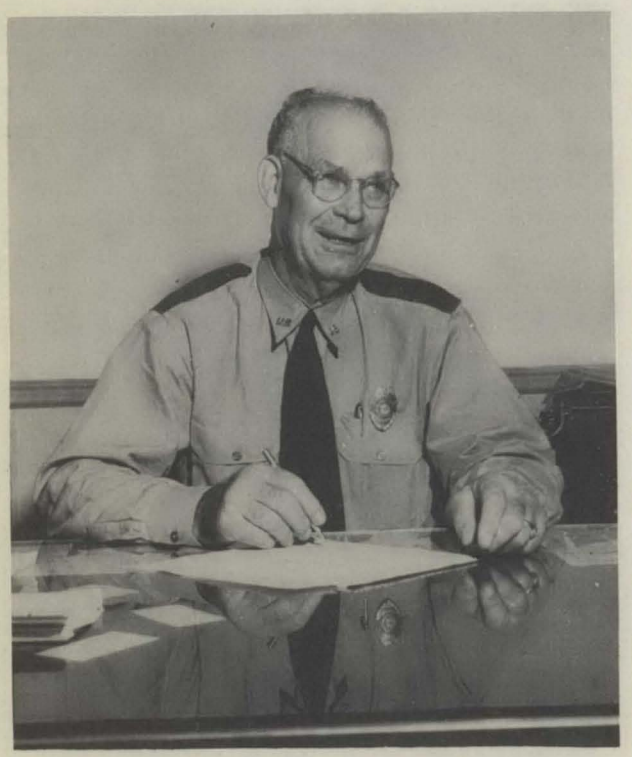
POLICE PERSONALITIES

Chief Ranger Chas. F. Peterson Retires in Nevada

Charles F. "Pete" Peterson, Chief Ranger, United States Bureau of Reclamation Rangers, Boulder City, Nev., retired on August 31, 1951, after nearly 50 years of law enforcement, 30 of them with the Federal Government.

"Pete" was born August 6, 1881, at Sugarloaf, Colo., the son of a civilian scout who had gone to Colorado from the Texas Panhandle with the trail herds, to establish his own ranching interests. After his youth in Colorado, in 1904 "Pete" was sworn in on the streets of boomtown Nederland, Colo., as a city marshall as he was going home from work in the mines. Dressed in a red turtle neck sweater, overalls and high-top shoes, with a city marshal badge pinned on the sweater, his first official act was quelling a riot which was brewing in a saloon while he was being sworn in.

Since 1904 "Pete" has been in law enforcement as a police officer, chief of police and deputy sheriff in various Colorado and Wyoming mining camps. He was in the sheriff's office, Boulder, Colo., from 1908 to 1918, and from 1921 until late 1933 he was a special agent and assistant director of prohibition in Wyoming.



Retired Chief Ranger Peterson.

On January 15, 1934, "Pete" entered the Bureau of Reclamation service as a ranger at Boulder City, Nev., during the construction of the Boulder Canyon project, then known as Boulder Dam and now as Hoover Dam. In 1940 he was named Chief Ranger and held that position until retirement.

"Pete" has been very active in Boy Scout and other youth work for many years. Peterson Field in Boulder City is named for him because of his unceasing interest in and work with the teen-agers of the government city. He has also been active in the Masons, Rotary, Elks and the Sportsman's Association, as well as being a past president of the Nevada Peace Officers Association.

"Pete" will remain in Boulder City where he and Mrs. Peterson make their home.

45 Years in Law Enforcement

After 45 years' active duty with the St. Louis Police Department, Maj. Edward P. Dowd retired on August 27, 1951. At the time of his retirement, he was an aide to Chief of Police Jeremiah O'Connell.

Appointed to the force October 14, 1906, as a patrolman, Major Dowd has served in the department's Secret Service Division and for 5 years he headed the narcotics squad.

The major's retirement will allow him to spend more time with his family, which has been increased by 11 grandchildren, make visits to the White House, a Catholic retreat, and reminisce with his cronies from the department who meet regularly as members of the Police Veterans Association, an organization comprised of retired police officers.

OTHER TOPICS

Excellent Record Set By Savannah Homicide Squad

Savannah, Ga., should be well on the way to public reputation as a poor place to commit a murder. Each murder committed there since January 1, 1949, has been cleared by arrest within an elapsed time of 5 days following the commission of the crime.

Principal credit for swift and effective investigation of murders is given to the Homicide Squad under Capt. Leonard J. Hallman, a graduate of the FBI National Academy. Organized in April 1949, the squad includes officers from both the Uniform Division and the Detective Division. Each officer has taken a thorough course of training on homicide matters.

One of the most interesting cases handled by the Homicide Squad began with the discovery of a body in an outlying suburban area in July 1951. Because of decomposition and damage done by rodents it was impossible to identify the body by fingerprints or visual examination. Autopsy disclosed that the victim had been shot with a 12-gauge shotgun.

A careful crime scene search and examination of clothing and other personal effects produced two items which led to a solution of the crime. One was a photograph obliterated by the chemical action of body fluids. When examined under ultra violet light with a magnifying glass the paper was found to bear the letters JAC, followed by a space and another letter C and a number with two digits, a hyphen and three more digits. Another paper was an advertising card for a taxi company, without a company name or cab number.

Assuming an error in the manner in which the number had been written, officers located a residence having a telephone number identical with the number on the paper except that the hyphen was between the first and second digits rather than the second and third. When informed that the telephone subscriber for the premises was out of town on business, the officers asked for "Jack."

A young man whose name was found to correspond to the letters on the photograph then appeared at the door. When questioned, the young man remembered that on a recent night he had given his name and telephone number to a cab driver on learning that both he and the driver had mutual acquaintances resulting from their Army service in Germany. The driver's identity was unknown except that he drove cab number 114 in a local fleet.

The cab company identified the driver and advised that he had been missing for several days, presumably having quit work and abandoned his cab on the spur of the moment. The driver's mother was located. She identified the body from the clothing and dental work. He had been missing for several days but was not reported missing because he often stayed similar periods in the home of another driver.

Capt. Leonard J. Hallman.

When personnel of the cab company were asked whether the driver kept a gun in his cab it was learned that weapons were prohibited, but a former driver had recently been known to pawn and redeem a shotgun.

The last entry in the deceased's radio log showed that he had been sent to a tavern at 10:21 p. m. Investigation at the tavern resulted in identifying the former driver, by photograph, as the man who had called a cab at approximately the same time.

Acting on information supplied by the Savannah Homicide Squad, Sheriff E. W. Miles of Bryan County, Ga., arrested the former driver less than 24 hours after the victim's body was found. Returned to Savannah, the subject refused to answer any questions but asked to see his mother. After this request had been granted the subject thanked the officers, confessed and re-enacted the crime and provided information leading to discovery of the murder weapon and other additional evidence.

City officials commended the Homicide Squad on the solution of the case and the Savannah Morning News commented on the speed with which "This most baffling crime was solved."

New Training Quarters

The new police training school for officers of the police department, New Orleans, La., was dedicated on Sunday, June 4, 1950. The ceremony was the culmination of a long-time dream of Maj. William J. McNamara, supervisor of operations and training in the department, and director of the training school.

The New Orleans Police Department Training School had its beginning in the early part of 1945. A former elementary school of the city of New Orleans housed the training school until the middle of 1949, at which time the building was again utilized as an elementary school and the training program of the police department was temporarily discontinued.

Major McNamara advised that the superintendent of Delgado Trade School, who was very much interested in police training, offered a large tract of land just behind the trade school and facing on Navarre Street. The area, which had been utilized during World War II, was cleared.

The building designs for the New Orleans Police Department Training School and the supervision of construction cost nothing. A number of police officers gave their time and labor to the task. Much of the lumber used was salvaged from the old buildings which were removed to make way for the new building. The roof slates came from the old criminal courts building recently torn down. The police department had to pay only for the cost of plumbing and a "few odds and ends."

The main building of the New Orleans Police Department Training School is 82 by 240 feet in dimension. It has an administrative office, classrooms, a darkroom, and library which occupy the front space. There are a large auditorium and a fully equipped gymnasium. Quarters at the rear of the gymnasium accommodate the New Orleans Police Department crash truck crew. The equipment of the latter is housed there also. An indoor target range was recently completed in the building.

The school, which has been described as one of the finest in the South, cost an estimated $9,000. Had the work not been done by members of the police department, the building of the school alone would have cost approximately $40,000.

Front view of the new training school, showing administration building, gymnasium, and the quarters of crash truck crew at rear of the building.

REGISTRATION ACT

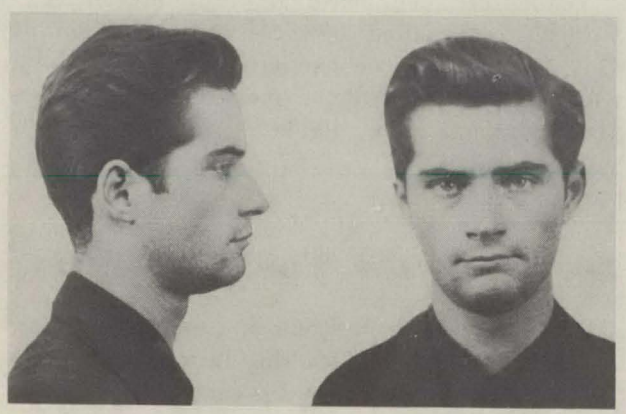
Agents of foreign principals engaged in propaganda and related activities are required to register with the Attorney General and abide not only by the statute, but also by any regulations promulgated by the Attorney General under the act.

The Internal Security Act of 1950 requires, with certain exceptions, the registration with the Attorney General of anyone who has knowledge of or has received instruction or assignment in the espionage, counter-espionage, or sabotage services or tactics of a government of a foreign country or of a foreign political party.

WANTED BY THE FBI

GEORGE ARTHUR HEROUX with aliases: Joseph Corcy, Joseph Arthur Corsey, Joseph Corsy, William Keegan, Robert C. Walker

Bank Robbery



George Arthur Heroux.

Shortly before 8 a. m. on October 10, 1951, the cashier of the Southside Bank of Kansas City, Kansas City, Mo., was hurrying to work. Suddenly, a few steps from the side entrance, a stranger, wearing coveralls and a chauffeur type cap, came up from behind and forced the cashier to admit him to the bank.

Waving a gun, the stranger compelled the cashier to open a vault and take out $4,641 in currency. A safe inside the vault had a time lock, and the bandit decided he would wait until it could be opened. Then he marched the cashier and a custodian who was in the bank to the front lobby.

While he paced back and forth in front of the teller's cages waiting for the other employees to arrive, he smoked continually. Wary of touching anything, he forced the cashier and custodian to handle objects in which he was interested. He wore a tan leather glove on his right hand, slipping it off and on nervously. As an added precaution, he ordered the blinds drawn.

As employee after employee reported for work, each was informed that a holdup was in progress. They were lined up at the rear of the bank, and when the robber believed all were present except one he herded them into a vault used for supplies, leaving the door open. However, as one of the last persons entered, the cashier dashed out and gave a verbal alarm. The bandit immediately scooped the available currency into the large patch pockets of his coveralls and ran from the bank.

The bank robber was identified as George Arthur Heroux.

Less than 2 months later, on November 23, 1951, two men robbed the Johnson County National Bank, Prairie Village, Kans., of approximately $62,000 in currency, together with traveler's checks and Government bonds. A method similar to that of the Kansas City robbery was used. At approximately 8:05 a. m. two bandits followed a bank employee into the bank and waited for the cashier to arrive. One robber forced him at the point of a gun to open the vault. The second robber, also armed, stood in the bank entrance, accosting employees upon their arrival. After these individuals were locked in the vault, the bandits departed.

One of these robbers was identified as George Arthur Heroux.

Complaints were filed before United States Commissioners on October 15, 1951, and November 26, 1951, at Kansas City, Mo., and Topeka, Kans., respectively, charging Heroux with violations of Title 18, U. S. Code, Section 2113, the Federal Bank Robbery Statute.

Background

In June 1947, Heroux enlisted in the United States Army at Boston, Mass., and in April 1949, was sent to Germany. He was convicted under a special court martial for unlawful and fraudulent possession of ration cards, cigarette coupons, and an unregistered weapon, and in January 1950, was sentenced to be discharged from the service with a bad conduct discharge and a 6 months' term at hard labor.

On March 6, 1950, he was discharged under "other than honorable conditions," but, as he was then serving his sentence, he did not obtain full release until June 1950.

Heroux returned to his home in Rhode Island for a short time but, unable to settle down, he began to travel. Shortly thereafter, he was arrested, and later convicted in Milwaukee, Wis., for violation of the Federal Firearms Act. In December 1950, Heroux participated in an attempted jail break at the Milwaukee County Jail, at which time, with two other inmates, he assaulted a deputy sheriff.

In August 1951, Heroux was placed on 2 years probation in United States District Court, Milwaukee, Wis., for violation of the Federal Firearms Act. He was charged with unlawfully transporting in interstate commerce firearms from which the manufacturers' serial numbers had been removed and obliterated.

Heroux reportedly has a mania for guns.

Heroux is armed and should be considered extremely dangerous.

Heroux is described as follows:

Age	21, born April 10, 1930, Baltimore, Md. (not verified).
Height	5 feet 10 inches.
Weight	145 pounds.
Build	Slender.
Hair	Light chestnut.
Eyes	Grey-blue.
Complexion	Medium.
Race	White.
Nationality	American.
Occupation	Laborer, weaver.
Scars and marks	½-inch scar left hand between index and middle fingers.
FBI No.	511,539A
Fingerprint classification	16 O 28 W IMO / M 32 W III

Notify FBI

Any person having information which may assist in locating Heroux is requested to notify immediately the Director of the Federal Bureau of Investigation, United States Department of Justice, Washington 25, D. C., or the Special Agent in Charge of the Division of the Federal Bureau of Investigation which is nearest his city.

Newport, Ark., Range

(*Continued from page 19*)

over the State of Arkansas. In the formal dedication Chief Moore, on behalf of the city of Newport and the Newport Police Department, made this range available for the training of all peace officers, thereby meeting one of the outstanding needs in the furtherance of police training.

Since this range was formally opened, numerous police officers in the surrounding area have availed themselves of the opportunity to use the range facilities.

The pistol range is located on land presently owned by the city of Newport and formerly used by the United States Air Force. There is a 15-foot embankment which extends along the rear of the range and 20 feet along each side. The range is approximately 150 feet wide and 190 feet in depth, and generally accommodates from 10 to 20 shooters at a time. Each lane is constructed of concrete, and the lanes vary from 5 feet to 8 feet in width.

Law enforcement officers in the vicinity of Newport have attributed the successful completion of this range to the determination of Chief John Moore to provide his department and other officers the latest facilities available for the benefit of law enforcement.

★ ★ ★

How Should You Report It?

This is a series of questions and answers on how to classify crimes under the uniform crime reporting system. The series is continued from the January 1952 issue of the FBI Law Enforcement Bulletin.

Question: A woman sets her purse on the counter of a department store. After looking at some yard goods she finds her purse gone. A thorough search of the scene does not reveal the purse. Is a police department correct in classifying this incident as "missing purse?"

Answer: No. This should be classified as a theft.

Question: Two thieves drive into a service station and break the lock on a gas pump outside the service station building. The thieves fill the tank of their car and drive on. How should this be classified under the uniform crime reporting system?

Answer: As a larceny.

Question: An auto reported stolen is recovered by the police within a day. The owner discovers that a valuable set of tools has been stolen from the trunk of the car. Should a larceny or auto theft be reported on the monthly crime report?

Answer: Auto theft only.

Question: The owner of an auto discovers that in his absence someone attempted to pry open a window of the locked auto. Under the uniform crime reporting system attempted crimes are

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scored in the same manner as though the crime were completed. How should the above incident be classified?

Answer: As an attempted theft—not auto theft. It should be treated as attempted auto theft only if there are definite indications of an attempt to start the car.

Question: Complaints of minor larcenies (thefts of auto gas tank caps, etc.) which experience showed to be "boyish pranks" and therefore not investigated were listed by a police department as "unfounded." Is this proper?

Answer: No, these are actual thefts of property and should be reported as such under the uniform crime reporting system. The victims who lost the items of small value have suffered losses. A complaint of an offense under the uniform crime reporting system can be listed as unfounded only where the police investigation reflects that the offense, in fact, did not occur.

Question: A police report entitled "molesting auto" reflected that three youths in the process of rifling the glove compartment of an automobile were flushed by the police. Should such reports be included in the monthly crime reports to the FBI?

Answer: Yes, reports of molesting an automobile where it is clear-cut that there was an attempted theft (door handle or windows on locked cars broken) should be treated as larceny. If there is definite indication of an attempt to start the car, it would be considered an attempted auto theft and therefore scored on the monthly crime report in the same manner as an actual auto theft. The terms "molesting an automobile," "tampering with an automobile," etc., may result in police practice from local legislation of the same or similar titles. Generally such legislation arises out of a practical need to deal with potential thieves in those instances where it is practically impossible to prove before a court the element of "intent." For the purpose of uniform crime reporting, the offense should be classified on the basis of the facts involved and not on the technical charge which may be filed against the subject.

EL PASO USES TWX

The El Paso Police Department, El Paso, Texas, wishes to advise other departments that TWX has been added to their communication facilities. The number is "EP–87."

Items To Remember

MICROSCOPIC SCRATCH MARKS on a nailhead protruding from a shoe heel made possible the identification of the burglar who left a fragmentary heelprint on a box lid during the burglary.

PLASTER CASTS of impressions to be used as evidence should be marked by scratching in the cast as soon as the plaster sets. Use the date, your initials, and a number or symbol for that particular cast.

TIRE PRINTS and other impressions in sand, loose soil, or snow can be strengthened with a plastic spray, shellac, or other quick-drying fixative before a plaster cast is made of them.

TALCUM POWDER sprinkled in a fine layer over the surface of a shoe print or other impression in snow will serve to insulate the snow from the heat of the setting plaster.

A COMMON FAULT in preparing casts is to allow the plaster mixture to become thick before pouring. This causes imperfections which may completely obliterate identifying marks.

WOOD FRAGMENTS found at the scene of a crime can often be identified as being the same species of wood (maple, ash, spruce, etc.) as other pieces of wood found in the possession of a suspect.

CRIMES OF VIOLENCE often involve physical contact of the criminal with his victim. Careful search should be made for hairs, fibers, and other minute evidence transferred from one person to another during this contact.

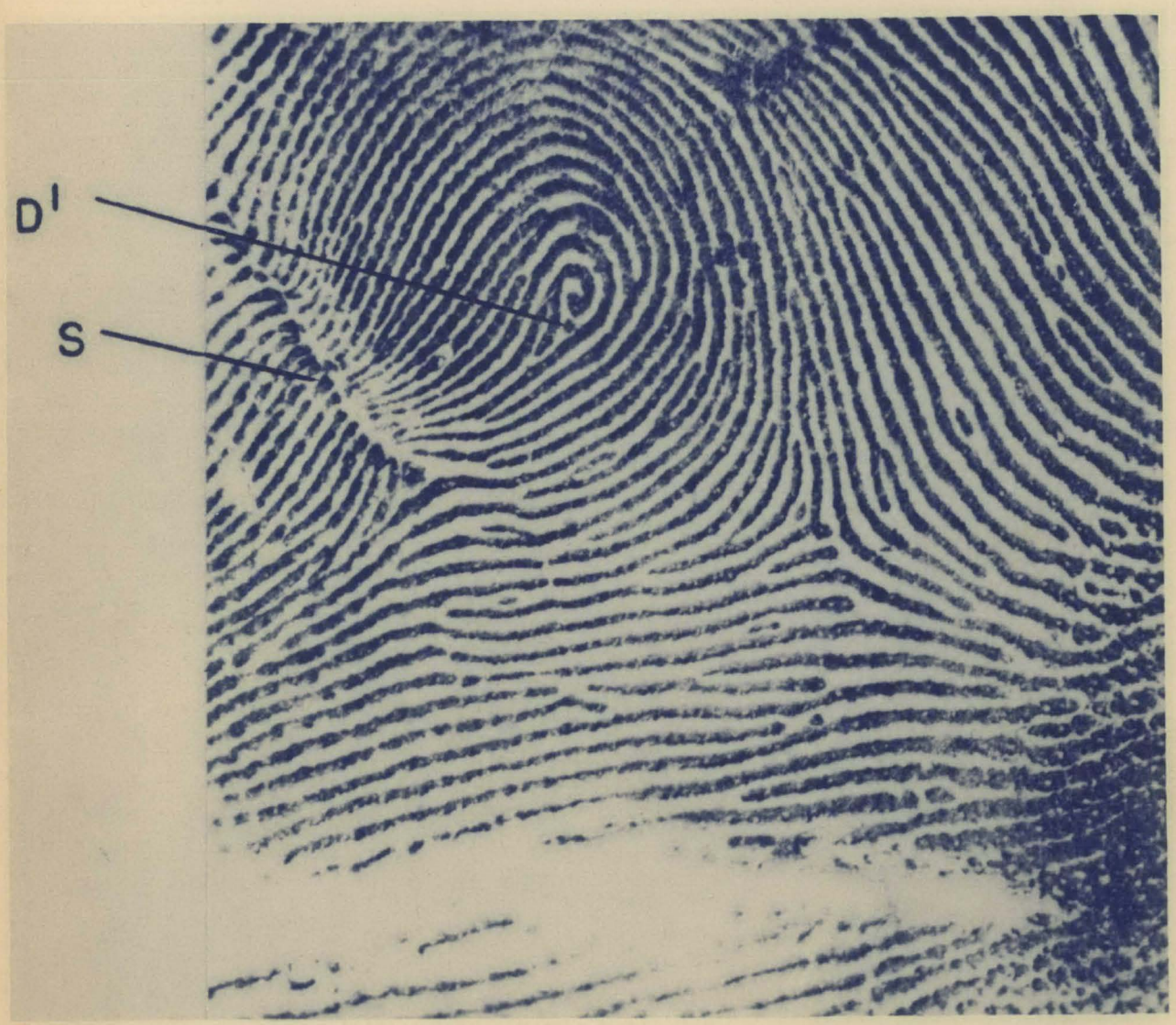
AVOID CONTAMINATION of evidence submitted for scientific examination by sealing it in an absolutely clean container of a size suitable to the specimen, one specimen only to a container.

HEEL PRINTS and other impressions not visible under ordinary light conditions can be located by sweeping the beam of a flashlight over the surface on which the impression was made.

LIQUID BLOOD samples for scientific examination and comparison should always be taken by a physician or competent technician.

Questionable Pattern

FINGERPRINTS



The pattern presented this month exemplifies the minimum requirements for a central pocket loop, i. e., a recurve in front of each of two deltas and an imaginary line between the deltas which cuts or touches no recurve in front of the inner delta D 1.

Inasmuch as inking or pressure may make the recurve appear pointed, a reference search would be conducted as a loop. The area marked "S" is scarred and in this particular impression should not be considered in the interpretation of the pattern.