HBBB Saw Enforcement BULLETIN



1956 JANUARY Vol. 25 No. 1 Federal Bureau of Investigation
United States Department of Justice
J. Edgar Hoover, Director

FBI Law Enforcement Bulletin

Restricted to the Use of Law Enforcement Officials

JANUARY 1956

Vol. 25, No. 1

CONTENTS

Page
Statement of Director J. Edgar Hoover
Feature Article:
Art of Tracking Wanted, Lost and Missing Persons, by Fred O. Patton, Chief of Information and Education Division, New Mexico Department of Game and Fish
Crime Prevention:
"Junior Police" Builds Men in Brattleboro, Vt., by Chief Richard B.
Putnam, Brattleboro, Vt., Police Department 7
Communications and Records:
Police Radio Network in West Virginia, by Lawrence J. Burley, Sheriff
of Marshall County, W. Va
Identification:
Sequencing and Filing the FBI's Fingerprint Cards
Watch Part and Palm Print Identify Subject
Interesting Pattern
Firearms Training:
Description of an All-Purpose Firearms Range
FBI Academy Practical Pistol Course Inside back cover
Other Topics:
The Auto Theft Problem and the State Police, by Frank A. Jessup,
Superintendent, Indiana State Police
Case of the Pillow Slip Burglar
Wanted by the FBI
Time To Nominate
Crime Scene Search Solves Murder



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.





United States Department of Instice Federal Bureau of Investigation Washington 25, D. C.

January 1, 1956

TO ALL LAW ENFORCEMENT OFFICIALS:

As a career law enforcement officer, I abhor the word "cop" in reference to members of our profession. The expression is degrading to law enforcement and the stature it has achieved through long years of dedication to responsibility. Especially deplorable is the use of this term--a standard derisive invective of the underworld--in a careless or disdainful manner by ordinarily law-abiding individuals.

At the beginning of this new year, it is well to give some serious thought to the everyday role of the American policeman. In our society he is more than a public servant. More often than not his many contributions to the welfare of his fellow men go unsung and insufficiently rewarded. He is the guardian of children at the school crossing, the solace of the grieving relatives of the missing person or the crime victim, the watchman of the slumbering community, the shield between the vicious criminal and the innocent citizen. In each of the past ten years no less than 61 police employees, on the average, have sacrificed their lives in line of duty.

Good law enforcement thrives in an atmosphere of public understanding and support. Wherever there remains any vestige of the public scorn inherent in the epithet "cop," the hope for adequate salaries, proper equipment and working conditions and other requisites of efficient police departments wanes. In addition, poor adult example can lead only to youthful disrespect for police authority—an open doorway to increased juvenile delinquency.

The splendid cooperation rendered to law enforcement by the nation's news media has proved of great value in fostering public assistance and respect. As one example, more than one-fourth of the 82 apprehensions on the FBI's "Ten Most Wanted Fugitives" list are directly attributable to publicity given by television, radio, newspapers, and magazines. Recently, an Eastern newspaper reported a stirring episode in which a police officer leaped aboard a wildly careening truck tractor, clung on desperately in a vain attempt to halt the vehicle in its erratic flight through a crowded section, and was finally crushed

to death in an impact with another truck. The newspaper, unconcerned with space convenience or style flair, presented the representative of the law as a "hero policeman," a "patrolman," and a "heroic officer."

How much more fitting is this description than the offensive "cop."

This graphically illustrates how news sources can further enhance the dignity of the police profession. Regardless of its various possible derivations, "cop" holds the same unsavory connotation as "quack" and "hack" when referring to the doctor and the journalist.

The prospect that 1956 may well be the fifth consecutive year in which more than two million major crimes are committed emphasizes the urgent need for public cooperation and respect for police authorities. Certainly, it would be a concrete measure of encouragement to every police officer to see the designation "cop" go the way of the rubber hose, the third degree and other reprehensible practices which have no place in modern progressive law enforcement.

Very truly yours,

. Language

Director



Much has been written on the methods of tracking animals, but, so far as I know, this literature does not pertain to tracking humans. Yet tracking animals calls for techniques easily applicable to tracking wanted, lost, or missing persons.

Man-made trail signs are as ancient as man himself. Any person who ever wandered through forest or meadow has left a trail. It may have been only a footprint, or crushed grass, or accidentally broken twigs and stems along the way. Nevertheless, it was a trail.

Older than the trails of man are the trails made by wild creatures of the woods. Often they make pathways which they follow year in and year out. Bears, especially, follow the same trails for generations. You will find the signs and tracks of game more often than you will see the creatures themselves. So, if you would know your wild neighbors, you must be able to read their daily diaries.

Since most game trails are well-chosen routes, Indians selected them as their way of traveling from one point to another. Later the white man made the trails into roads. Thus the game trails of yesterday became the highways of today.

If you are just learning to track, you will find it easiest after a light snowfall. The next best tracking ground is a muddy area or a sandy beach. But naturally, you will want to be able to track over all kinds of ground. That means plenty of practice, getting into rocky areas, shale slides, etc. A good hunting dog is a fine teacher because of his natural ability to trail by scent.

Just as individual animals have peculiarities, so do their tracks; but each species has general characteristics easily recognized. Similarly, the tracks of a lost or wanted person will indicate his particular characteristics, and even his state of mind.

Probably the greatest man trackers today are those who have had experience in tracking woodland animals. Remember that tracks alone—

Art of Tracking Wanted, Lost and Missing Persons

by Fred O. Patton, Chief of Information and Education Division, New Mexico Department of Game and Fish

actual footprints—do not always give the whole picture. Often it is the small, hard-to-see traces which complete the picture. Look for a cigarette pack, a gum wrapper, a cigarette butt, a matchbook or a match; but also look for strands of hair, dry mud from the heel of a shoe, a thread from a coat, and other identifiable matter.

Before you can expect to track footprints in difficult terrain, you must be able to follow a simple track on open ground. On a summer day at the beach you will see the prints of bare feet of many bathers. At a quick glance they will all look pretty much alike, but when you study them you will discover an infinite variety.

The human foot (and the heel of feline animals) will leave a print similar to a fingerprint. It can provide positive identification of the individual who made it. The size and shape of the print will



Fred O. Patton, New Mexico Department of Game and Fish.



Hunter's boot track.

also be of great importance, and here is a trick to help you. Draw a line from the tip of the big toe to the tip of the little toe. Note whether the three middle toes just reach that line or whether they extend beyond it. Now draw a line from the tip of the big toe to the tip of the heel. Observe whether the curve of the instep touches this line.

Study the Print

Prints of bare feet are interesting, but you are more apt to be concerned with the tracks of shoes and boots. A good plan is to sketch what you want to remember about the track—the length of the shoe, the width of the sole at its widest point, the width and length of the heel. Include in the sketch any special markings such as nails or cleats, brand marks on a rubber heel, or markings across the sole. On your next hunting trip, especially if there is a light snow on the ground, study the footprints left there by other hunters. Or when fishing, note the various kinds of boots or shoes which have left their mark.

When you have grown familiar with the individual footprint you are studying, begin to note



Penitentiary inmate's shoe print.

the relationship of that print to other prints of the same subject. Does he walk with feet straight forward, or slightly inward, or pointed outward? Women particularly tend to walk with toes pointed more or less outward. And their tracks are recognized also by more pointed toes and small heels.

Now you are ready to learn something about your subject's state of mind. Is he wandering aimlessly or trying to cross country quickly? Has he a tendency to hide? What story do you get out of the tracks before you?

In thinking about the subject's state of mind, you may tend to be guided by "What would I do if I were the lost or wanted person?" This is not apt to be a reliable line of thought because it is hard to place oneself in the position of a sex-crazed criminal or a fear-maddened lost person.

Lost persons often reach that state of panic where they hide from would-be rescuers; they travel in circles; they take no precaution against injury. They even throw away their clothing. Where they reason that it is well to follow a stream, they may go into deeper wilderness.

Man-made tracks are not always the sole consideration in a search for wanted persons. An auto-

mobile, motorcycle, bicycle or horse may have been involved. All of these leave distinctive tracks, just as feet do.

It is wise to make plaster casts of the tracks, whether footprints or vehicle marks; this is especially important where it appears that rain may fall and obliterate the tracks.

When setting up a search for rescue or capture, one should learn as much as possible about the subject. How old is he? Was he carrying anything? How is he dressed? Is he of sound mind? Is he right-handed or left-handed?

Spectators

A most important factor is to get ahead of onlookers, whether the tracking is to be done by men or by dogs. Spectators can obliterate tracks as completely as weather can obliterate the scent. A dramatic instance occurred a couple of years ago on White Sands Proving Grounds where a hunter had been shot through the head. The case has not yet been solved, simply because curious hunters gathered around and destroyed the tracks of the guilty person.

The airplane with radio communication to the ground force has helped tremendously in search.



Fisherman's boot track.

In cases where a person has been killed, circling buzzards, crows or magpies will tell where the body may be found. Nevertheless, there are times when success depends entirely on the eyes and the instincts of a good woodsman.

General Rules

There are three rules which must be followed if one is to be a proficient tracker.

1. Fix the details of the single print in your mind.—It pays to take time to make a small sketch of the print. Try to ascertain the age of the print. If it is washed by rain, there must have been rain since the track was made, so you will ask yourself, "When did it rain last?" If the track has been blown full of sand or grass seeds or leaves, your question would be, "When did the wind blow?" Get the help of the sun. "Always track against the sun." Then small details cast shadows which show up in the track. When you have to follow a track away from the sun, it pays to stop from time to time and look it over, against the sun.

2. Look at the track and trail as a whole.— Don't get the habit of being a bloodhound with your nose to the ground. Look up occasionally.



Dog track.

Sweep the landscape ahead to the point where the track disappears, and step lively, walking to one side of the track, never on top of it. Sometimes it is difficult to see the separate imprints, but the track as a whole often stands out plainly. Through dew-laden grass it will stand out because of the absence of moisture through the trail. Through dry grass the bent and downtrodden trail will reflect the light differently. On hard or rocky ground the track may reveal itself through small signs-misplaced stones, scraped-off moss, cracked branches, turned-over leaves or rocks showing their more moist and therefore darker undersides. Also watch for important landmarks. You may have to go back the way you came in, and you surely don't want to get lost.

3. If you lose the track, mark the last imprint and look around.—The simplest way of marking is by pushing a stick into the ground next to the last imprint, and placing a handkerchief or other suitable marker there. Then step ahead 25 or 30 feet from the marker and walk around in a circle. If you still do not find another track, make the circle wider, and try again.

Cases

World War II produced stories of the tracking of spies who had been landed on our shores by



Director Homer C. Pickens points to an important tracking clue—a broken twig.

submarines, and of the tracking and rescue of airmen who had been shot down overseas. Those were experiences among FBI men, military personnel, and other Government agents.

The New Mexico Department of Game and Fish also has its stories relating to the war. George Hightower, foreman at the Heart Bar Wildlife Restoration Area, received a citation for tracking German escapees from Fort Stanton. Hightower also put his skill to use in the finding of a lost child. A 4-year-old had been lost in the Capitan Mountains for 3 days. Though 150 men were engaged in this search, its success resulted directly from Hightower's game-tracking experience.

Other men of the department, who have put such experience to good use, include Elmo Traylor and Ray Bell and Homer C. Pickens, the present director of the New Mexico Department of Game and Fish. Pickens started out as a trapper-patrolman in 1931. He soon became known as one of the outstanding lion hunters of the Southwest and was made the official statewide lion hunter. For 2 years he concentrated his efforts in the southwestern part of the State, where lion predation was most serious. Weather conditions and the rocky terrain in the area make excellent training grounds for a tracker.

During this period a 6-year-old strayed from the family picnic spot north of Silver City. Six days of search by CCC boys and 200 residents of the area made the effort look like a lost cause. Hard tracking terrain covered by leaves and rocks was too much for the inexperienced. But Pickens found the child, not 2 miles from the point where he had last been seen. As is not unusual with lost persons of any age, the child had become frightened and had deliberately hidden from his would-be rescuers.

An interesting sidelight is the manner in which the child had survived the 6 days. In an effort to determine this, a local doctor pumped the little fellow's stomach. He found leaves, juniper berries, bark from twigs, and astonishingly—bread crusts discarded by the searchers themselves.

Another of Pickens' experiences, the one he considers his most interesting search for humans, was "The Case of the Redheaded Woman." It involved a group of game-law violators.

A school teacher, gathering wood on Ladron Peak near Belen, heard some shots. That evening

(Continued on page 23)

CRIME PREVENTION

Brattleboro, Vt., is a typical American town of about 12,000 population. It has its stores, its Main Street, and its parking problems (still unsolved). One problem it did solve, for the most part—the problem with its boys. The boys here, too, could be found in any town. They are good average American boys-some get into trouble once in a while, but on the whole they are good clean-living youth. The police department here, as in most towns, came to know the boys who were prone to get into trouble, but only after they had gotten into trouble. Giving some thought to this point, I held discussions with my force of 13 men and 2 women clerks in October 1953, about the ways and means of getting to know the boys of the town better. Consultations were also held with several men around town, including the clergy, professional men, and businessmen, as to

In October 1953, the Brattleboro Junior Police was inaugurated. On the first call, about 80 boys between the ages of 12 and 16 showed interest. To date, 2 years later, there are about 100 members. Its primary purpose was to allow the boys and the police officers to become acquainted on friendly terms. It was the hope of the department that the organization would help prevent possible future delinquents.

the best means of approaching the boys.

The men interested in the project formed a "board of strategy" and set up a program which today consists of drilling, boxing, wrestling, and shooting. A code was drawn up, badges were distributed, and soon uniforms were obtained with the aid of the local Exchange Club. Weekly meetings are held under the direct charge of Sgt. Reginald Belville. For each meeting, police officers are assigned to aid Sergeant Belville and other volunteer directors in instructing the boys.

Once a month the boys receive a characterleadership talk given either by me or one of the members of the board of directors. It is hoped that this year we will be able to enlarge the program in order to have time for visitors to address

"Junior Police" Builds Men in Brattleboro, Vt.

by Chief Richard B. Putnam, Brattleboro, Vt., Police Department

the group. During the winter, selected movies are shown and, in addition, the boys put on boxing and wrestling shows for the public. Their drill team draws an appreciative crowd whenever it makes a public appearance.

The time and effort put into this program do pay off. There are, of course, still a few slips among the boys, but on the whole the program is a success.

Results

A comparative study of our boys' organization for the past few years will indicate this success. Previous to the formation of the junior police, the police department had an average of about 15 serious juvenile complaints a year. Most of these complaints were in the nature of pilfering offenses, usually involving parked cars. During the first year of the group's existence, from October 1953,



Chief Richard B. Putnam.

to October 1954, there were only two serious complaints. From October 1954, to September 1955, there were five complaints. Of these 5 boys, three had previously dropped out of the junior police, and 2 were still members. Now the car pilfering has stopped, and there have been no complaints on this since the inception of the junior police program.

Even though the few boys mentioned above present no very serious problem for us, still we are concerned with the problem of keeping all the boys within the group. It is our big worry at the moment, and we hope to find an answer in the program. We hope to make officers of the older members in the 15- to 16-year group. This is the time when they get restless and feel that they are grownups, too big for the junior police. As long as we can keep them in the junior police, we have some control over them. When they leave, there is cause for worry, at least where some of the boys are concerned. We try to keep the positions of color guard and platoon leaders as honor positions for the older members. The boys of the drill

team, under their capable director, Mr. Henry Angel, get opportunities to act as drill master at each meeting. From this group we hope to pick officer candidates.

Public Appearances

We endeavor to keep the junior police in the public eye so that the citizens may see them as an integral part in the life of the community. During the March of Dimes campaign, the boys dress in their uniforms and take up the collections at the local theaters. Last spring, the Vermont high schools had their music festival in Brattleboro, an event which attracted students and adults from all over the State. The junior police helped park cars, acted as messengers or guides wherever they were needed, and participated in the parade in their uniforms.

The fact that the junior police training is helpful to the police department was also very evident at a local drowning. The victim's body was recovered at a hard-to-reach spot, and before long



Junior Police drill team.

the rescue and working area was crowded by onlookers. When a few of the junior police were spotted in the crowd, they were placed at advantageous spots to hold the crowd back on the banks. They did an excellent job and were respected and obeyed by the people. This type of training is given to the boys not to give them any authority but to guide them in accepting and conscientiously carrying out responsibility when it comes to them.

The activities program attracts the boys. The boxing is under the supervision of Mr. Martin Jewett, who is a former amateur boxer himself. Wrestling, at the moment, lacks a director, but we hope to remedy this situation soon. Before our former wrestling instructor, Mr. Philip Suter, attorney, moved away, he gave of his time to instruct the boys in college-type wrestling. The boys enrolled in shooting are first acquainted with the rifle. Then instruction in its handling is given by Dr. Alfred B. Jordan, a man deeply interested first in boys and then in sports. He has aroused an interest in rifle teams, with rifle club awards as incentives. Mr. Angel has selected a group of about 36 boys sincerely interested in drill-team work, and he has trained a remarkably precise unit.

The movies shown to the boys are selected deliberately with an eye to emphasizing the responsibility and dignity of the police officer.

The character lectures mentioned earlier in this article are given monthly. The talk does not last long-perhaps about 5 to 10 minutes. It does not dwell too much on the negative "don't" but rather stresses the positive "do." If the chief of police has received a complaint of some misdemeanor by boys in town, it is reported to the boys, and it is explained why it could be serious or harmful. The chief generally alternates in these talks with a young clergyman of the town, Rev. Daniel F. Roberts, who is well known to the boys and who has helped in setting up junior police groups in Vermont towns. His talks are generally based on the program's code, which sets up nine basic rules. The code of the Brattleboro Junior Police is as follows:

I promise to live a clean, honest life and be a credit to my parents, my church, and my town.

I will not steal, cheat, or lie.

I will not be a bully or hurt another.

I will not use language that is vile or be a rowdy on the streets.

I will not damage another's property.

I will not loiter around railroad property.

I will not stay out late at night without my parents' permission and will obey them at all times,

I will at all times keep myself clean and healthy by following good health rules.

All these rules I promise to keep and follow faithfully, knowing that if I fail, I will lose my badge and the rights of being a junior policeman.

Aims

The purpose of the junior police, as explained to the boys and the parents in the town, is not to assume full responsibility for the training of the youngsters, an obligation which belongs in the home, supplemented by the church and the school. Rather, the group's aim is to develop a congenial and happy spirit between the youths and their policemen. The boys get to know and respect their police officers. The police officers, at the same time, help the boys to develop into real men—good future citizens.

Through the physical training programs and the moral guidance talks, we hope to teach the boys an appreciation of "a sound mind in a sound body" so that each boy may grow up to acknowledge and accept his responsibility to God and to his fellow man. He does not need help to be a boy, but he does need help to be a man. That is what we hope and work for with the Brattleboro Junior Police. (Photographs through courtesy of Lewis R. Brown, Brattleboro, Vt.)

DANGEROUS PRANK IS FEDERAL VIOLATION

Early in 1953 a crack passenger express train was involved in a near wreck when it crashed into railroad crossties which had been placed on the track. It is a violation of Federal law willfully to derail, disable, or wreck any train or part thereof which is in interstate or foreign commerce, or to attempt to do so. FBI Agents, conducting a crime scene search, discovered dog tracks. Soon a dog appeared at the scene. The agents followed the animal to his home where they interviewed his 10-year-old master. They noted that the youngster's well-scrubbed hands had small amounts of creosote on them. The boy admitted that the creosote had come from the railroad crossties which he and a 13-year-old companion had placed on the tracks as a prank.

Prosecution was declined but the two boys were severely admonished regarding the danger of their action to themselves and to possible victims of a train wreck.



A radio network now in operation in the counties comprising the Northern Panhandle of West Virginia has proved most successful in the apprehension of criminals and the investigation of accidents and other matters by the sheriffs' offices and other law enforcement agencies in that area.

For several years Norman D. Ferrari, former county commissioner and present director of civilian defense for Hancock County, had been interested in inaugurating a coordinated radio system between Hancock County at Weirton, W. Va., and Wheeling, W. Va., and other communities in this area of the State. It was recognized that such a system would be very useful in keeping steel mills and other industries in operation and in maintaining transportation and communication lines open in the event of a national emergency, as well as assisting normal operations of law enforcement agencies in these counties.

In March 1954, Lawrence J. Burley, sheriff of Marshall County, and Sgt. P. B. Swiger, who is in charge of the West Virginia State Police in the Panhandle counties, devised a plan for a coordinated radio network for this section of the State. Authorization for the purchase of equipment to be installed at the West Virginia State Police Headquarters in Moundsville, W. Va., the county seat of Marshall County, and for the employment of an operator at that location was given by the county commissioners of Hancock, Brooke, Ohio, Marshall and Wetzel Counties at a joint meeting on May 13, 1954.

A receiver-transmitter unit was installed at the Moundsville Headquarters of the West Virginia State Police and an operator was employed to relay messages within the network of participating counties and between this network and the State police radio network, which also operates a base station on a different frequency at Moundsville. This receiver-transmitter, together with one located in the West Virginia Penitentiary, also situated in the city of Moundsville, and the base station in the Marshall County Sheriff's Office, all

Police Radio Network in West Virginia

by Lawrence J. Burley, Sheriff of Marshall County, W. Va.

use the call letters KQB 902 and operate on a frequency of 39.98 mcs. The antenna and transmitter are located on top of Grandview Hill, which is about 2 miles east of the city of Moundsville. The base station operates on 120 watts input and the mobile units on 80 watts input. The mobile units in the system are distributed as follows:

Hancock County	4
	4
Brooke County	2
	4
Marshall County	6
West Virginia Penitentiary	5
City of McMechen, W. Va	
City of Glen Dale, W. Va	
Wetzel County	

Coverage

This network covers an area of 965.78 square miles and a population of 190,011, according to the 1950 census. In addition to this coverage, four other West Virginia counties adjacent to the Northern Panhandle have two-way radio installations operating on the same frequency, which results in the following units being added to the radio network system: Marion County, 4; Monongalia County, 4; Preston County, 3; Taylor County, 2.



Sheriff Lawrence J. Burley.

This makes a total of 42 units covering a total area of 2,479.22 square miles and total population of 372,150, according to the 1950 census. In addition, there are 23 radio-equipped cars operated by the State police in the counties covered by this system. This provides 100 percent radio coverage for law enforcement agencies in this section of the State. There are also several law enforcement agencies with radios operating on the same frequency in the areas of the States of Pennsylvania and Ohio adjacent to the Northern Panhandle counties of West Virginia, which actually afford tri-state radio coverage in this part of the country. Including the operator employed by the participating counties at Moundsville, operators are on duty in the various counties, the West Virginia Penitentiary and the West Virginia State Police Headquarters at Moundsville on a 24-hour basis.

Each day all police traffic for the previous day is cleared over the network. Details of all major crimes such as robberies, burglaries, automobile thefts, and other larcenies, assaults, and hit and run cases, as well as descriptions of escaped convicts and other fugitives, and other matters of mutual interest are transmitted. This facilitates coordination of effort on the part of law enforcement agencies in the area in the solution of the crimes listed and the apprehension of the convicts and other fugitives described. In the investigation of automobile accidents in the parts of the counties situated outside city limits the network results in the more rapid dispatch of ambulances to care for the injured and greatly aids the investigation by the interested agency. During dry seasons of the year small forest fires in isolated sections have been reported promptly, resulting in assistance being obtained to extinguish them before they got out of control. In several instances missing persons in the area have been located through the widespread publicity given the descriptions of the individuals involved.

Aid in Prison Escapes

The radio network has been particularly effective in the coordination of the efforts of law enforcement agencies in the location and apprehension of convicts escaping from the West Virginia Penitentiary at Moundsville. There have been no escapes from the walled enclosure of the main prison in recent years. But there are rather frequent occasions when convicts assigned to an



Sgt. P. B. Swiger contacts radio operator in State Police office at Moundsville, W. Va.

honor camp or on work details outside the prison walls take advantage of the situation to escape from control. When notice of such an escape is received, it is immediately transmitted on the radio system which results in radio cars being dispatched to key roads and strategic locations. These radio cars work in close conjunction with the penitentiary guards, who use trained bloodhounds in the rural areas in the vicinity of the penitentiary. This coordination has resulted in about 95 percent of such escapees being located and apprehended within a short time.

A case recently brought to a successful conclusion through the conviction of two men for arson in the Marshall County circuit court demonstrates the value of rapidly alerting surrounding law enforcement agencies when the commission of a crime is determined. In March 1955, a house located in Moundsville was discovered burning. There was evidence that gasoline had been used to set it on fire. This information was transmitted on the radio network and within ten minutes two men were apprehended by police in the nearby town of McMechen, W. Va. Both of them were severely burned and their automobile, which investigation later disclosed had been stolen in Baltimore. Md., contained cans which had been used to carry gasoline. The two men were convicted of arson in the Marshall County circuit court and sentenced on June 23, 1955, to 2-20 years plus 5 years because of a prior conviction for felony.

Use in Disasters

Recently, three of the larger chemical plants in the vicinity of Moundsville and New Martinsville, W. Va., have begun installation of radios for the purpose of establishing quicker communication with law enforcement agencies in the area. This has been done in order that immediate notification can be given in the event of an explosion or fire in these plants which might result in dangerous gases escaping through the country adjacent to the plants. If such a disaster should occur, the radio network could be utilized to quickly alert the entire tri-state area, including the Northern Panhandle of West Virginia. Radio cars could be assigned to set up roadblocks at certain points to permit only essential cars into the area and for evacuation and other similar purposes if deemed necessary. This type of communication could be readily adapted to Civil Defense programs which may be formulated for this section of the country.

Although this radio system has been in operation for only a comparatively short time, its effectiveness in coordinating the efforts of the participating law enforcement agencies in the location of stolen automobiles and other property, in the location of missing persons, in the investigation of automobile accidents, in the apprehension of escaped convicts and the location and arrest of other fugitives has been repeatedly demonstrated. With further experience it is believed that a greater utilization of its facilities will be made by the participating agencies. Its scope can be broadened to bring additional agencies and mobile units into the system. The network should be an increasingly important factor in combating crime and promoting better cooperation among the law enforcement agencies in the Northern Panhandle of West Virginia.

STANDARDIZED ABBREVIATIONS

The FBI has available for distribution a 20-page pamphlet listing standardized abbreviations which should be used in connection with submission of fingerprint cards to the FBI. For uniformity and expediency in handling fingerprint cards, it is desired that these abbreviations be used rather than State, county, or municipal code numbers. Copies of this pamphlet may be obtained free of charge by writing to the Director, Federal Bureau of Investigation, U. S. Department of Justice, Washington 25, D. C.

Eyeglasses Trap Burglar

Recently Sgt. James F. Murphy of the Cambridge, Mass., Police Department, while investigating a break-in at a local drugstore, found a pair of eyeglasses near the skylight through which the burglar had entered. Taking these to an optometrist, he learned the formula of the lenses. In checking the modus operandi file of the local police department, the officer located a man who, 15 years previously, had received a 15- to 17-year sentence. He next examined the medical records at the prison where this man had been incarcerated and discovered that his prescription formula matched exactly the formula of the glasses found on the roof of the burglarized building.

The officer subsequently located his suspect and questioned him regarding the break-in. The suspect at first denied any connection with the burglary. He changed his story, however, when Sergeant Murphy showed him the glasses and explained that he knew they were ground to the exconvict's prescription. The suspect admitted his guilt and was subsequently sentenced to 2 years in jail.

Bank Booklet

Copies of the informative booklet entitled "How Banks Can Help the FBI" are available to interested law enforcement officers and individuals affiliated with banking institutions through the office of the Superintendent of Documents, United States Government Printing Office, Washington 25, D. C. The price is 10 cents per copy. On orders of 100 or more going to one address, there is a 25 percent discount. The booklet sets forth preventive measures which can be taken by banks and banking-type institutions to forestall victimization of their premises.

For your information, the Superintendent of Documents of the Government Printing Office does not send the material collect. Therefore, the necessary funds must accompany an order. Checks or money orders for bulk quantities should be drawn payable to the Superintendent of Documents. Law enforcement officials and persons affiliated with banking institutions should request it on stationery bearing the letterhead of their organization.

IDENTIFICATION

In previous articles the division of the criminal fingerprint file in the Federal Bureau of Investigation's Identification Division was discussed. As previously stated, criminal fingerprint cards are first divided according to sex, age, amputations, deceased, and mutilation. Within each of these groups the fingerprint cards are then divided according to their primaries. Within each primary division the fingerprint cards are further divided by means of their secondary classification. It should be noted that these groups do not provide an adequate subdivision for many of the primary and secondary combinations.

Therefore after the primary and secondary classifications have been utilized, the fingerprint cards are further subdivided by the use of the subsecondary classification (see fig. 1). A definite sequence or order of the filing of fingerprint cards in the above-mentioned subsecondary classification will be discussed in this article.

Subsecondary

The further division of the secondary groups is accomplished by grouping according to the ridge counts of loops and the ridge tracings of whorls.

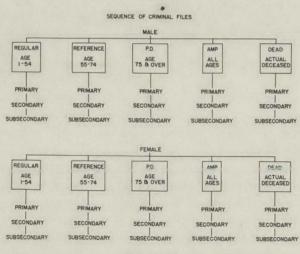


Figure 1.

Sequencing and Filing the FBI's Fingerprint Cards

The result of this grouping is called the subsecondary. The subsecondary classification appears just to the right of the capital letters which represent the secondary. The subsecondary is shown in the classification formula by capital letters representing the values assigned for ridge counts of loops and ridge tracings of whorls of fingers 2, 3, 4, and 7, 8, 9. The subsecondary is used when no small letters appear to the right of the secondary classification.

The Federal Bureau of Investigation, however, has found it necessary in the past several years to extend this subsecondary division to many of the small letter groups which became too large for efficient handling. In the subsecondary, fingers 2, 3, and 4 are used for the numerator, and 7, 8 and 9 are used for the denominator. A ridge count of 1 to 9, inclusive, in the index fingers (2 and 7) is brought up into the subsecondary formula as I. A count of 10 or more is brought up as O. In the middle fingers (3 and 8) a count of from 1 to 10, inclusive, is brought up as I, while a count of 11 or more is brought up as O. In the ring fingers (4 and 9) a count of from 1 to 13 is brought up as I and 14 or more as O.

It should be noted that, although it is entirely proper and feasible to use all six fingers of the subsecondary where necessary, only so many should be used as the size of the group requires. Even though there are places in the file where prints are not sequenced and filed by the entire subsecondary, it is best to indicate the entire subsecondary on the fingerprint card when it is classified, in order to provide for any future expansion of the files (see fig. 2).

Letters

There are three types of letters which may appear in each of the fingers of the subsecondary: I, M, and O. It will be noted that a capital M will appear in the subsecondary only in those cases where a whorl-type pattern is present. The following chart (see fig. 3) will illustrate the manner in which the figures of ridge counting are

translated into the letters I and O so that they may be grouped or sequenced with the whorl tracings I, M, and O. The following are examples illustrating the sequence for filing of the subsecondary in addition to the other divisions of the

CRIMINAL TSI No. BROADING OF PERSONS PROGRAMMED PERSONAL OF PERSONS PARAMETERS	ROE, WALTE	NAME WHITE PARTY	MALE WHITE 61 146 11-3-1927 BLACK HAZEL
8573 MAIN STREET CARPENTER	8-1962 LEAVE VIII	S. SPACE SLAND	BLACK MAZEL
NONE	DALLAS, TEXAS	1 R 110	
NUNE, SIGNALINE OF DEPOSITS. DESC.	AMERICAN	1 R 111	
N. J. Carlon 2-19-4	9 Date of Street, Street		
CRIMINAL FBI So: SEMECTORS OF FESSION TENDERPORTED	DOE, JAMES	DOUGLAS	MALE WHITE 59 126
James Longies dec	POLICE DEPARTMENT KENNEWICK,	NONE	7-10-1932
184 SOUTH MAIN DRIVE	WASHINGTON		BROWNBLUE
SALESMAN	24164 STATE STATE		
SCAR UPPER LIP	SEATTLE, WASH.	1 R 111	
SECRETARION DE COPECIAL DECEM- TANDOS PORCESTORES :	U. S.	1 K 111	
Jacob Hart Jackages 1-8-5	ACCION AL		
CRIMINAL FILL REC. GEOMETRICAL PROCESSION TO CONTRACT STATES	ROE, JOHN	FRANK	"MALE "WHITE
	SHERIFF-S OFFICE	NONE	62 192
284 ROCKING HORSE ROAD	DUBUQUE, IOWA		1-22-1921
284 ROCKING HORSE ROAD SHIPPING CLERK	1857	IN MAKE BLANK	RED GREEN
SCATE AND MARKS	LIMA, OHIO	1 T II	
NONE SIGNATURE OF CHESCHAL HATE TOKING PROGRAMORY	UNITED STATES		
hadred R. Office 1-2-5.	A DATE A NO.		
CRIMINAL MANY TOTAL PAGE BANK	1 2000		
	All believes and the second		(Shire
FRI No.	DOE, KENNET	H ALBERT	MALE WHITE
TRI No. SHART OF THE STREET STREET	POLICE DEPARTMENT JACKSONVILLE,		MALE WHITE 61 192 8-29-1918
PB 80. Sharped or release construction Sharped or release construction 1829 KENSINGTON PLACE, N.	POLICE DEPARTMENT JACKSONVILLE, FLORICA		61 192
PE N. SEASON OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PERSON OF T	POLICE DEPARTMENT JACKSONVILLE, FLORICA 52164-9	NONE NONE	61 192 8-29-1918 BLONDBLUE
THE NO. SHARPER OF THE PROPERTY OF THE PROPER	POLICE DEPARTMENT JACKSONVILLE, FLORICA 52164-9 K MIAMI, FLA.	NONE 1 U OII	61 192 61 192 62 67 9 1918 8-29-1918 BLONDBLUE
PRI NO. SEASON OF THE PRINCIPLE PRI	POLICE DEPARTMENT JACKSONVILLE, FLORICA 52164-9 K MIAMI, FLA.	NONE NONE	61 192 61 192 62 67 9 1918 8-29-1918 BLONDBLUE
PRI NO. SEARCH OF THOSE PROCESSING PROCESSING OF THOSE PROCESSING TON PLACE, N. CLERK 239 to the season LARGE CUT SCAR BACK OF NECE SEASON SEASON LARGE CUT SCAR BACK OF NECE SEASON SEASON 2-27-5	POLICE ORPATMENT JACKSONVILLE, E. FLORIDA 52764-9 K. MIAMI, FLA. APERICAN	NONE AS MARIE BLAND 1 U 011 1 T IC	61 192 61 192 61 192 61 192 61 BLONDBLUE
THE NO. SHARE CUT SCAR BACK OF NECESSARY STATES OF THE ST	POLICE ORPATMENT JACKSONVILLE, E. FLORIDA 52764-9 K. MIAMI, FLA. APERICAN	NONE AS MARIE BLAND 1 U 011 1 T IC	61 192
THE NO. SHARMORD OF THE PROPERTY OF THE PROPE	POLICE DEPARTMENT JACKSONVILLE, E. FLORICA SEZEGA-9 K MIAMI, FLA. APERICAN APERICAN FOR ED MAR SEZEGA-10	NONE AL WARE BLANK 1 U OII 1 T IO Department	61 192 61 192 61 192 61 192 61 BLONDBLUE
THE NO. SHARMORD OF THE OF THE STREET PROPERTY OF THE STREET PROPER	POLICE DEPARTMENT JACKSONVILLE, E. FLORICA S2164-9 MIAMI, FLA. APERICAN GOVERNMENT JACKSONVILLE, E. FLORICA S2164-9 MIAMI, FLA. APERICAN GOVERNMENT AND ASSESSMENT ASSESSMENT AND ASSESSMENT ASSES	NONE AL WARE BLANK 1 U OII 1 T IO Department	MALE WHITE 72 182 1-7-1909
THE NO. SHARP COLOR PLACE, N. CLERK LARGE CUT SCAR BACK OF NECE LARGE	POLICE DEPARTMENT JACKSONVILLE, E. FLORICA SZIGA-9 MIAMI, FLA. AMERICAN AMERICAN SIGNATURE SIGNA	NONE AL WARE BLANK 1 U OII 1 T IO Department	MALE 2917E 72 182
THE NO. SHARP COLUMN TO THE PROPERTY OF THE P	POLICE DEPARTMENT JACKSONVILLE, E. FLORICA 52164-9 K. MIAMI, FLA. APERICAN APERICAN GOT AND ED MAP GOT A	NONE AL WALL BLANK I U OII I T IO D PAUL MINISTER BLANK NONE	MALE WHITE 72 182 1-7-1909
THE NO. SHARP COLOR PLACE, N. CLERK LARGE CUT SCAR BACK OF NECE LARGE	POLICE DEPARTMENT JACKSONVILLE, E. FLORICA SEG4-9 K. MIAMI, FLA. AMERICAN ROE, ED NAR SMERIFFS OFFICE GALESBURG, ILLINOIS CHICAGO, ILL.	NONE AL WALL BLANK I U OII I T IO D PAUL MINISTER BLANK NONE	MALE WHITE 72 182 1-7-1909
THE NO. 1829 KENSINGTON PLACE, N. CLERK LARGE CUT SCAR BACK OF NECESSARY LARGE CUT SCAR BACK OF NECESSARY CRIMINAL THE NO. 1748 QLD DROVERS WAY SPOTTER TATTOO: MARY - RIGHT ARM	POLICE DEPARTMENT JACKSONVILLE, E. FLORICA 52164-9 MIAMI, FLA. APERICAN APERICAN SURPRISH STATES SURPRISH STATES SURPRISH SURP	NONE 1 U OII 1 T IO D PAUL BOTH BANK NONE 1 A II	MALE WHITE 72 182 1-7-1909
TATIO: MARY - RIGHT ARM	POLICE DEPARTMENT JACKSONVILLE, E. FLORICA 52164-9 MIAMI, FLA. APERICAN APERICAN SURPRISH STATES SURPRISH STATES SURPRISH SURP	NONE 1 U OII 1 T IO D PAUL BOTH BANK NONE 1 A II	MALE WHITE 72 182 1-7-1909
TATIO: MARY - RIGHT ARM	POLICE DEPARTMENT JACKSONVILLE, E. FLORICA 52164-9 MIAMI, FLA. APERICAN APERICAN SURPRISH STATES SURPRISH STATES SURPRISH SURP	NONE 1 U OII 1 T IO D PAUL BOTH BANK NONE 1 A II	MALE WHITE 72 182 1-7-1909
TATIO: MARY - RIGHT ARM	POLICE DEPARTMENT JACKSONVILLE, E. FLORICA 52164-9 MIAMI, FLA. APERICAN APERICAN SURPRISH STATES SURPRISH STATES SURPRISH SURP	NONE 1 U OII 1 T IO D PAUL BOTH BANK NONE 1 A II	MALE WHITE 72 182 1-7-1909
PRI NO. 1829 KENSINGTON PLACE, N. 1829 KENSINGTON PLACE, N. CLERK LARGE CUT SCAR BACK OF NCC WARRINGTON TO SCAR BACK OF NCC TATO TO SCAR BACK OF NCC 1748 OLD DROVERS WAY SPOTTER TATO: MARY - RIGHT ARM WARRINGTON MARY - RIGHT ARM	POLICE DEPARTMENT JACKSONVILLE, E. FLORICA 52164-9 MIAMI, FLA. APERICAN APERICAN SURPRISH STATES SURPRISH STATES SURPRISH SURP	NONE 1 U OII 1 T IO D PAUL BOTH BANK NONE 1 A II	MALE WHITE 72 182 1-7-1909

Figure 2.



Figure 3.

classification formula which have been considered up to this point:

III	III	III	IMI	IMM	IMO	III	IOM	IOO	
MII	MIM	MIO	MMI	MMM	MMO	MOI	MOM	MOO III	
OII	OIM	OIO	OMI	OMM	OMO III	00I III	OOM	000 III	

The denominator is kept constant until each possible change in the numerator has been used, then the next denominator, IIM, would be used with all possible numerators as shown above. Each numerator in turn as listed above becomes the denominator for the complete sequence of numerators. Thus the last possible subsecondary of the sequence would be

000

In most groups or collections of prints it is necessary further to subdivide the subsecondary groups. This is accomplished by use of the major, final and key. In a future article, sequencing and filing by major, final and key will be discussed.

The fingerprint patterns shown in figure 2 accompanying this article are not clearly perceptible due to the reduced size of the illustration. The data in the remainder of the fingerprint card are being emphasized in this illustration rather than the fingerprint patterns.

Barefooted Burglar

Careful efforts to avoid leaving telltale fingerprints backfired in a recent case. A burglar entered a business establishment through a skylight, apparently climbed down a latticework to a glasstopped desk and then jumped to the floor. Detective Joseph Wilson, Kentucky State Police, to whom the case was assigned, found one latent print. This print, which was found on the glass-topped desk, turned out to be a footprint.

The officer learned that an ex-convict had been arrested by the local police after the burglary. He was especially interested to learn that the man had been barefooted when arrested.

When interviewed, the suspect emphatically denied any connection with the burglary. His footprints were taken, however, and a positive identification was made of the latent print found on the desk top. The burglar had removed his shoes and socks before committing his crime and had worn his socks on his hands, feeling confident that he was foiling any efforts to trace him through finger-prints.

WIREPHOTO SPEEDS IDENTIFICATION

In 1953, two bank robbers inadvertently left a gun in a bank they victimized. This gun was traced to the shop where it had been purchased and a sales slip was found which showed the signature of the purchaser. A wirephoto of the signature was transmitted to the FBI Laboratory. Ninety minutes later the contributing agency received a teletype advising that the handwriting characteristics on the sales slip were similar to the signature on a fingerprint card on file in the FBI's Identification Division. Further investigation revealed that this suspect and a companion were suspected of a number of armed robberies. Both were subsequently apprehended.

LATENT FINGERPRINTS

In addition to processing complete sets of fingerprints, the FBI's Identification Division frequently is requested to compare latent fingerprints found at the scene of a crime or on evidence with the fingerprints of criminal suspects. Latent fingerprint examinations are of such importance that a single fingerprint file containing the finger impressions of several thousand notorious criminals has been established in the Identification Division. This file facilitates the searching of latent fingerprints received in connection with heinous offenses such as kidnapings, extortion threats, and bank robberies.

During the fiscal year 1955, there were 5,876 latent fingerprint examinations made by the Identification Division. Many of these examinations resulted in the elimination of criminal suspects, while others helped to establish the guilt of persons who had violated the law.

WATCH PART AND PALM PRINT IDENTIFY SUBJECT

About 2:30 one morning last year the chief of police in a southern town received an urgent phone call. The caller had heard loud screams coming from a neighboring home and had seen a man leaving the vicinity.

The chief of police immediately went to the home the caller designated. There he found a young mother hysterical, her face and arms swollen and bruised. She told the officer that she had been awakened by a man kneeling on her bed beating her about the face. She further stated that the intruder had threatened to kill her and her children if she refused to submit to him.

The crime scene search revealed two important clues. A latent palm print was found on the sill of the window through which the intruder had entered. The working mechanism of a wristwatch was found in the bedroom. It belonged to no member of the victim's family.

Capitalizing on this latter clue, local officers patiently contacted jewelers in the vicinity until they found a jeweler who identified his mark on the movement of the wristwatch. The jeweler was able to identify the owner of the watch, who was subsequently located. His palm prints were taken and, together with the latent print developed on the window sill of the victim's home, were sent to the Identification Division of the FBI for examination. This examination showed that the palm print found on the window sill had been made by the suspect's right hand. At the trial a finger-print expert testified, using chart enlargements of both prints to show the identity to the jury.

The jury returned the verdict of guilty to a charge of rape, recommending that the subject be imprisoned for "not less than 20 years nor more than 20 years."



Description of an All-Purpose Firearms Range

One of the primary considerations pertaining to the construction of a new range should be its location. In determining the location, attention should be given to safety, accessibility, medical aid, and security.

Safety, of course, is of paramount importance. The range must be in a suitable site and located in such position as to eliminate any possible danger from stray bullets. A natural hill makes an ideal immediate impact area, provided the bullet stop does not contain stones or material which would cause ricochets. If possible, the area to the rear of the immediate impact area should be inaccessible terrain—such as swampland or unnavigable waters. If area of this type is not available, the land should be uninhabited, preferably fenced, and clearly marked by appropriate signs. The desired size of this area depends upon the maximum range of the weapons to be fired upon the range. For example, the impact area should be at least 2,000 yards for the .45-caliber submachinegun, 1,800 yards for the .38-caliber revolver, and approximately 500 yards for the 12-gauge shotgun (using 00 buckshot).

In the search for an appropriate site, accessibility should be a vital factor. The possibility of future expansion should be considered at the time of the original location selection. Ideally, more than one all-weather road should lead to the area and the range should be located within a few minutes' drive of two or more towns or cities.

Although every precautionary safety measure will be taken during firing sessions, it is important that first-aid supplies be located on the range. During the operation of the range, an automobile should be stationed on the accessible road so as to be readily available for general use and in the event of emergencies. In addition, it is wise to post in a conspicuous place the name, address and telephone number of the nearest hospital, ambulance, and doctor. Range personnel should be familiar with this information.

In the interest of security and control of the range, it might be suggested that the residence of

the maintenance man or range officer be located on the range property. The range officer should be recognized as such by all shooters and should be in charge of any firing that is done on the range.

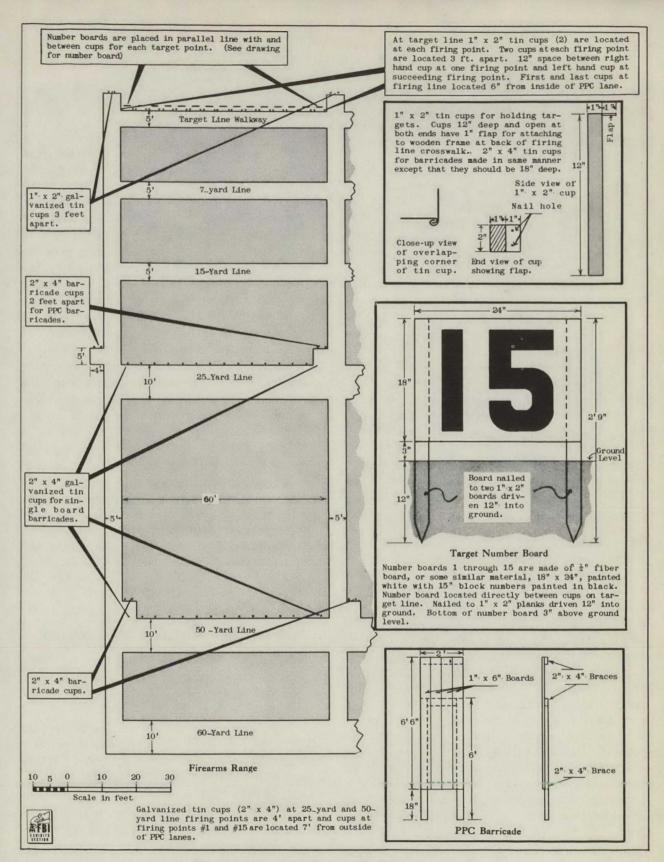
If possible, the range should be laid out in a north-south direction with the targets at the north side of the range. This affords the best natural light conditions as the light is on the target throughout the day and the shooter does not have to shoot toward the sun.

Physical Layout

Depending upon the available space and the particular needs, the range may vary from one firing point to an unlimited number of such points. In the accompanying diagram there is shown a simple layout for a range consisting of two lanes for firing the practical pistol course and 15 firing points for regular shooting. It should be noted that it is possible to enlarge this range in the future by merely adding as many firing points and lanes as desired, provided the site originally selected allows for such expansion.

Hard surfacing of the firing lines and PPC lanes is not absolutely necessary. If training is to be afforded even in inclement weather, however, the lanes and firing lines should be of some hardsurface material, such as asphalt or macadam. The lanes for firing the practical pistol course must be at least 60 feet apart for proper safety. Each lane should be 5 feet wide. At the target line of each PPC lane there should be two 1- by 2inch galvanized tin cups sunk into the ground 36 inches apart. Silhouette targets are pasted onto celotex board or some similar material which in turn is nailed onto two 7-foot stakes. The target is then supported by these stakes placed in the 1- by 2-inch tin cups. Between the two lanes, 15 number boards can be set up, 2 feet apart. Oneby two-inch galvanized tin cups should also be utilized as target holders along the target line.

There should be a 5-foot-wide walkway at the target line. Similar crosswalks should be pro-



Diagrammatic sketch for a practical firearms range.

vided at the 7- and 15-yard lines. Ten-foot-wide crosswalks should be at the 25-yard, 50-yard, and 60-yard lines. Two- by four-inch galvanized cups should be set 18 inches deep at each of the 15 regular firing points along the 25- and 50-yard lines, as indicated on the firearms range drawing. By using regular 2- by 4-inch boards as barricades, position shooting in preparation for the practical pistol course can be conducted at both the 25- and 50-yard lines.

The range as outlined above is adapted for training with the pistol for the recruit or the experienced police officer. For recruit training, 15 men can be accommodated for bull's-eye single-or double-action shooting. The bull's-eye target can be pasted on an Army "E" bobber target nailed to a 6-foot stake or it can be placed on the conventional silhouette target at the head area. Fifteen men can also fire at one time in double-action training, using either the bobber or the silhouette target.

If bobber targets are used, they should be uniformly placed either to the left or right of the number boards. If silhouette targets are used, they should be placed directly above the number board. In addition to the above procedures, double-action training can be given, using either of the two targets for the double-action course with 15 men firing at one time.

Submachinegun Course

Training on the .45-caliber submachinegun can be conducted in relays of eight men each, using the odd-numbered firing points. Two targets should be used for each shooter to afford training in moving from one target to the other in various levels of shooting; i. e., from the hip, shoulder, and kneeling positions. The bobber target is most satisfactory for this phase, but the silhouette target can be used. If the bobber target is employed, one should be placed on either side of the number board, using only the uneven-numbered firing points to obtain the maximum number of shooters which safety will allow. If the silhouette target is used, targets should be placed over each number board, but the firing points should be the uneven numbers, for safety reasons.

Practical training for the 12-gauge shotgun can be afforded by using the bobber targets on firing points 1 through 5 and 11 through 15, thus accommodating two shooters at one time. This course is usually fired from the 15-yard line (hip level) and 25-yard line (shoulder level). If hand traps are available, no more than two should be used, the traps being used at the 15-yard line on the two practical pistol course lanes.

Other Considerations

Some type of sound equipment is desirable but is not absolutely necessary on a range of this size, as hand megaphones can be used for commands. In the event electric current is not available at the range site, consideration could be given to a battery-operated set. If electricity is available and the cost is not prohibitive, it is advisable to have an outlet at the 25-yard line in the middle of the range for closer control and observation by the range officer when shooting at the 25-yard line or closer. The main outlet should be placed to the rear of the 60-yard line at the midpoint of the range for control of the practical pistol course and 50-yard line position shooting.

Some provision should be made to provide automobile parking for the shooters. Until such time as funds become available for a shooting shed or clubhouse, the parking area should be immediately behind the 60-yard line.

Water should be available for drinking purposes, for mixing paste, and as a safety precaution against fires in dry areas.

The details set out herein provide the basic data for the construction of a range which can serve many purposes in connection with firearms training. Additional information or instructions concerning the building or use of firearms ranges can be obtained upon request to the FBI.



THE FBI PRACTICAL PISTOL COURSE

A 14-page instructional pamphlet entitled "The FBI Practical Pistol Course" is available without charge to law-enforcement officers through the FBI. The pamphlet contains instructions for firing the course and individual illustrations of the various positions. A chart illustrating this course appears on the inside back cover of this issue of the FBI Law Enforcement Bulletin. Copies of "The FBI Practical Pistol Course" can be obtained in limited quantity by writing to the Director, Federal Bureau of Investigation, United States Department of Justice, Washington 25, D. C.

OTHER TOPICS

In Indiana, most of the vehicle thefts occur within city jurisdiction; therefore, the majority of the theft reports originate with the various city police departments. It is unlikely that an auto thief will remain very long within the city where he has stolen a vehicle, unless he is a commercial thief and conceals the vehicle in a local garage or similar place. He may, therefore, be expected to drive out of the city before the theft is reported.

Except in cases where something about the vehicle or the driver arouses the suspicions of a patrol officer who checks the vehicle as it is leaving the city, the local department will have no opportunity to make the apprehension. Consequently, the best opportunities for effecting an apprehension fall to the State police, sheriffs, and city police into whose jurisdiction the thief may drive the vehicle. Thus vehicle thefts become the concern of every police officer in the State, regardless of the point of origin of the theft. Such thefts are State and interstate problems.

One of the most interesting factors in the vehicle-theft problem is its relationship to other crimes, such as robbery, burglary, and the escape of prisoners. These thieves represent a real danger to the public and to police officers. In the 22-year history of the Indiana State Police Department, four members have been killed by criminals. Three of those four men were killed by criminals who were driving stolen vehicles. The records of other police departments may reflect similar experience.

Vehicle thefts represent far more than the loss of the car to the owner. Such thefts go hand in glove with most of our more serious crimes. If the theft can be prevented or an apprehension made soon after the theft, many of these more serious crimes may be prevented.

Many thefts can be prevented by private citizens through the simple expedient of locking the ignition and doors of vehicles when they are to be left unattended. This not only stops the inexperienced thieves who are often found in the joyrider group, but it forces the experienced thief to take just a

The Auto Theft Problem and the State Police

by Frank A. Jessup, Superintendent, Indiana State Police

little more time to get into the vehicle and, after gaining entrance, to get the motor started. He will probably have to break a window or vent in order to open the door. He will have to install a jumper to start the motor, or have an accomplice push or tow it away. The longer he is forced to delay his escape with the vehicle, the greater the possibility of witnesses discovering and reporting it.

Basically, the solution of the auto theft problem is the accurate and timely reporting of thefts, and the dissemination of this information to the members of all police departments who are likely to have an opportunity to apprehend the thief or to recover the vehicle. In addition, there is the need for a centrally located records system at which any police department may inquire to determine whether or not a particular vehicle has been reported stolen or is wanted.

The Training Division of the Indiana State Police Department cooperates with the sheriffs, chiefs of police, the FBI, and the State universities in conducting special training schools for sheriffs, city police, and town marshals.



Supt. Frank A. Jessup.

The apprehension of car thieves and the prevention of vehicle thefts hinge upon many things. Among these are adequate training for all police officers; thorough investigation of the theft at the scene of the theft, aimed toward obtaining all available information concerning it; proper recording of this information so it may later be used for trial and reference purposes; the dissemination of the essential information concerning the vehicle and any suspects by the quickest means possible to all police officers who may be immediately concerned; utilization of special facilities and techniques in examining recovered vehicles for physical evidence which may assist in locating and convicting the thief; and, most important of all, the application of patrol observation techniques and the subsequent checking of vehicles and drivers by patrol officers and investigators.

State Law

In Indiana it has been provided by law that all county sheriffs, police officers, and other peace officers shall report daily to the Indiana State Police Department the stolen and recovered cars of which any such officer may have knowledge, and that the Indiana State Police shall prepare a report not less frequently than once a month, showing a list of all cars stolen and recovered in the State of Indiana. The department may distribute the reports as it deems advisable. As a consequence of these provisions, the necessary machinery and procedures have been set up within the framework of the police communications and record system in the State of Indiana so that information concerning the theft and recovery of vehicles is made available to interested police departments soon after the information is received at the State level.

Reporting

The reporting system is well organized. Any peace officer in the State, when he or his department learns of the theft of a vehicle through some citizen, will contact the nearest State police district headquarters by the quickest means available to him and provide the theft information. The district headquarters will originate a radio message and broadcast the information to all radio-equipped police departments within the district and to the other State police districts likely to be

affected. At the same time State police general headquarters records the information as received by radio. The radio message becomes the basis on which certain written records are made and kept. The district headquarters and general headquarters will file a copy of the message in their radio rooms and make a card for the stolen car file, which refers to the theft by motor or identification numbers. The information contained in the message is then available in a matter of minutes to any police department inquiring about the vehicle either by license number, motor number or identification number.

Supplemental to the thefts reported in Indiana, the records include some of the theft reports from other States and those reported by the National Automobile Theft Bureau in Chicago.

As a matter of procedure, the police department which originally received the theft report from the citizen is responsible to authorize the cancellation of the message regardless of who makes the recovery of the vehicle.

Broadcasts

To further disseminate the information concerning thefts and recoveries, State police general headquarters broadcasts a list of wanted license numbers three times daily. All the State police districts receive this information and in turn broadcast it for the attention of all radio-equipped police departments within their district. In addition, general headquarters prepares a daily summary which lists new stolen reports and cancellations. These summaries are mailed to every sheriff, police department, and town marshal in the State of Indiana. Copies are also sent to the Federal Bureau of Investigation, other States, the National Auto Theft Bureau, and the provost marshal. Thus, the essential information concerning vehicle thefts and recoveries is made available by the quickest means to all police officers in the State and other interested departments.

The information contained in the files of the Indiana Bureau of Motor Vehicles concerning titles, registration, and drivers' licenses is available to any police department. Inquiries may be made through the medium of the Indiana police radio net and State police general headquarters will relay the request for information to the Bureau of Motor Vehicles by teletype or other means. Replies to inquiries are relayed to the interested police department through the same channels.

The success or failure of patrol officers and other investigators to apprehend car thieves and recover stolen vehicles is dependent largely upon the training they receive. They must be taught the fundamental investigative techniques peculiar to vehicle theft investigations. They must learn to recognize things about the vehicle, the driver, and the registration and title papers which indicate possible theft of the vehicle. They must receive instructions concerning the modus operandi of the various types of car thieves.

The Indiana State police trooper is introduced to this type of training at the recruit level. Subsequent to that, he learns the practical application of this training during his probationary period while he is assigned to work with experienced troopers and investigators.

Periodically, inservice training schools are held which afford officers an opportunity to review previous training and to clear up points which the records indicate were not at first thoroughly understood. Procedures and policies are explained through the medium of Department regulations, memoranda, and other written communications, of which a copy is given to each of the enforcement personnel.

Because of his training and through his cooperation with sheriffs and other police departments, the State police trooper is able to pass on to these local officers, to some degree, what he has learned. This is particularly true in cases where other police officers have not had an opportunity to receive formal training on this subject.

Editor's Note.—This is the second article in a series concerning automobile thefts and the measures various law enforcement agencies and other interested organizations can take in combating this problem.

Case of the Pillow Slip Burglar

Chief R. E. Vickery of Kodiak, Alaska, tells of an interesting problem which he and other officers of his department recently were called upon to solve—a problem which Chief Vickery refers to as the "case of the pillow slip burglar and his desire for women's clothing." On March 5, 1955, the Kodiak Police Department was notified that various feminine effects had been taken from one of the local residences. A few days later, while

this case was under investigation, another complaint was received to the effect that a .45 colt automatic, \$12 in cash and several items of women's wearing apparel had been stolen from another local home. Officers immediately went to this home and proceeded to track the intruder through the snow. They followed his footprints for some distance to a main road where they no longer were able to distinguish the telltale marks. Then, concentrating on finding the stolen articles which they thought the thief possibly had abandoned, they found a pillowcase hidden near a hotel. The officers enlisted the cooperation of the hotel manager and, from a hotel room, maintained a surveillance on the pillowcase. Nothing happened. The officers then substituted another pillowcase and found that the original case contained various articles taken from the second burglarized home.

While the officers were working around the clock to solve this case, another burglary was reported. This time jewelry and women's wearing apparel comprised the loot. A pillowcase also was missing. The police were additionally disturbed as this was the second burglary to occur within a matter of hours, and they now knew that the burglar was armed. While investigation of this case was in its initial stages, a break came. of the officers reported that various items stolen from the second burglarized home had been traced to an individual who had occupied a room in the hotel near which the pillowcase was found. When interviewed, the hotel manager stated that the occupant had registered there on the night of March 5. This was the night of the first burglary. She also stated that the same young man had registered on the night of the second burglary but was using a different name.

When the suspect, a 19-year-old youth in military service, was brought in for questioning, he admitted the three burglaries. He said that he took articles which would be of value only to women in order to "throw police off the track." He said that he expected them to seek a married man as the burglar, and then ruefully added, "It looks like I was wrong." The youth's burglary escapades had netted him a total of \$12 in cash, various feminine effects which he could not use, and a .45 automatic which would not fire.

The confessed burglar was turned over to military authorities and subsequently received a dishonorable discharge, 7 years of hard labor, and loss of all pay and allowances.

WANTED BY THE FBI

JAMES EDDIE DIGGS, with aliases: Dick Diggs, "Smitty."

Unlawful Flight to Avoid Prosecution (Murder)

The attention of all law enforcement officers is directed to the fact that James Eddie Diggs, who has been a fugitive from justice since 1949 and one of the FBI's "Ten Most Wanted Fugitives" since 1952, is thought to be wearing plastic-rimmed glasses of the type shown on the retouched photograph shown on the right below. These glasses are believed to contain a slight but noticeable tint.

It is to be noted that the basic photograph which appears on the left below, and which also appeared in the December 1952 issue of the Bulletin, together with a write-up concerning this fugitive, was taken in 1943 when Diggs was approximately 30 years old. Diggs is now 42 years old and investigation reflects the strong possibility that he has gained considerable weight and varies the manner in which he wears his mustache.

It will be recalled that this man is charged with murdering his wife and two sons in Norfolk, Va., on May 26, 1949, and subsequently fleeing into North Carolina, where he is accused of shooting and critically wounding a police officer who stopped him for questioning.

Diggs was born at Morven, N. C., in 1913, and remained in that community until 1933, when he moved to Norfolk. From 1933 to 1949 he was employed almost continuously at Norfolk as a porter, truckdriver, and aircraft mechanic. In 1937 he



James Eddie Diggs.

was married. Described as a quiet, hard-working individual, Diggs maintained an excellent credit record and was generally well regarded by fellow workers, neighbors, and acquaintances.

About 1946, however, Diggs reportedly began drinking excessively and marital difficulties followed. During 1948 he was arrested on four occasions by members of the Norfolk Police Department and the Prince George County, Va., Sheriff's Office on charges of drunkenness, reckless driving, carrying a concealed weapon, and assault and battery. He was ordered to pay fines in each case.

Diggs is said to be an excellent marksman with both rifle and revolver. He is a hunting enthusiast and allegedly owns an automatic shotgun, a high-powered bolt-action rifle, and a Smith and Wesson .32 caliber revolver with a 4-inch barrel and a nickel-plated finish.

Diggs' complexion is normally dark brown, but it is believed that he may be using a skin bleach, making his complexion much lighter in color. It is also reported that he has very poor eyesight and, consequently, wears glasses practically all the time. His eyes are very sensitive to light and at the time of his disappearance required glasses of the following correction: R-.50-.50 cx 180; L-.25-1.25 cx 25; Crookes A.

Caution

Diggs is said to carry a .32 caliber revolver and is to be considered extremely dangerous. He is described as follows:

berroed an rollo in b.	
Age	42, born May 29, 1913, Morven, N. C.
Height	6 feet.
Weight	160 pounds (in 1949).
Build	
Hair	Black, possibly graying.
Complexion	Dark brown, possibly bleached.
Race	Negro.
Nationality	American.
Education	Eleventh grade.
Occupations	Aircraft mechanic, chauffeur, and porter.
Characteristics	Wears mustache and sightly tinted glasses; has space between upper front teeth; has gold right upper front tooth.
FBI No.	216, 692A.
Fingerprint classification	8 0 5 A II 3 0 17 A II
** *	

Reference_____

17 aA

Notify FBI

Any person having information which may assist in locating this fugitive is requested to notify immediately the Director of the FBI, United States Department of Justice, Washington 25, D. C., or the Special Agent in Charge of the nearest FBI field office.

ART OF TRACKING

(Continued from page 6)

on his return to town he reported the fact to Pickens. Early next morning Pickens was in the hills investigating. First he found the spot where two doe deer had been killed and dressed out. Next he located a fresh campsite with tracks of three men, a woman, a small child, a car and two-wheeled trailer. Eventually he talked with a sheepherder who had seen the campers.

New Mexico being a bilingual state where both Spanish and English are spoken, it happened that neither man understood the other to any extent. But Pickens did grasp that in the party there had been "una senora con cabello colorado"—"a redheaded woman!"

A case of this type demands the height of perseverance to bring it to a successful conclusion. All Pickens had to go on, aside from that bare description, "a redheaded woman," was an empty match book-and the wheel tracks. He lost those tracks almost as soon as they got off the dirt road and onto the black-top. But for 28 miles he sidetracked into every dirt road along the way, until he finally picked up the trail once more. He found the woman, her husband and their child living near Socorro, 30 miles from the campsite, as the crow flies. Eventually he found the other two men living near Estancia, more than 60 miles from the site. The case was closed with four prosecutions for violation of game laws, and the return of one of the men, a parole violator, to the penitentiary.

Cooperation

Conservation officers, game wardens, rangers, by whatever name your state calls them, are in the woods most of the time. In a relatively short while they pick up "accidental" experience that other men cannot acquire in a lifetime. When it comes to helping other law-enforcement agencies in search for wanted, lost or missing persons, you can count on their cooperation. In cases where the special skills and talents of these trackers can be utilized, it is good policy for other law enforcement agencies to seek their assistance.

Time To Nominate

Police officers in all law-enforcement agencies are requested to be alert for boys and girls in their communities who may be logical candidates for either the Young American Medal for Bravery or the Young American Medal for Service. These medals are awarded annually by the United States Department of Justice and presented by the President. Their purpose is to extend recognition for outstanding bravery and service.

The rules and regulations governing nominations were published in the January 1952 issue of the FBI LAW ENFORCEMENT BULLETIN. Additional copies may be obtained by writing to the Director, Federal Bureau of Investigation, Washington 25, D. C.

Articles describing the awards made in previous years can be found in the September 1952, October 1953, and March 1955, issues of the FBI LAW ENFORCEMENT BULLETIN.

As indicated more fully in the rules and regulations, nominations for the 1956 awards for meritorious conduct in 1955 should be made soon.

FIREARMS EXAM SOLVES CASE

In 1953, two FBI Laboratory examiners testified at a murder trial in a Southern State. A firearms examiner testified that a cartridge found at the crime scene was fired from the defendant's gun. He further stated that his examination revealed that the fatal shot was fired from the outside through the screen door on the victim's trailer and that the muzzle of the gun was held from 6 to 12 inches from the door when fired.

Another laboratory examiner testified that the small wire fragments removed from the victim's body were the same size, type, and composition as the wire strands from the screen door.

The defendant was found guilty of being an accessory before the fact of murder in the first degree and was sentenced to prison for the remainder of his natural life. The Laboratory examinations furnished vital evidence in this case.

Crime Scene Search Solves Murder

A careful crime scene search and subsequent scientific examination of physical evidence played an important part in a recent Kentucky murder case, which at first appeared to be an accident.

When investigating officers were called to the scene of the "accident," they found a woman's body lying in a ditch with her head crushed. Her husband, who had notified the police, stated that a car had run him off the road and he had swerved into the ditch to avoid hitting the other car. He said that his wife, who was riding with him at the time, fell out of the vehicle and was crushed under the wheels.

A short time later, but after the "accident" victim had been buried, the county attorney's office requested the Kentucky State Police to investigate for evidence of foul play. A daylight crime scene search was conducted. About 100 yards from the spot where the body had been located, an 18-inch combination jack handle and tire tool was found. Blood stains and a single hair, apparently of human origin, were found on this tool. The investigating officer traced the tool and found that it belonged to a certain type of truck. proceeded to the home of the dead woman's husband and found that the latter owned a truck of this type. Upon searching the vehicle, he found that the combination jack handle and tire tool was missing. The husband was arrested but refused to make any statements.

The victim's body was exhumed and hair specimens were obtained from her head. This evidence, together with the tool, was sent to the FBI Laboratory for examination.

In the meantime, an autopsy showed that the victim's head was the only part of her body which had been injured. It also showed that wounds in her head could have been made by the jack handle and tire tool combination.

The report which came from the FBI Laboratory stated that human blood had been found on the tool submitted and that the specimen of hair found on this tool was believed to be from a white female and was similar to hair from the head of the victim.

A trial followed and the defendant was sentenced to life imprisonment on a verdict of guilty of first degree murder.

Diatoms Destroy an Alibi

In the early morning hours of November 9, 1953, burglars broke the glass of a window in a cleaning establishment in a southern city, entered the building through the broken window, collected a quantity of clothing and departed through a rear door. Shortly after this burglary, two suspects were apprehended nearby. Both stoutly denied any knowledge of the crime. Doubting policemen, however, escorted them to jail. The policemen then obtained the clothing the two suspects were wearing at the time of the apprehension and immediately delivered the clothes, along with samples of glass from the broken window and soil and dirt specimens from inside and outside the plant, to the FBI Laboratory for examination.

In one suspect's trousers, the examining technician found a tiny glass particle which could have come from the broken window at the cleaning plant. The jacket of this suspect, and the shoes of both suspects, contained a substance described by the examiner as "a gray colored diatomaceous gelatinous material." A similar material was found to be present in the specimens which had been collected outside the rear door of the plant and on the floor of the building. This type of material is often used by cleaning establishments in their cleaning operations. A further check was made and it was determined that the particular "diatomaceous material" used at the burglarized cleaners differed from that used by nearby cleaners.

The police department was notified of the Laboratory findings.

On December 7, 1953, the two suspects were brought to trial. Their attorney, knowing of the positive findings of the FBI Laboratory, advised his clients to plead guilty. This they did, and each received a sentence of 2 years in the State penitentiary.

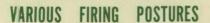
Prompt collecting and submitting of physical evidence by local police, followed by a thorough, scientific examination of this evidence by a trained technician, brought this case to a quick conclusion.

SAFE INSULATION

Particles and fragments of safe insulation often break loose and become lodged in the floor mats or other parts of vehicles used to transport safes. These bits of evidence can be vital in the solutions of burglaries.

FBI ACADEMY PRACTICAL PISTOL COURSE

The practical pistol course consists of 50 shots on the silhouette target.













SCORING

SHOTS STRIKING SILHOUETTE TARGET SCORED ACCORDING TO THE VALUE OF THAT AREA. TOTAL TIME SIX MINUTES AND TEN SECONDS.....



PRONE

SITTING

KNEELING

HIP SHOOTING

60 YARD LINE 5 SHOTS FIRED

TRAINEE STANDS ON 60 YARD LINE WITH LOADED GUN IN HOLSTER AND WITH ONLY 35 ADDITIONAL ROUNDS OF AMMUNITION - AT COMMAND "COMMENCE FIRING" TRAINEE AS SUMES A PRONE POSITION AND FIRES 5 SHOTS - RELOADS WHILE PRONE -- HOLSTERING GUN, TRAINEE ADVANCES TO THE 50 YARD LINE ...

25 YARD LINE 15 SHOTS FIRED

TRAINEE FIRES 5 SHOTS KNEELING, DOUBLE ACTION; 5 SHOTS STANDING WITH STRONG HAND FROM BEHIND BARRICADE, DOUBLE ACTION; 5 SHOTS STANDING WITH WEAK HAND FROM BEHIND BARRICADE, SINGLE ACTION.,

START HERE

1

FEET

7 YARD LINE

10 SHOTS DOUBLE ACTION FROM HIP

ON COMMAND "DRAW", TRAINEE DRAWS AND FIRES 5 SHOTS DOUBLE ACTION FROM THE HIP -- RELOADS AND FIRES 5 ADDITIONAL SHOTS IN THE SAME MANNER -- 10 SHOTS TO BE FIRED FROM THE COMMAND "DRAW" WITH SHOTS TO BE FIRED FROM THE COMMARD "DRAW" WITH-IN 25 SECONDS - TIME IS TAKEN OUT TO PERMIT TRAINEE TO RETURN TO THE 60 YARD LINE WHERE TIMING AGAIN BEGINS AT COMMAND "COMMENCE FIRING" ...

50 YARD LINE 20 SHOTS FIRED

TRAINEE FIRES 5 SHOTS FROM EACH OF FOUR POSITIONS: SITTING. PRONE, STANDING WITH LEFT HAND AND STANDING WITH RIGHT HAND-LOADING AND REHOLSTERING BE-FORE ADVANCING TO THE 25 YARD

DEFENSE SHOOTING WITH A HANDGUN

LEFT RIGHT HAND

HAND

FEET

UNITED STATES DEPARTMENT OF JUSTICE FEDERAL BUREAU OF INVESTIGATION WASHINGTON 25, D. C.

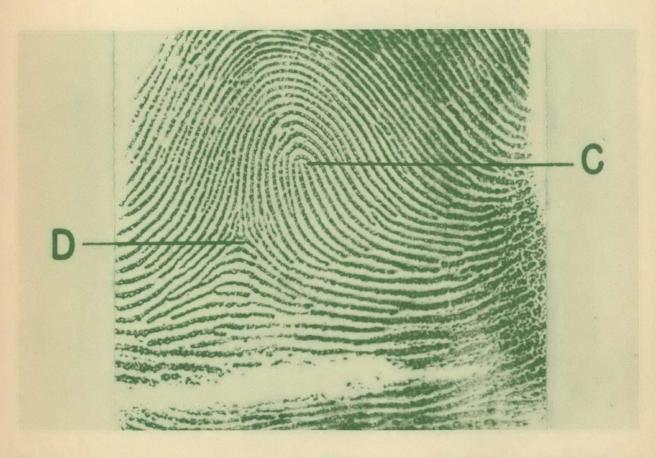
OFFICIAL BUSINESS

RETURN AFTER 5 DAYS

PENALTY FOR PRIVATE USE TO AVOID PAYMENT OF POSTAGE, \$300 (GPO)

Captain Vayne Gurdane State Police Portland, Oregon

Interesting Pattern



The loop type pattern shown is not questionable but is interesting insofar as the location of the delta is concerned. The delta (point D) is found at a point on a ridge located at and directly in front of the divergence of the type lines. By locating the core at point C, a ridge count of 10 is obtained.