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The FBI Law Enforcement Bulletin is issued monthly to law-enforcement agencies throughout the United States. Much of the data appearing herein is of a confidential nature and its circulation should be restricted to law enforcement officers; therefore, material contained in this Bulletin may not be reprinted without prior authorization by the Federal Bureau of Investigation.

Published by the FEDERAL BUREAU OF INVESTIGATION, UNITED STATES DEPARTMENT OF JUSTICE, Washington, D. C.
TO ALL LAW ENFORCEMENT OFFICIALS:

There is no law enforcement agency in the country which has not benefited time and again from the fact that some public-minded man or woman brought to its attention evidence of a law violation or furnished information which led to the apprehension of a criminal. Citizen cooperation is invaluable to investigative work and is one of our most potent weapons against crime.

Nothing would be more desirable to the lawless underworld than some word or act, no matter how tragic the consequences, which casts doubt on the wisdom of the public in cooperating with their law enforcement officers. If it were possible, the criminal would like to destroy completely this helpful attitude on the part of private citizens, and experience has shown that he will not hesitate even to resort to violence to achieve that end.

This threat must be met by strict adherence to a policy of zealously guarding the confidence of any citizen who furnishes information and desires that his identity not be disclosed. This relationship is in the nature of a public trust and law enforcement has the obligation to maintain it on that basis.

I am convinced that it is a wise policy and we must emphasize our determination to follow it without exception.

Very truly yours,

John Edgar Hoover
Director
In the 15 years of its existence the Oklahoma Highway Patrol, along with other law enforcement agencies, has enjoyed notable success in the apprehension of criminals through the use of roadblocks. Much of the credit must be attributed to advance planning and to coordination and cooperation between city, county, State, and Federal agencies.

Not many years ago the lack of planned coordinated effort enabled the Floyds, Underhills, Kimes brothers, Bonnie Parker, and Clyde Barrow to remain at large to plunder and kill much longer than if a planned system of apprehension had been in effect. Some of the cases in which Oklahoma's roadblock plan has resulted in speedy capture have been those of Victor Lloyd Everhart, G. W. Beasley, the Hulbert bank robbers, the Broken Arrow bank robbers and others.

The primary reason for our success is that Oklahoma's officers have functioned as a unit, with each car and each officer directed from a central point so as to coordinate the actions of all. A roadblock is no better than its weakest point. Planning, coordination, and cooperation all tend to eliminate the weak points.

This article has been written for the purpose of furthering the feeling of cooperation between agencies and States and to better acquaint the individual officer with a theory and system employed in effecting a roadblock. The plan presented here is not necessarily that of the Oklahoma Highway Patrol but is the combined planning of all Oklahoma peace officers. Particular credit is given to former Patrol Chief Ralph S. Thompson, now on leave in military service, and Henry B. Lowrey, now with the Federal Bureau of Investigation.

**When To Set Up a Roadblock**

In general terms, a roadblock should be set up when a definite need is shown. The officer who authorizes a roadblock must take many factors into consideration before making a decision that might (1) be a great inconvenience to a large number of peace officers, (2) disrupt the schedules of several enforcement agencies, and (3) prove to be an expensive and tedious undertaking. First, he must decide whether the crime committed is serious enough to justify a roadblock being set up. If it is, he must then make a decision as to whether he has enough information and description of the wanted person. Last, he must consider the time elapsed between the time of the crime and its discovery; ordinarily, the more time the less the roadblock would be justified. A great responsibility is placed on the officer who authorizes a roadblock and much thought and consideration should be given in each case.

The seriousness of the crime committed should be given first consideration. Although there can be no set rule, crimes of violence against the person would certainly justify a roadblock if the other factors were favorable. In fact, roadblocks have been, and should continue to be, set up for misdemeanants who are wanted for assault, leaving the scene of an accident that resulted in personal injury and offenses of a similar nature. The following are some of the most common crimes justifying the employment of a roadblock:

1. Any capital offense such as murder, rape, and kidnapping.
2. Bank robbery.
3. Robbery with firearms.
4. Larceny of automobile.
5. Manslaughter with automobile.
6. Assault with intent to kill or any felonious assault.
7. Burglary and larceny, if sufficiently serious.

Granted that the crime is serious, the next factors to consider are whether the information about the crime and the description of the wanted person or persons are adequate. Full and complete
information should be had, if available. There would be little to gain in blocking off a crime scene in an effort to apprehend a felon if the description furnished were not sufficient to enable officers to identify the subject. A full physical description, including a description of clothing, should be had along with full information on mode and direction of travel and description of any firearms used. Also, in robbery cases, it is important to have a description of any monies or other property taken.

The period of time between the commission of a crime and its discovery will have a definite bearing on the value of a roadblock and its justification. When a crime is 5 to 6 hours old at the time of the first alarm, there is ordinarily little to be gained in setting up an organized block. If the crime was committed by a transient, he would have had sufficient time to be out of range of any effective roadblock. If committed by a local person, such person would be safely “holed up” a short time after the commission of the crime. Speed is essentially the most vital factor in the efficiency of a roadblock and any time lost in obtaining the necessary information must of necessity lessen the probability of the block being successful.

As a general policy, the Oklahoma Highway Patrol has conducted roadblocks when requested to do so by any other recognized law enforcement agency. This policy is sound and will promote cooperation among the various enforcement agencies which will add to the effectiveness of all law enforcement.

Capt. Robert R. Lester (left) and Capt. Eugene L. Bumpas. Commanding officers are in command of the entire block at division headquarters. They have two-way radio communication with most units, thus being able to closely follow the activities of the fugitive and reinforce the block as required. They also designate units working inside the block to check on information received from citizens inside the blocked area.

JUNE 1952
On highways where traffic is usually fast, use the higher points. Radio communications are usually better there. Also, oncoming automobiles can be observed much farther and can stop quicker.

The Officer in Charge

The officer in charge of a roadblock holds a position of great responsibility and he should possess many qualifications. The safety and lives of the officers on the assignment depend upon his ability to make sound decisions quickly and exercise good judgment. He should always meet the following requirements:

1. He should know the district in which the block is to be set up; he should know the farm-to-market and county roads and their points of juncture.

2. He should know the various sheriffs, chiefs of police, and other law enforcement officials in the area, the strength of their departments and their reliability.

3. He should hold a position of extra authority so that his lawful commands will be obeyed without question.

4. He should know the criminal element within the district.

In the average serious crime, several agencies have jurisdiction. For example, if an Oklahoma bank were robbed the city police, the sheriff, the State bureau of investigation, Oklahoma Highway Patrol and the FBI would have jurisdiction. After a roadblock has been established, each enforcement agency with jurisdiction should be represented as soon as possible at the headquarters of the blockade to act as a board of strategy. A group of individuals, working in harmony toward the same end, will achieve successful results.

Initial Phases

In most cases, after the first report has been given on a serious crime, there follows a period of excitement and confusion. This is only natural after any unexpected emergency. Many mistakes have been made at such times in the past.

There can be no set procedure to follow as each case will be different from the last. The locality, density of population and communication facilities will all have a definite bearing on the proper chain of action to take.

The following is a generalization of the appropriate action to follow:

1. Obtain as much information as possible when taking the first report. Attempt to be sure of its
authenticity and the reliability of the person making the report to you.

2. If a radio transmitter is available, make a general broadcast of the complete information for the attention of all stations within the reception range of the radio transmitter.

3. Assign all units within radio range to block roads at strategic points as quickly as possible. The sooner they are on a given blockade point, the greater the chance of a quick apprehension.

4. Assign blockade points to city and county departments by radio to those with whom radio contact is available. Attempt to make as many contacts as possible, making as tight a blockade as possible of these first assignments.

5. Contact all other officers and departments in the surrounding area by telephone, giving all information possible and making blockade assignments. Learn how many men and cars they have available for future assignments. Request that the departments contacted disseminate the information to other departments in their locality.

6. Assign a unit to the scene of the crime to obtain all the information possible. The first reports are rarely complete and accurate.

7. Notify the central control point of the number of additional units needed and their blockade assignments.

8. Broadcast any change in information and all additional information as soon as it is received and authenticated. During lulls in making assignments, the complete information should be broadcast several times for benefit of stations not copying the initial broadcast.

9. Keep an accurate record of all blockade assignments as they are made and the time that they were made. Employ the use of a spot map and place pins in the map at points where units have been assigned to block the roads.

10. If the crime comes within the jurisdiction of any Federal agency, notify that agency as soon as possible.

All of the above must take place within a few minutes. It is virtually impossible for one person to handle a blockade headquarters during this period of time. If only one man is on duty, help should be obtained immediately. One man should

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**FIGURE 2**

*Blocking two lanes.*

*Officers of the Oklahoma City Police Department and the Oklahoma Highway Patrol. Place signs sufficiently far from blocking units that fast traveling vehicles and heavily loaded trucks will have sufficient stopping space. Officers are using their automobiles for cover. Trooper at right is in position to move behind his unit in case of danger.*
handle the telephone while the other handles the radio. The lieutenant or sergeant of the district should be notified quickly and he will notify other officers who are to participate in the roadblock.

Arrangements should be made to prepare a mobile radio transmitter for use in case the center of activities gets too far away from any established station to permit satisfactory radio contact.

**Pattern of the Roadblock**

Within a short time after the initial alarm is given, units from adjoining districts and cars and men from the various local departments will be reporting into blockade headquarters for assignment. It is at this point that the blockade can begin to follow a definite pattern, although such pattern will differ in each case due to the difference in roads and terrain. It would be impossible, with the limited manpower available, to block every accessible road, country road or lane in any given locality. Normally the officer making the assignments must make them at points which cannot easily be avoided by an escaping criminal. Rivers, for example, provide an excellent barrier for forcing the object of the hunt back to the main highway. Normally back roads or country roads will not continue for any great distance and the fleeing criminal must leave them for the highways in order to get away. Full cognizance should be given to these roads in making assignments and the blockade should be set to cover as many of their outlets to the main highway as possible.

Normally a double blockade is used and this type of roadblock has proved to be very effective. It is made up of two separate and distinct blockades called the inner circle and the outer circle.

**The Inner Circle**

Usually the first assignments in a blockade would be on the inner circle. This is a circle thrown around the crime scene or center of the hunt as compact and tight as possible. The circle should have a radius of from 25 to 40 miles, depending on the roads, highways, and important intersections. These assignments should be covered as soon as possible, many of them by units and officers from the immediate area. Units called from outlying detachments and cities to cover the inner circle should proceed to that assignment quickly on the most strategic road and should be on the alert for the wanted car or person on the way in. Many apprehensions have been made by officers en route to their blockade points. The Broken Arrow bank robbers had proceeded half the distance to a blockade point; a quick apprehension was made and a long and tedious man hunt was avoided.

One of the primary functions of the inner circle is to speedily block the area surrounding the crime and to drive the fugitive to the back roads. Once driven into the back country, there is an excellent chance of his becoming lost if he is not a native of that area. Also his being on the country roads
in sparsely populated areas will sometimes attract a great deal of attention and increase the chances for his capture. Probably the most important feature of all is that traveling on the back roads will cut down his speed in getting away; these roads will not permit high speed and are ordinarily of a circuitous nature, which will delay the getaway. Any such delay is precious to the officers on the hunt.

**The Outer Circle**

The outer circle is a large circle designed to completely encompass the inner circle. Its normal radius is from 40 to 60 miles, depending largely on the important highway intersections in that zone and the number of intersecting highways which can be covered from one blockade point. It should be composed of units and officers stationed a considerable distance from the scene of the crime or center of the manhunt. They, too, should proceed to their assignment on the most strategic highways and be on the alert all the way in. The outer circle employs a great number of officers and units and the blockade points will ordinarily be on the more important roads.

The strategy of the outer circle is as follows:

- In many cases, the fugitive is already out of the range of the inner circle before it is formed. If the inner circle has driven the fugitive to the back roads and he does manage to get through that circle, in a majority of cases he will be forced to take to the main highways because of the nature of the roads before he reaches the outer circle. Victor Lloyd Everhart successfully evaded the inner blockade at Catoosa, but was forced to travel the main road to the point where he encountered the outer blockade, bringing his case to a satisfactory conclusion.

**Patrolling Within the Inner Circle**

After a satisfactory blockade has been established, or, possibly, during the time it is being formed, the inner circle should be patrolled by as many units and officers as are immediately available. In many cases the wanted person makes no attempt to get away from the scene for several hours. Often he will attempt to hide out in the immediate area until the search is abandoned. Many have been known to wait for the cover of night before attempting to leave the locality of the crime. The patrolling units should be manned by two or more officers and should be assigned to districts within the inner circle. They must make a thorough, continued search of their respective districts, investigate all reports received concerning suspicious persons and, in general, contact as many persons as possible in their search for information and publicize the nature of their hunt widely among the residents of the area. The greater the number of people who know of the crime, the greater the number who will be looking for the

TRY TO HAVE AS MANY UNITS AVAILABLE AT EACH BLOCK AS POSSIBLE. IF AN AUTOMOBILE RUNS THE BLOCK AND MUST BE PURSUED, THE BLOCK WILL STILL BE MAINTAINED.

KEEP IN MIND THE POSSIBILITY OF CROSSFIRE AT ALL TIMES. SUFFICIENT MANPOWER IS ESSENTIAL.
The headquarters radio station maintains a map record of the blocks and location of additional mobile units which might be needed.

criminals. Commercial radio stations have aided greatly in this phase of the search.

In checking farm houses, the officers patrolling the inner circle must not be quick to assume that all is well merely because the resident waves to him from the doorway or tells him that no one is there. There is always a possibility of the wanted persons being in the house and holding a gun on the resident. If there is anything in anyone's actions to attract attention and suspicion, an investigation should be made.

Residents in the area must be warned against unnecessary travel on the back roads and also against leaving their automobiles unlocked or with the keys still in the car.

One of the best methods of publicizing a hunt in the rural areas is to notify the rural telephone operator and request that she contact the phones on the rural lines. Of course, this results in a great number of unfounded reports on suspicious persons within the area, but it will also prove effective in many instances.

The Use of Aircraft

Aircraft have been used successfully on many roadblocks and continued use should be encouraged. In several cases planes have driven the criminals from their cars into the woods. Once on foot, the chances for their capture are greatly increased.

If aircraft are used on a blockade, all the cars participating in the blockade must be adequately marked. This is easily done by painting an identifying mark or number on the top of the unit with water paint or other substance which may be easily removed later.

Planes should have patrolling assignments similar to those of the units patrolling within the area.

Every back road, lane, farm, and any other place where a car might be taken should be given close scrutiny. If the pilot of the plane notices a suspicious car or persons, he should notify blockade headquarters by radio. In the event the plane is not radio-equipped, he can notify the units cruising the area by doing a prearranged maneuver with his plane, such as wagging the wings or executing a series of dips. Then he should stay immediately above the car or persons that have aroused his suspicion.

Some law enforcement agencies are equipped with aircraft and members of the force are regularly assigned as pilots. All officers who are members of a department which does not have aircraft should maintain a record of all planes and pilots available for voluntary service.

The use of bloodhounds has been of material aid. Weather conditions greatly affect the dog's ability to trail. However, questioning of captured criminals where the dogs were on the hunt proves that nothing is more terrifying or demoralizing to the fugitive than to hear bloodhounds on the search. The criminal is forced to move about, and this aids the searchers materially.

Methods of Blocking the Road

It is to be assumed that no unit containing less than two officers is to be left on a blockade assignment. If it becomes necessary to assign a unit containing only one officer, help should be sent to him as quickly as possible.

There is no safe way to block a road or highway. Someone must expose himself to danger and even risk his life if the blockade is to function thoroughly and efficiently. However, as few officers as possible should expose themselves to gunfire. Since one man will have to make an inspection of cars and their occupants, the others should take advantage of any natural cover, keeping the fellow officer and the cars stopped under constant observation and backing him up with shotgun or rifle.

When it is necessary to block a road and stop
traffic going in only one direction, the unit should be parked at right angles to the road, partially blocking the lane used by the traffic to be stopped. A blockade sign should be placed in the other lane, 20 to 25 feet from the unit in the direction the traffic to be stopped is coming from. Cars should be stopped at about the blockade sign, and the officer investigating the car should stay off the road and out of the headlight beam as much as possible until the car has stopped. The car can be stopped by use of the sign, by waving a flashlight or by the spotlight. The second officer should take cover with the shotgun on the opposite side of the car, using the motor of the unit for a shield and keeping the whole scene covered. If there are more than two officers, the third should take cover on the opposite side of the road, even with the unit.

In stopping traffic going in both directions, the same system may be used, with officers exchanging assignments and the shotgun back and forth when vehicles approach. This would be satisfactory only if the traffic were light. In heavy traffic areas, it is necessary to assign two units to stop traffic going in both directions, with the second unit parking the same as the first, except on the opposite side of the road approximately 75 yards away.

Blocking a four-way intersection properly requires at least two units and four officers. It is almost impossible for two men to block such an intersection with any degree of safety or efficiency. If two units are used, blocking traffic in two directions, the same system as outlined in illustration No. 2 may be employed, placing a unit on each road to be blocked.

When the order to stop all cars is given by headquarters, each car should be stopped, inspected, and the occupants investigated. Look in the car. The fugitive may be hiding on the floor with a gun on the driver. If any occupant of the car arouses your suspicion, check his identification, and if still not satisfied, take him into custody for investigation. Do not leave your assignment; radio or send word for a cruiser to pick him up.

**Points To Remember**

The following observations are made in connection with selecting the blockade point and stopping cars:

1. If the choice is optional, select a place where the roadway is narrowed down, such as a bridge, culvert, cut through a hill, etc.
2. Do not set up a block where some access road intersects the highway within the sight of the blockade.
3. Attempt to keep out of your fellow officers' line of fire.
4. Keep spotlight on all cars stopped at night; it affords almost as much protection as your gun.
5. Keep your guns in working order; don't waste your ammunition on target practice for you may need it. Avoid any unnecessary display of firearms.
6. Don't pass cars on without inspection just because you recognize the car or the driver. The criminal may have commandeered the car and may be hiding in it.
7. Stay out of the path of traffic. Don't get in a car's lane of traffic until it has stopped.
8. Conserve the battery on your unit. Keep the battery charged up. You may need it in a hurry.
9. Transmit any information of a valuable nature that you might receive to blockade headquarters.
10. Do not select a blockade point which will
not enable a motorist to see your unit and blockade sign in time to stop. Don’t park just over the crest of a hill or behind a sharp curve.

When To Shoot

It is difficult for any one officer to tell another when to shoot, or when not to shoot, in line of duty. That is entirely up to each officer’s judgment and common sense. A general rule is “never shoot unless you’re sure,” and the officer is rarely sure, unless he has to shoot in self-defense. Firearms in the hands of overanxious and overzealous peace officers have taken the lives of innocent persons, and the careers of many good officers have been ruined by their wounding or killing of innocent persons.

The law entitles an officer to use only that force that is necessary to effect the apprehension of a felon.

Oklahoma peace officers have been fortunate in avoiding tragedies, for there has been in the past some firing on vehicles not coming to a stop at blockade points.

If a vehicle runs by your blockade point without stopping, don’t fire at it! Run it down and investigate it. In all probability it will be driven by some person whose only offense was becoming excited, or who was afraid of a robbery. If it is the car you are hunting, you will have ample opportunity to identify the occupants.

Officers have been found guilty of manslaughter for the killing of innocent persons by mistake even though in the line of duty. Do not let that happen to you!

Leaving the Assignment

Many good roadblocks have failed in the past because some officer left his assignment without authority. A roadblock is no better than its weakest point, and when one point is open, the whole blockade is ruined.

Any peace officer must be given credit for initiative and the ability to exercise sound reasoning. If officers on a roadblock saw a vehicle approach, then turn around and speed back in the direction from which it came, they would certainly be expected to investigate. These are about the only excusable instances for leaving an assignment—this turning around instance and if a car runs the blockade.

If an officer feels that he has been left on an assignment too long without relief or becomes ill, he should notify headquarters either by radio, telephone, or message relayed by passing motorist. In any event, he must wait until relief arrives or until he is ordered to leave the assignment.

If an officer feels that he is stationed at the wrong point and that a blockade point a mile or so further on would be better, he should request permission of headquarters to change his location. He should not change it until permission from the control point is granted.

If an officer begins to feel the pangs of hunger, he must not leave in search of food. He should notify headquarters to send food out by a cruiser. If unable to do this, he may request some passing motorist to bring food to him. There is no necessity, ordinarily, for going hungry on a blockade.

Relieving Officers on Assignment

As stated before, it is the duty of the officer in charge of the roadblock to maintain a record of all units on assignment, of all officers assigned with the units, and of the time they went on the blockade point. All officers on assignment should be given as much relief as the manpower available will permit. The average man can go only so long without sleep. After a certain point, the senses are deadened and carelessness in stopping cars will be the natural result. If reserves will permit it, an officer should not be kept on an assignment more than 12 hours without relief.

After the blockade has been established to the satisfaction of an officer in charge, any additional officers reporting in for assignment should be advised to stand by, rest, or to get some sleep; then to report back at a certain time to relieve officers already on the blockade. They should not be allowed to roam around visiting the blockade points nor should they be released even though not needed at that particular time. The blockade might last for days or weeks, and all manpower should be conserved and kept in readiness.

It is also the duty of the officer in charge of the roadblock to relieve all officers who are on assignment when the apprehension is effected or the roadblock is discontinued. If units which are not radio equipped are stationed on the blockade, a cruiser must be sent out to advise them. It may also be done by telephone if more practicable.
Suggested Special Equipment

The units and officers receiving the initial assignments will have precious little time in which to obtain any special equipment. Each unit should have pot flares and a roadblock sign as regular equipment. It should also contain extra ammunition and serviceable flashlights at all times.

In the past, officers who did not receive one of the first assignments, yet who expected to be assigned later, have rushed off to the blockade assignment without taking any special equipment with them. When time permits, the following articles will be of great value on an extended roadblock:

1. Roadblock sign.
2. Pot flares.
3. Spare ammunition.
4. Spare flashlight batteries.
5. Thermos bottle of coffee, tea, or water.
7. Quilt or blanket.
8. Field glasses or binoculars.
9. Raincoat and cap cover.
10. An ample supply of cigarettes or tobacco if a user of same.

If you know in advance that you are going to receive a blockade assignment, equip yourself with articles such as the above which you might need or which might add to your comfort on the assignment. You will certainly need food. You may be relieved for an hour or two to sleep and a quilt or blanket will be valuable. The others will add to your comfort and enable you to stay on the assignment longer without the need of relief.

When To End the Block

The roadblock should be kept in operation until the apprehension has been effected or until the officers in charge have reason to believe that the fugitive is no longer within the blockade area.

In cases where the fugitives are still believed to be in the area, yet the blockade becomes too prolonged without any trace of them, the officers in charge may employ the strategy of withdrawing the inner circle blockade and placing plain cars and nonuniformed officers on the outer circle blockade. This strategy has in the past resulted in the word getting out that the entire blockade had been withdrawn and caused the fugitives to make their appearance, resulting in their capture.

All agencies are blamed by the public when a roadblock or search fails, and justly so. By the same token all agencies should be recognized when a capture is effected. To follow any other policy can destroy the effects of years of cooperation and efficient and willing aid when called for. Don't fail to recognize all agencies and individuals who aid in the capture of a public enemy.

All photographs shown in this article were prepared by the Oklahoma Department of Public Safety.

EVIDENCE—HANDLING AND TRANSMITTAL

In order that evidence may be admissible in court it must be handled very carefully and identified in a very positive manner. Any contamination by spoilage or by contact with any foreign materials should be avoided if at all possible. Persons handling evidence should be thoroughly familiar with its characteristics, and while marks of identification are desirable on some types of material they are not on others. For example, on documents submitted for fingerprint examination an identifying slip should be attached with a clip. Bullets should be marked on the base, while the best place for an identifying mark on an empty cartridge case is inside. Containers should be marked adequately and tags affixed securely to large objects such as firearms. All evidence should be handled and packaged for shipment so that it will reach the FBI Laboratory in its original state.

In submitting evidence a letter should be prepared in duplicate. This letter should be addressed to the Director of the Federal Bureau of Investigation, attention FBI Laboratory. In the body of the letter there should be set forth the names of the victims, the suspects, and the type of crime. All evidence should be described in detail, and pertinent facts which may be helpful in making the examination should be set out. This letter should be sent along with the evidence if the latter is small or under separate cover in the case of bulky objects. In the latter event, a copy of the letter should accompany the package.

PHOTOGRAPHY IN CRIME

The camera is indispensable in recording criminal data. The FBI Laboratory is equipped to handle special problems of photography in crime detection including the use of special lighting.

A series of articles on the classification of fingerprints has been carried in recent issues of the *FBI Law Enforcement Bulletin*. In this issue, a review of the plain arch, tented arch, and the loop types of patterns will be discussed.

**Plain Arch**

This particular type of pattern is actually the lack of a pattern; that is, most of the ridges enter upon one side, make a rise or curve in the center, and flow or tend to flow out the opposite side from which the ridges entered. In this type of pattern there will also be the ending ridges, short ridges, and bifurcations. The ending ridges, short ridges, and bifurcations do not affect the classification as long as these types of formations follow the general trend and contour of the pattern. Dots are also present in plain arches and inasmuch as dots are not considered to have direction, there is no effect on the interpretation of the pattern. Plain arches appearing in the index fingers are designated by a capital letter (A). The small letter (a) is used if this type of pattern is present in any one of the other fingers.

Figure 1 is an example of the plain arch.

**Tented Arch**

There are three types of tented arches, namely, angular, upthrust, and loop type. The angular type tented arch is quite similar to the plain arch except that in the approximate center of the pattern, an angular formation will appear. This formation is caused by two ridges meeting and forming a definite angle. The upthrust type is also similar in appearance to the plain arch; however, somewhere in the approximate center of this pattern will be an ending ridge which does not follow the general contour of the pattern but tends to go straight up to the tip of the finger. There is no definite length requirement to this ridge and, as a matter of fact, it is often very short in length. Both of these types of tented arches, despite the fact that most of the ridges are of the plain arch type, are easily distinguishable from the plain arch due to the sharpness of the angular type and the abruptness or directional change of the upthrust.

The third and last type of tented arch is the pattern that approximates a loop; that is, it has the general appearance of a loop but lacks one of the basic requirements. Into this classification fall
the patterns which seem to have all three requirements but no white space is present to obtain a ridge count, those patterns that do not have a sufficient recurve (spoiled by an appendage), and any other patterns which possess any two of the basic requirements but lack the third. Tented arches are designated by the capital "T" in the index fingers and by a small "t" in all others.

Figure 2 is an example of the angular type tented arch.

Figure 3 is an example of the upthrust type of tented arch.

Figure 4 is an example of the loop type of tented arch. This illustration has the general appearance of a loop but upon close examination it will be noted that the delta is located on the only recurving ridge and, consequently, it is impossible to obtain a ridge count across a looping ridge.

Figure 5 illustrates the manner in which plain arches and tented arches are indicated on the fingerprint card.

**Loop**

Before discussing the loop and whorl patterns, it is necessary to review the terms pattern area, type lines, and delta.

The pattern area is that area which is bounded or surrounded by the type lines, which are described as the two innermost ridges which start or go parallel, diverge and surround or tend to surround the pattern area. These ridges do not have to be of any definite length and usually are not continuous ridges. Consequently, in order to locate the entire pattern area when a type line is a short ridge or when it ends, it is necessary to drop away from the center of the impression and take the adjacent ridge and continue on it. The area enveloped by the type lines is the only portion of the impression considered by the classifier.

The proper location of the type lines leads to the correct determination of the delta, which is one of the focal points of a loop and also one of the basic requirements. The delta is located on a ridge at or nearest to the point of divergence of the two type lines. The delta may be located on a bifurcation, ending ridge, dot, or in the middle of a ridge.

The second basic requirement of a loop is a sufficient recurve, which is defined as the space between the shoulders of the innermost recurve of a loop. In order for the recurve to be usable it must be free of any appendages abutting upon the outside of this recurve at right angles. In the event the innermost recurve is spoiled by an appendage, the next recurving ridge is used. After having determined the sufficient recurve, the second focal point, the core, can be located. As the name implies, the core is the approximate center of the pattern area and is located on or within the sufficient recurve.

The shoulders of a loop have a definite bearing on the location of the core. The shoulders are located on either side of the recurving ridge at the point where the ridge definitely turns in to make the recurve. After locating the shoulders, the area from the shoulders up to the inside tip of the recurve is examined. If this area is blank, that

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**Figure 3.**

**Figure 4.**
is, no rods are present, the core is automatically located on the shoulder farthest from the delta. If a single rod is present in the afore-mentioned area, the tip of this rod is used as the core. If there is an uneven number of rods, the core is located on the center rod. If there is an even number of rods, the two innermost are considered

and the core is located on the tip of the rod farthest from the delta.

The third basic requirement of a loop is a ridge count of at least one across a looping ridge. In order to obtain an accurate ridge count it is necessary to have a Henry reticule, which is a separate and removable part of the fingerprint magnifier. A red line is drawn in the middle of the reticule dividing it exactly in half. This red line should be placed on the fingerprint impression in such a manner as to connect the core and the delta. All ridges that are cut or touched by this red line are counted. There must be white space between the delta and the first ridge in front of the delta in order to count it. Fragmentary ridges are parts of the ridges and likewise are not counted. Dots are counted if they are as thick as the surrounding ridges. When the red line crosses through an island, both sides of the island are considered ridge counts. Two ridges are counted when the red line crosses a bifurcation at the exact point of bifurcation.

Figure 6 is a loop with 19 ridge counts. The core is designated by the letter (C) and the delta by the letter (D). The correct location of the core and delta culminates in obtaining an accurate ridge count, which is very important as the ridge counts are necessary in obtaining or arriving at a correct classification formula. The ridge count

*Continued on inside back cover*
Since 1870, the Pennsylvania town of Lansdale has handled its traffic problem in an adequate manner, whether it dealt with the horse and buggy, the bicycle, or the Stanley Steamer. In 1940, however, civic leaders and law-enforcement authorities became aware of a new situation similar to that confronting numerous communities throughout the United States. Despite what was believed to be a comprehensive system of adequate protection, we found that unexplained accidents and traffic jams were occurring almost daily.

**A Common Mistake**

In studying the problem, it was determined that we had made the common mistake of considering an efficient safety and traffic program for only our own population. We had failed to provide for the swiftly mushrooming population of the surrounding country, brought on and activated by the defense program.

Lansdale is listed as a borough with a population of approximately 10,000 individuals who occupy an area of three square miles. It is like any one of a thousand other communities which have hazardous traffic situations which cannot be eliminated and awkward physical characteristics which need correcting.

The main artery is State Highway Route 63, which runs lengthwise through the town. One of the principal railroads, with seven crossings, runs through the width of the community. In addition, bus lines operate on an hourly schedule into the heart of Lansdale.

**The Trouble Spots**

In sitting down to analyze the over-all picture, we found there were three situations responsible for the traffic congestion and contributing to the accident rate. They were:

1. The railroad's antiquated drawgate system and numerous crossings which disrupted the flow of traffic, particularly during peak periods;
2. The influx of new industry with attendant traffic and population increases;
3. The "hot rods" with their irresponsibility and lack of regard for human life and property.

Each problem was reviewed and a determined effort made to find a solution. A frank discussion with the officials of the railroad secured their ready cooperation and assistance in changing the gates from the long, manually operated gate to the short electrically run type of the present time. This change was, of course, a great benefit, but was not nearly so important as the rearrangement of the railroad parking lot. In the morning from
7 to 9 a.m. and in the evening from 4 to 6 p.m., we were daily involved in a situation of the housewife meeting her husband at the train and competing for roadway with the commuter who had left his automobile parked in the lot. This always created a series of tie-ups which seemed to coincide with the dismissal hour of the various factories. At the drop of a hat, you could find a first-class traffic jam on your hands.

The railroad parking lot was rearranged with additional entrances and exits so that the bulk of the traffic would be shuffled off into a side street. From here the cars would reach the traffic flow gradually, and not be injected into it all at once. The borough also opened a new parking lot of three acres to provide for the shoppers and daily commuters. Meters were installed, 50 of them being leased by the week or month for long-term parking, while others operate on the principle of four hours for a nickel and are usually utilized by women going to Philadelphia for shopping purposes.

Our police department consists of eight men, with three or four being on duty at all times. This would be a sufficient number to handle the usual routine of traffic direction, but, if there is an accident or tie-up, it is almost impossible to cope with the situation. Recently, however, we were able to secure the appointment of two policewomen who work part-time directing traffic. This addition has been of great assistance in releasing men for duty in the more congested traffic areas.

A survey was made of the new defense industries in and around our area. Discussions were had with the safety department heads and plans were made for rerouting traffic coming from the plants at peak periods so that it would not conflict with that originating from the railroads.

**Arrest and Education**

The "hot rod" danger had to be coped with in an entirely different manner. This was something which could not be settled by discussions and instructions. In these cases, we found it necessary to arrest the individuals responsible for wild driving and to make certain that their parents learned of their activities. We can say that this action has eliminated these thoughtless drivers, but we are continuing to make every preventive effort through cooperation with the various high-school driver's training courses. There is also the thought that if you educate a child at an early age he may learn through the years to have respect for the rights and privileges of others. With this thought in mind, we are assisting in planning and instructing the various safety patrols of the elementary schools in our district, hoping that their knowledge of safety regulations will remain with them when they, in turn, become drivers on our highways.

**Other Techniques**

It was learned that many accidents were caused by drivers illegally crossing the white road lines. When questioned, many violators pointed out, and they were right, that the white lines had become so obliterated by constant travel that it was difficult to see them. We have installed white lines made up of white plastic buttons. These buttons are supposed to more than triple the life of the dividing line. They have given satisfactory results up to the present time.

Another technique we are utilizing is the two-way radio to move our traffic men from spot to spot when tie-ups occur.

In company with the engineers, we have made extensive surveys in order to provide additional one-way streets, all of which are designed to take congestion away from central points.

There is no doubt that child safety is one of the most important programs in any police department. We emphasize this program.

**Safety Awards**

Here in Lansdale, all safety-minded groups have cooperated in bringing safety to our highways and streets. In 1948, 1949, and 1950, Lansdale was very proud to receive a certificate from the Governor's highway safety program indicating that we had been successful to such an extent that in 2 years there had been no fatal traffic accidents in Lansdale. At the Montgomery County police chiefs dinner in December, I received, on behalf of the town of Lansdale, the Certificate of Achievement in Traffic Safety for our accomplishment in having finished the 3 years without a fatal accident.

Traffic safety, however, is a problem which can only be solved by keeping abreast of each current development. It is impossible to feel that you have the situation under control unless you are on it every minute and hour of the day. The town of Lansdale hopes to stay in that position.

**FBI LAW ENFORCEMENT BULLETIN**

16
Military Violators of Traffic Laws

Officers assigned to traffic duty will be interested in a directive issued by the Department of Defense, Washington, D.C., earlier this year. The purpose of the directive is “to set forth a uniform policy for the handling of military violators of traffic laws,” as requested by the President’s Highway Safety Conference. The statement of policy reads as follows:

1. In January of 1950, the Secretary of Defense issued a policy statement regarding safety and accident prevention and emphasized the importance of safe practices to prevent injuries. The steadily increasing number of traffic accidents involving a substantial number of armed forces personnel indicates the necessity of continuing the present efforts of the military departments to impress upon the men and women of the Army, the Navy, and the Air Force, the importance of careful and safe operation of motor vehicles, during both on and off duty hours. Injuries received in automobile accidents reduce the efficiency of the military organization through the loss of services and the hospitalization of personnel.

2. Every effort should be made by commanding officers of all the military services to inform the personnel of their commands of the importance and necessity of driving safely and obeying traffic laws. To this end, commanding officers should seek the cooperation of local authorities and use all available sources of education.

3. Traffic laws throughout the Nation are designed to promote highway safety and prevent accidents. Statistics show that automobile accidents do not just happen—they are generally caused by operators of vehicles. In almost every accident, a traffic violation is involved. It is evident, therefore, that if traffic violations are reduced, there will be an accompanying decrease in the number of accidents. One means of reducing traffic violations is the strict, equitable and reasonable enforcement of traffic laws, and military personnel who violate those laws are not entitled to any special exemption solely by virtue of their military status. They are responsible for violations in the same manner as other offenders, except in those cases where because of military necessity superior military authority has directed movement of official vehicles which involve temporary waiving of traffic laws. In such cases, notification is usually given and arrangements made with the local authorities.

4. In order that local authorities, commanding officers and all personnel may know the policy of the Department of Defense with reference to violations of traffic laws by military personnel and operators of official vehicles, the following principles are published for guidance:

   (a) Military personnel who violate traffic laws while operating a private vehicle are responsible therefor in the same manner as civilians. The Department of Defense is confident they will be accorded fair and equitable treatment and, if taken into custody, will be granted bail or recognizance (except for those offenses for which bail is not customarily granted) so that they may return to their military duty as soon as possible.

   (b) Drivers of official vehicles on official business who are stopped by local police for traffic violations should not normally be arrested or detained, unless the nature of their offense is such, or it is apparent that they are in such condition, that further operation by them would be prejudicial to their own safety and the safety of others.

   (c) All drivers engaged in duties under emergency conditions or conditions of urgent military necessity will be specifically informed of such emergency or urgent necessity by competent military authority and such determinations will not be left to the driver concerned. In such cases, coordination will be effected between military and civilian authorities, whenever practicable.

   (d) The Department of Defense desires that the commanding officer of the military installation to which a driver of an official vehicle is assigned or attached be notified promptly by local civil authorities when the driver has allegedly violated traffic laws. In accordance with policies enunciated in current regulations of the Departments of the Army, Navy and Air Force, published under authority of article 14, Uniform Code of Military Justice, members of the Armed Forces alleged to have violated traffic laws may be delivered to civil authorities.

   (e) Commanding officers should cooperate closely with local civil authorities in conducting educational and training campaigns to promote highway safety, reduce accidents and provide for adequate enforcement of traffic laws. Whenever desirable, agreements should be sought with local civilian authority to effectuate these principles. All commanding officers shall continually emphasize to persons under their command the importance of safe driving and the observance of traffic laws.

Notice

The FBI receives numerous requests from law enforcement officers who wish to receive the FBI Law Enforcement Bulletin regularly. Every effort is made to honor these requests in order that this service may be made available to the greatest possible number of members of the law enforcement profession.

Distribution of the Bulletin, however, must be made in accordance with budgetary limitations. It is therefore suggested that when officers discontinue their law-enforcement duties, or no longer desire to receive the Bulletin, immediate notice be given to the FBI, in order that our records may be adjusted accordingly. This will permit distribution of the Bulletin to other officers.
In the public interest every law enforcement agency must strive toward increased efficiency and greater economy of operation. A system of regular, comprehensive inspections contributes materially to the achievement of these essential goals. Such an inspection system has been developed and is presently employed by the FBI. It can be adapted by any police department to bring its work, equipment, and personnel under the scrutiny of a trained, experienced inspector.

A searching, impersonal examination of a department's administration, operations, and personnel is made by an inspector who submits a written report describing what he found, what corrections he made in the course of the inspection, and pointing out situations which call for the attention of the top executive. Thus the inspector's report gives the head of the department an over-all picture of his command divorced from personalities and reflecting the total efficiency of the organization. With this information the chief can order training programs to correct inadequate performances by personnel, order organizational changes or transfers of personnel to correct weakness in the command structure and direct that reports, files, and record systems be properly amended and integrated.

**Scope**

This type of inspection is not a spit-and-polish maneuver held on a specified day each month, but is rather a penetrating analysis going to the heart of every phase of a department's operation.

In departments operating out of one central station the inspection can be set up to cover the entire department or divided into units to simplify the examination. In larger organizations, as in the FBI, it will be necessary to divide the department into units to permit completion within a reasonable time. For example, an FBI inspector conducts an inspection of one field office or headquarters division at a time. The duration of an inspection will depend upon the size of the unit being inspected and the scope of operations.

In a large metropolitan or State police department individual stations, precincts, or headquarters units such as the Detective Division, Traffic Bureau, Record Bureau, etc., would be practical inspection assignments. Several inspections may be going on at the same time in a large department with different inspectors in charge. Instituting an inspection service in a large department will necessitate the services of several full-time inspectors.

**Frequency**

Experience has shown that frequent inspections are desirable to insure that the work is being handled in the manner that the department head desires and to learn of any new problems which may have come up and are not being properly handled.

Annual inspections are considered a necessity and semiannual inspections highly desirable.

**What Will an Inspection Show?**

Many police departments have expanded over the years with little or no modernization of manuals, operating rules, or office procedures. Some departments follow archaic methods in use when the present commanding officers were recruits. In records keeping there has been noted a tendency for officers to employ haphazard systems that begin nowhere and end just short of the next makeshift addition. In one large department the chief of detectives observed recently that it takes a year for a new detective to learn the bureau files to the point where he can check all pertinent records without the assistance of an older officer.

In even the most modern, efficient departments the human element enters into the application of rules and policy and errors in form and judgment will be made from time to time.

Periodic inspections will reveal procedures unknown to the head of the department but which have been followed over a period of time, having
grown up without the knowledge or consent of the chief.

Inefficient or incomplete practices in operations will be noted which make the entire department vulnerable to public criticism.

Lapses in care of equipment so that it is not available for 24-hour-a-day use, inability of officers to handle equipment available for use, and inadequate equipment will be noted.

Shortages in manpower and facilities will become apparent, and the chief will be able to pinpoint such needs in requests for additional funds to do the job.

Analysis and observation of individual performances permit recognition of meritorious work and particular abilities for consideration in promotions.

**Authority and Qualifications of Inspector**

The inspector must be given authority over all personnel concerned for the duration of the inspection. This can be accomplished by designating the inspector the personal representative of the head of the department. To be effective the inspector must possess certain qualifications. A mature outlook and experience within the organization, coupled with a keen sense of loyalty to the department, is essential. In addition, the inspector must have analytical ability to recognize areas where operations may exceed authority or fall short of requirements and further possess a critical but constructive faculty to recognize errors in administration and suggest changes to correct major deficiencies.

**Nature of Inspector’s Examination**

Plant and equipment is examined as to condition, availability, and whether or not it will do the job intended for it.

All personnel are interviewed as to knowledge of requirements of their jobs, adequacy of handling assignments, personal problems, suggestions, etc. A written or oral examination is given to each employee.

Official forms and office procedures are examined as to accuracy, clerical errors, omissions, misfiling, etc., and scrutinized as to adequacy, duplication, and whether or not they fill a need within the service.

The inspector will analyze all complaints which have been received, ascertain that those requiring investigation are being handled promptly, and review all pending cases minutely for errors or neglect which may affect the solution and prosecution of the case.

This inspection procedure can be easily extended to other phases of police activity. Patrol operations, foot patrol or squad car, can be examined for coverage, effectiveness, availability, etc., and personnel spot checked by observation and cross checking of radio logs, call box records, etc.

**Traffic Operations**

The inspection of the traffic operations of a department is carried out in the same general way as the inspection of other departments. The inspector should make a careful analysis of the administrative operations of the department to assure that adequate personnel is assigned to the traffic division as well as other divisions of the department. He should determine whether the manpower available for traffic-law enforcement is being utilized during the periods when it is most necessary as determined by an analysis of traffic flow and accident data. Specific attention should be given to the traffic activity of officers assigned to other than the traffic division, so that the department can be assured that all units or divisions are functioning as a whole with respect to the enforcement of traffic laws.

The activities of officers assigned to moving patrol, parking and intersection control and school crossing protection should be checked. Accident investigation procedures, reporting and analysis of accident data should be carefully reviewed. Attention should also be given to such matters as the processing of parking tickets, the handling of tickets for moving violations and follow-up procedures against those violators who fail to appear. Accident records should be reviewed and a determination made as to whether the information available from them is being used to best advantage for the prevention of other accidents. A thorough and systematic inspection of all traffic functions and operations will do much to promote better traffic-law enforcement and thereby save lives and property.

**Modus Operandi**

On instituting an inspection system the head of the department and the inspector will confer on the criteria to be used by the inspector. This will
include the rules and regulations of the department, the policy of the department in various areas of operation, and the level of achievement which the chief demands to maintain the spirit and traditions of the organization.

The inspector will survey the scope of his assignment and prepare an outline or check sheet for his guidance in the examination. Such an outline will necessarily be flexible and conditioned by the scope of operations covered.

Certain broad outlines such as the following are suggested: Physical condition and maintenance; administrative operations; personnel matters; and investigative operations.

Each of these classifications is subject to numerous specific subclassifications dependent upon the type of activity handled by the personnel involved.

The inspector will determine the period to be covered by his review and examine the written record of operations for this period.

Interviews with supervisory personnel, business and civic leaders, judges, prosecutors, and other persons having knowledge of the department's activities will be conducted.

Each phase of the department activity will be the subject of a written analysis. Individual deficiencies will be discussed with the personnel involved and a written report of each incident, together with the explanation of the officer and supervisory official responsible for same, incorporated in the inspection report. Where the deficiency is subject to correction and within the authority of the inspector to order it corrected, this will be done and a statement included reflecting this.

Included also in the inspection report will be an analysis by the inspector of the over-all condition of the particular units or operations involved, together with his observation as to the efficiency of the operation and personnel involved.

What Will Inspection Accomplish?

While final determination of major problems unearthed by the inspection is in the discretion of the head of the department, the inspection report should be given weight and action where indicated. Obviously the report is of a confidential nature for the use of the chief. Some problems reflected in the report will be readily solved by instructions from the chief to effect corrections and by dis-

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If other occupants were noted in the car, a cross index of the same cards was made covering each of these.

The information obtained from the cards was used to identify the various individuals operating in the gang, and to show their association with one another. As a result of this and other information the 33 men in this gang, which had committed almost 200 burglaries, were all eventually picked up, convicted, and sentenced.

The file has been successfully used by the Omaha Department in other cases. It has proved invaluable in establishing the connection between hoodlums operating in the area and hoodlums visiting the area from other localities.

At the scene of the crime the description of a car is many times obtained but the license number of the car is not. A check under the heading “Make of car” immediately reveals the names and addresses of individuals owning this type of automobile. Reference to the modus operandi often identifies them as logical suspects.

In one instance of this nature, photographs of ex-convicts were furnished to an Iowa sheriff as logical suspects after a description of an automobile had been forwarded to the Omaha Police Department. The sheriff showed these photographs to witnesses, who positively identified both of the suspects. These individuals were eventually convicted of the crime and given penitentiary sentences.

Another example of the results obtained through this file is illustrated by the arrest of four burglars. These men were noted by members of the department when they observed their car operating suspiciously in the residential section of the city. The officers radioed a request for a check of the file. They were informed that the car was registered to a known burglar. The officers then placed all four occupants of the car under arrest. A search of the car revealed a considerable number of burglar tools. Investigation later proved that some of these tools had been taken in a burglary of a local hardware store and that others had been used to commit other crimes. Officers also found loot in the car obtained as a result of two burglaries committed shortly before the arrest. All four of these individuals received penitentiary sentences and their arrests cleared up 38 safe burglaries.

The cases cited in this article concern only a fraction of the convictions obtained through the use of this file.

Alcohol Still Operated by Police

Home-made stills are usually at the far end of the law, but Chief of Police C. A. Hollingsworth of the Greenville, Miss., Police Department has one which he uses as a technique in law enforcement.

Over a period of several years, Greenville officers experienced considerable difficulty in obtaining evidence in cases involving illegal sale of whiskey. Time and again when officers inspected an establishment where whiskey was reported as being sold illicitly, the “evidence” was poured by the seller into a tub or bucket in which he had previously poured a mixture of water and commercial bleach or disinfectant. The disinfectant acted to destroy the odor of the whiskey and thereby made it virtually impossible to establish guilt.

During the fall of 1950, Sgt. A. N. Rankin devised a counter measure to offset these tactics; he rigged up a small still. Rankin obtained a small copper container for a “cooker” and fitted it with a copper tube leading off to a copper coil for a “condenser.” He fitted the condenser coil into a gallon tin can to be filled with cold water to surround the condenser, and at the end of the coil tubing he arranged an outlet.

The still worked. Now when a raiding officer is confronted with the “evidence” being poured into
a mixture of water and disinfectant or bleach, he takes the suspected mixture to the police station along with the suspect. There Sergeant Rankin has the suspect examine the copper container and all other parts of the homemade still, to verify the fact that it contains no alcohol. Then, in the presence of the suspect, Rankin pours about 1,000 cubic centimeters of the suspected mixture into the copper "cooker" and sets it over a lighted hot plate. Soon, with the suspect watching, the steam begins to rise from the "cooker," passing through the copper coil or condenser, which is contained in the gallon tin can now filled with cold water.

In approximately 30 minutes the alcohol from the suspected mixture is distilled and begins to trickle from the outlet at the end of the condenser coil, into a waiting glass. In the face of such evidence, produced in the presence and before the eyes of a suspect, a number of whiskey sellers have decided to plead guilty.

**HARD TO PRINT**

Extreme care should be taken in fingerprinting the aged, whose ridges are usually faint and ill-defined because of wear; children, whose ridges are very fine and close together; those persons whose occupations (bricklaying, stone or cement work, dishwashing) cause partial effacement or destruction of the ridges, and those who have a skin disease affecting the hands. In the latter two cases, if possible, the prints should not be taken until a sufficient period of time after cessation of such labor has elapsed to allow nature to reconstruct the ridges, or after a cure has been effected. If poor impressions are caused by excessive dryness of the skin, the condition may be remedied by rubbing the fingers with olive oil for a few minutes.

**LOOKING FOR LATENTS**

Authorities differ as to the length of time latent impressions will remain on any object touched. Atmospheric conditions may affect them slightly, but the physical condition of the person leaving the prints, considered with the type of surface to which they are adhering, will affect their duration considerably. They will remain legible and readily susceptible of development for an indeterminate length of time where they are placed under ideal conditions. If they appear on a piece of glass, steel, or other hard-surface nonporous material, it is sometimes possible to develop them, through the application of the proper materials, several months after they are so placed.

**Auto Theft, Incorporated**

One of the tricks sometimes used by professional auto thieves is to set up a respectable front through which titling operations and sales will be channeled. A used-car business is well adapted to this use. A flow of cars and titles through a company name and address will arouse no suspicion provided the details of the business are well handled. These details, however, have a way of getting out of joint.

The "used-car business" was the plan adopted by two men who were recently sentenced to terms of 12 and 10 years after being convicted of violating the National Motor Vehicle Theft Act. Fictitious bills of sale made out to the "... Auto Sales Co." were used as the basis for new titles and sales in a state located near to one in which the automobiles were stolen. Serial plates were removed before sale and motor numbers were altered before the fictitious bill of sale was made out.

The first car stolen was a "trial run" used by the experienced partner to convince the other that the job was both easy and profitable. When the theft, alterations, titling, and sale went through without a hitch they began business in earnest.

The second car was stolen by one partner from a parking lot in a large city while the other partner acted as lookout. After all mechanical and legal procedures had been completed in another state the car was sold to a legitimate used-car dealer in that same state. But the partners made one mistake which later proved to be important. In preparing the fictitious bill of sale used to obtain title, one of the partners wrote in his own true name as the person selling the car to the "... Auto Sales Co." used to cover their operations. This "error" was used later as both an investigative lead and evidence in developing a case against the subjects.

The next several thefts followed the same general pattern throughout except that true names were not used on the bills of sale and "drive-it-yourself" cars were rented to facilitate the thefts. The partners toured the city in the rented car until they located one they wanted to steal. Both cars were then used until the entire transaction on the stolen car was completed. After this car was sold the partners went back to the city where the theft occurred and returned the rented car to the rental agency.

(Continued on inside back cover)
Tennessee Department Shows Excellent Record

The record for the calendar year 1951 on file at the Union City, Tenn. Police Department includes 35 cases of burglary (breaking and entering), 4 cases of larceny ($50 and up), 2 cases of criminal homicide, 1 case of rape, and 5 cases of aggravated assault. All offenses within these classifications were cleared by arrest.

Efficient investigation in Union City has also assisted other law-enforcement agencies. During May 1950, a communication was received by Chief of Police W. A. “Gus” Hudson from a police department in Illinois requesting background information on a man who gave his home address and place of employment as Union City, Tenn. Within 24 hours a complete report was mailed to the authorities in Illinois with the request that the individual be fingerprinted and a fingerprint card furnished the Union City Police Department for possible future reference purposes.

During April 1951, Lt. J. E. Hudson and other officers learned that the man arrested in Illinois during May 1950, had returned to Union City. From October 1951 to December 7, 1951, there were eight reported burglaries in Union City as well as various other offenses in nearby towns. Each place burglarized in Union City was completely processed for latent fingerprints and the latents obtained were appropriately filed for future reference. During the night of December 7, 1951, a grocery store in Union City was robbed of $30 in cash. Several latent fingerprints were secured and Lieutenant Hudson within 30 minutes after finding the prints determined that one of the latents secured was the middle finger, left hand, of the same individual fingerprinted by the authorities in Illinois on May 12, 1950.

The burglar, upon arrest, implicated two associates. Information derived from questioning and investigation cleared eight pending and unsolved cases. The burglars admitted burglaries in various cities in Tennessee, Illinois, and Kentucky. Authorities in the other cities were notified of the admissions made by those under arrest. Chief Hudson and other members of his staff were commended by the various police departments and sheriff’s offices for their assistance.

Union City, located in the northwest part of Tennessee, is advertised as the “Gateway to Reelfoot Lake.” This lake was formed by an earthquake during the year 1812 which according to recorded history caused the Mississippi River to flow upstream until the lake was filled with water.

The police department is administered by Chief Hudson who became a member of the force on December 1, 1932. Chief Hudson’s son, J. E. Hudson, after 4 years’ experience with the FBI Identification Division joined the Union City Police Department on July 1, 1949, and has devoted much of his own time to organizing and establishing one of the most modern Identification Divisions in the State of Tennessee.

INTERNAL SECURITY

By Presidential Directives dated September 6, 1939, January 8, 1943, and July 24, 1950, the FBI was directed to take charge of investigative work in matters relating to espionage, sabotage, subversive activities and related matters. Law-enforcement officers, patriotic organizations and individuals were requested to report all information in the above categories to the FBI.

INTERNAL SECURITY ACT OF 1950

This act, among other provisions, requires Communist organizations to register with the Attorney General and imposes additional restrictions on such organizations and the members thereof. These provisions are within the investigative jurisdiction of the FBI.
About 6 p.m. on November 26, 1951, a father returned home from his employment in Detroit. He entered the rear door, using his own key. Everything was quiet—he didn’t see his wife, 18-year-old son or 11-year-old daughter. This was most unusual.

The father went to the wife’s bedroom, but the door was locked. He then proceeded to the front bedroom, occupied by his daughter. There he noticed something in bed, but upon pulling back the covers, found a large doll. Closer examination revealed bloodstains on the bed sheet. The worried father then opened a closet door and found the body of his little daughter, stabbed four times, lying on a rug. The rug normally lay under the piano bench. Bloodstains were found near this bench, and a “drag mark” on the carpet of the living room leading to the girl’s bedroom was clearly evident.

Aided by the police, the father then opened the wife’s bedroom and found the woman’s battered body just inside the door. She was dead, having suffered two skull fractures and 36 cut and stab wounds: In a bathroom clothes hamper officers located a hand ax and hunting knife, both covered with blood.

On December 1, 1951, a first-degree murder warrant was issued in Detroit, Mich., against Kenneth Lee Maurer, the 18-year-old son. On December 3, 1951, a complaint was filed before a United States district judge at Detroit, Mich., charging Maurer with a violation of Title 18, U. S. Code, Section 1073, in that he fled from the State of Michigan to avoid prosecution for the crime of murder.

Maurer has been characterized as being rather shy, timid and retiring, but displaying occasional fits of temper. He reportedly makes a good appearance, has a pleasing personality, and is a mature employee.

**Maurer may be armed and should be considered dangerous.**

He reportedly had more than $200 in cash in his possession, as well as five or six uncashed weekly pay checks, at the time of his disappearance. He has a Michigan driver’s license, and likes bowling and gardening as hobbies.

The fugitive is interested in nature lore and is fond of all forms of horticulture. He particularly likes the outdoors, and it has been said that while he could easily get lost in any city he would have no trouble finding his way in the woods. He reportedly is fully capable of going into outdoor areas and surviving indefinitely even though he lacked tools and equipment. He may have taken a compass with him.

Maurer also likes farming and it is believed that he may be working at this occupation. In addition he is fond of old people, and frequently becomes very friendly with elderly persons at the first meeting. He has also expressed a hope of visiting in New Mexico.

Maurer can be identified by his protruding ears, noticeable freckles and slightly buck teeth. He is stoop-shouldered, has large hands and feet, a sharp nose, and walks with a slight shuffle. He speaks slowly, in a low voice, and has a slight stammer. He is left-handed, but eats and writes with the right hand.

The fugitive is described as follows:

- **Age**: 19, born December 16, 1932, at Dearborn, Mich.
- **Height**: 5 feet, 10 inches.
- **Weight**: 150 pounds.
- **Build**: Slender.
- **Eyes**: Blue.
- **Hair**: Dark brown.
- **Complexion**: Medium.
- **Race**: White.
- **Nationality**: American.
- **Education**: Tenth grade.
- **Occupations**: Tree trimmer, gardener, store clerk.

FBI LAW ENFORCEMENT BULLETIN
Has noticeable freckles, protruding ears, teeth slightly protruding, sharp nose, is stoop-shouldered, is fond of all forms of horticulture.

FBI No. 929,302 A.
Fingerprint classification. None available.

Notify FBI

Any person having information which may assist in locating this individual is requested to immediately notify 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 nearest his city.

ARCHES AND LOOPS

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is marked in the upper right-hand corner of the fingerprint block.

There are two types of loops, namely, radial and ulnar. The names “ulnar” and “radial” are derived from the ulna and radius bones of the forearm. Loops which flow in the direction of the ulna bone (toward the little finger) are called ulnar loops and those which flow in the direction of the radius bones are called radial loops. The following is a simple set of rules to use in differentiating between the two loop types:

1. The ridges of an ulnar loop in the right hand flow toward the right-hand side of the fingerprint card.
2. The ridges of an ulnar loop in the left hand flow toward the left-hand side of the fingerprint card.
3. The ridges of a radial loop in the right hand flow toward the left-hand side of the fingerprint card.
4. The ridges of a radial loop in the left hand flow toward the right-hand side of the fingerprint card.

All ulnar loops are designated at the bottom of each finger block by a diagonal slanting line in the direction of the loop. Radial loops appearing in the index fingers are designated by a capital “R” at the bottom of the finger block. The small letter “r” is used if a radial loop is present in any of the other fingers. Figure 7 illustrates the manner in which ulnar and radial loops are indicated on the fingerprint card.

A review of the various whorl type patterns and a review of the classifying reference rules will be discussed in a future issue of the FBI Law Enforcement Bulletin.

AUTO THEFT

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Motor numbers were changed in a private garage rented for the purpose or in a wooded rural area.

The second mistake was made when the partners decided to return the rented car to the rental agency as soon as the second automobile was stolen and then use the stolen car in carrying out the next theft. While the partners were driving the stolen car a businessman took the license plate number of that car in connection with one of his routine practices. During an investigation made subsequently the license plate number was considered possibly of some significance in connection with the theft of another car at the same general time and place where the first car was seen and the number obtained. Tracing the plate led to the name of the “. . . Auto Sales Co.,” to which the plate had been issued, and the true names of the partners.

One of the partners was arrested by special agents of the FBI in Oklahoma City and the second was taken into custody a day later by the Atlanta, Ga., Police Department while he was attempting to sell a stolen car to a used-car dealer.

The temporary success of the business “front” used by these men is attested to by their reputation in one city in which they sold several stolen cars. Three businessmen in that city said they had previously made inquiry concerning the “. . . Auto Sales Co.” operated by the two partners and were told that the company was a used-car concern in good standing in the community.

INSPECTIONS

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disciplinary action where indicated. Other matters will require reassignment of personnel, new training methods, or extension of in-service training to resolve the shortcomings unearthed in personnel efficiency. In addition, the installation of an inspection system will bring a new awareness to all personnel that their day to day activities will be subject to scrutiny, and this consciousness will be injected into their performance of duty.
When classifying a pattern with a single looping ridge, care must be exercised that all three basic requirements for a loop are present.

Since Ridge A abuts upon the recurving ridge at a right angle between the shoulders, the sufficient recurve is lacking. This pattern is classified in the Identification Division of the FBI as a tented arch and a reference search conducted as a loop.