• *Restricted to the Use of Law Enforcement Officials*

FBI
Law Enforcement BULLETIN

1949
MAY
Vol. 18 No. 5

Federal Bureau of Investigation
United States Department of Justice
J. Edgar Hoover, Director

FBI *Law Enforcement Bulletin*

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CONTENTS

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Published by the **FEDERAL BUREAU OF INVESTIGATION, UNITED STATES DEPARTMENT OF JUSTICE,** ***Washington, D. C.***

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

May 1, 1949

TO ALL LAW ENFORCEMENT OFFICIALS:

We are today witnessing an intensified attack on religion--the moral foundation of our free way of life.

It has been made unequivocally plain to every thinking individual that the barbaric slave philosophy sprung from the dark ages and known today as Communism, is the mortal foe of all religion.

Karl Marx wrote in the Communist Manifesto, ". . . .Communism abolishes eternal truths; it abolishes all religion and all morality, instead of constituting them on a new basis; it therefore acts in contradiction to all past historical experience."

The first sentence in the preamble of the latest Constitution of the Communist Party, U.S.A., states, "The Communist Party of the United States is the political party of the American working class, basing itself upon the principles of scientific socialism, Marxism-Leninism."

Marx, himself, coined the phrase, "Religion is the opium of the people," and stated that "The criticism of religion is the beginning of all criticism." Lenin, who applied Marx' principles in starting the biggest blood-letting of all time, was quite as outspoken. "We must combat religion," he said, "--this is the ABC of all materialism, and consequently Marxism." Realizing how deep-rooted religion is, he recommended caution and a clever combination of open attack combined with deceit and subterfuge.

The present head of the so-called "American Communist Party," in discussing a possible future "United Soviet States of America," says, "The churches will remain free to continue their services, but their special tax and other privileges will be liquidated. Their buildings will revert to the state. Religious schools will be abolished and organized religious training for minors prohibited. Freedom will be established for antireligious propaganda. . .God will be banished from the laboratories as well as from the schools."

Incidentally, he added that American political parties will be liquidated, and "Likewise, will be dissolved all other organizations that are political props of the bourgeois rule, including Chambers of Commerce, employers' associations, Rotary Clubs, American Legion, YMCA, and such fraternal orders as the Masons, Odd Fellows, Elks, Knights of Columbus, etc."

No religion, denomination or sect has been spared the fury of the Party. Christianity, Judaism, and all the other religions of the earth which recognize a Supreme Being are marked for extinction.

We who are sworn to uphold the law of a free Nation, the very life of which is rooted in the moral code derived from religion, must learn the nature of the danger we face. We have no other alternative.

Yours very truly,

J. Edgar Hoover

John Edgar Hoover
Director

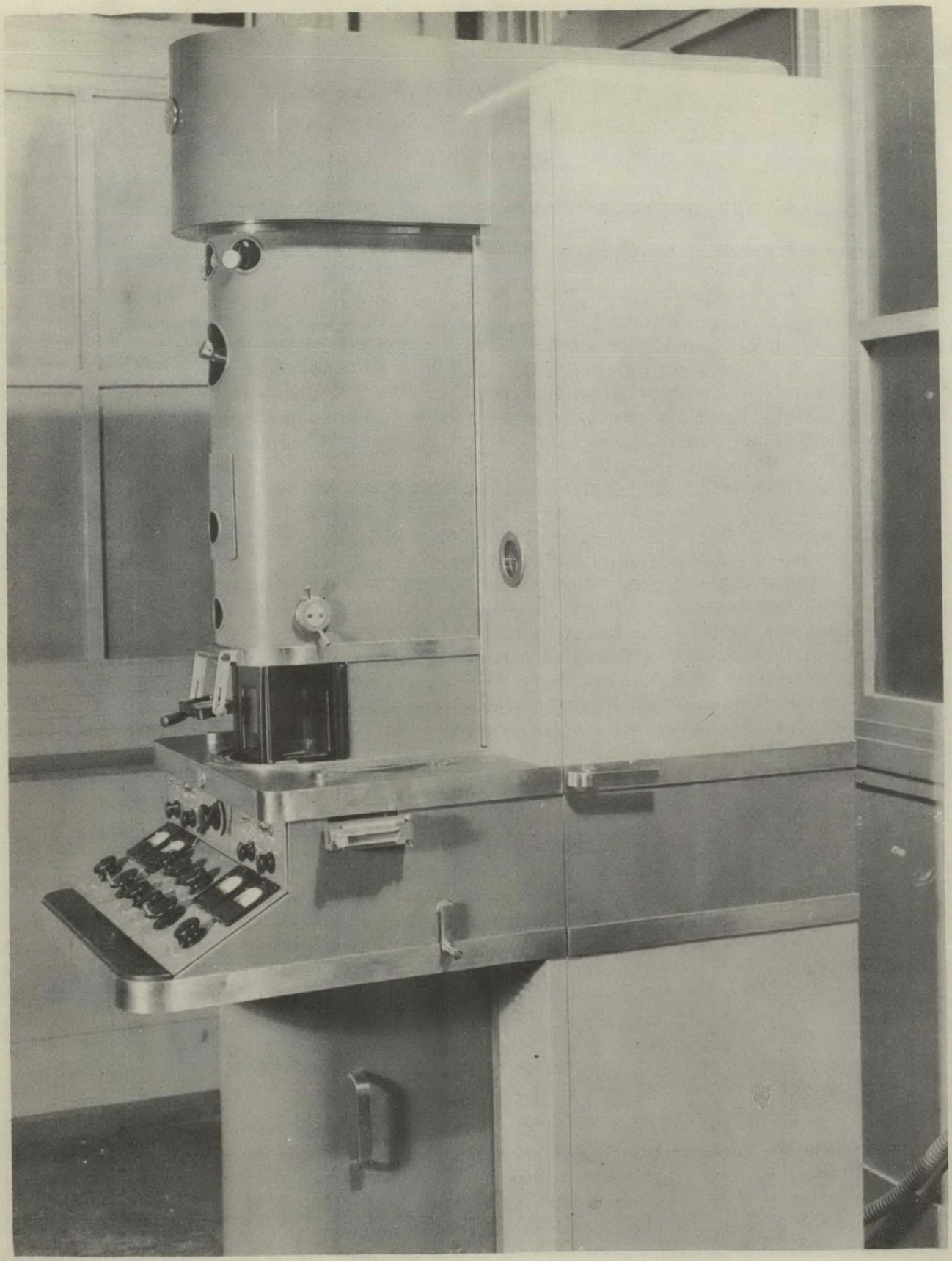


Figure 1.—*Electron microscope.*

SCIENTIFIC AIDS

Electron Microscope—A New Instrument in Crime Detection

Introduction

The field of electron microscopy is relatively new. In the last 5 to 7 years it has been developed from a subject of academic concern to a practical science. Today it is used in all types of industry and research. The microscope is peculiarly fitted for crime detection work in view of the fact that the amount of evidence left at the scene of a crime is often minute.

The FBI Laboratory acquired an electron microscope (fig. 1) in line with its policy of subjecting all evidence submitted to the most thorough and up-to-date scientific examination possible.

Because of the relative newness of the field, references and standards are limited. Many specimens viewed in the instrument are seen by human eyes for the first time. It follows that a great amount of research is necessary in analyzing an unknown material. Despite these facts, the FBI Laboratory's electron microscope began paying dividends in less than 6 months from the time it was installed. In use for slightly over a year, it has been utilized in cases including murder, extortion, and burglary.

Why the Optical Microscope?

A law-enforcement officer's vision is limited when evaluating evidence found at the scene of a crime. First of all, the human eye cannot distinguish two points lying less than 1/250 of an inch apart. Secondly, it can see only the small visible light portion of a large spectrum which includes X-rays, ultraviolet rays, infrared and radio waves, all of which are invaluable aids in crime detection.

Suppose we wish to see the details on a bullet for a ballistics comparison. Many of the interesting and conclusive markings lie closer together than 1/250 of an inch, say 1/25,000 of an inch, apart. We must use a microscope having a magnification of 100 times in order to make the details appear to be 1/250 of an inch apart and thus enable us to see and study these markings.

Why the Electron Microscope?

The optical miscroscope has a limit. Magnification cannot be increased indefinitely. It is generally accepted that the top useful magnification of a high-power optical microscope is around 2,000 times. Some microscopes can attain higher magnification. However, as the over-all image increases as the magnification is increased, the details become increasingly hazy.

How small an object we can see depends upon the wave length of the light we use to do the seeing. Light waves are considered to be similar in contour to the waves of ripples in water. The distance between each consecutive peak is considered the wave length. In visible light, red light has the longest wave length that the eye can perceive while violet light has the shortest wave length we can see. Beyond the red light, having longer wave lengths, are infrared rays; while below the violet light, having shorter wave lengths, are the ultraviolet and X-rays.

Over 70 years ago it was discovered that a perfect optical microscope could not resolve details finer than about one-half the wave length of the light entering the lenses of the microscope. After many years of painstaking and constant research, the optical microscope has reached a degree of perfection which equals this predicted limit. The optical microscope is therefore limited by the wave length of the light used to illuminate and view the specimen. If one could use a light or ray having a smaller wave length than visible light he could see smaller objects; however, the human faculties allow us to see only visible light.

The electron microscope utilizes a beam of electrically produced electrons instead of light. The wave length associated with these electrons is extremely small—smaller than X-rays. With the use of these short wave lengths, magnifications from 75 to 22,000 times may be obtained. Specimens can actually be viewed at 22,000 times and any specimen viewed can be quickly and easily photographed. The resultant photograph can be

safely enlarged at least 5 times and in this manner magnifications well over 100,000 times can be obtained.

One is probably asking himself, "How can you see electrons if the eye can only see visible light?" To answer this question, we can draw an analogy to the doctor's X-ray fluoroscope. In this case, the invisible X-rays hit and excite a fluorescent screen and cause it to give off visible light. If we hold up our hand in front of the X-ray beam and view it through the fluoroscope we can see that the X-rays pass through the flesh and skin very easily; however, when they hit the bones which are more dense, they do not penetrate as well and a darker area appears on the fluorescent screen in the same shape as the bones. In reality, we obtain a shadowgraph of the hand. If there is a break in one of the bones, the X-rays will pass through the break in the same shape and form as the break and will again excite the fluorescent screen and become visible. In addition, X-rays will expose a photographic film and a permanent record can be obtained. Electrons will excite a fluorescent screen and cause it to give off visible light as do X-rays. They will also expose a photographic film.

In the electron microscope, the object is placed between the source of electrons and a fluorescent screen. In this manner a shadowgraph of the object is easily seen. By replacing the fluorescent screen with a photographic film a permanent record can be obtained.

The image is not seen directly in the electron microscope as it is in the optical microscope, but it is seen by looking at the pattern produced by the object on a fluorescent screen, similar to that used on television sets or fluoroscopes.

How We Get Electrons

Electrons, it may be stated, are small particles carrying a negative charge of electricity. A small piece of tungsten wire, electrically heated, serves as the source of electrons. These are "boiled off" by the electrical heating. Just below the filament is a difference of 50,000 volts which collects, aims, and sends these electrons through the microscope.

As light does not penetrate through fog or smoke, electrons will not pass through air. It is, therefore, necessary to have the filament, lenses, specimen, and photographic film inside a very high vacuum. Two vacuum pumps working in unison create this vacuum. Electrons cannot pass through glass or any material which has an apparent thickness; therefore the electron microscope cannot have glass lenses. They are instead magnetic lenses which take advantage of the fact that magnetism can bend and focus a beam of electrons in the same manner that a glass lens can bend or focus a beam of light. These magnetic lenses appear much like the optical lens except that they do not possess glass and are surrounded by a variable magnetic field. By varying the magnetic fields we can vary the degree of magnification. The electron microscope has three lenses, the same number as that of an optical microscope.

The range of useful magnification of the electron microscope is extended by a factor of 100 over the optical microscope. A dime thus magnified may appear over a mile in diameter; a human hair as large as a giant redwood 40 feet in diameter.

One of the foremost problems in electron microscopy is the mounting of the object or specimen. Normally, a specimen is mounted on an extremely thin plastic film which in turn is supported by a small, fine wire mesh screen. The majority of the mounting process is done under the optical microscope. The specimen, which can be moved about inside the vacuum, is viewed on the electron microscope through one of the openings in the mesh screen.

Uses of the Electron Microscope

The electron microscope can be used for examinations and study in the broad fields of Chemistry, Textiles, Paints and Dyes, Ceramics, Metals, Soil Analysis, and Biology. Clays, of which there are many types, have always been troublesome to identify in soil analysis. With the electron microscope, it has been found that most of the clays exhibit a characteristic shape and therefore the electron microscope can be used beneficially in this type of examination.

Another beneficial use is in the examination and identification of safe insulation material. Certain safe manufacturers use diatoms as a filler in their insulation. Diatoms are microscopic silicified skeletal remains of marine plant life and are used for fillers in safe insulation, lipstick, paper, and many other materials. Diatoms are easily identified in the electron microscope. (See fig. 2.)

The electron micrograph in figure 3 shows the characteristic spiked pattern of zinc oxide smoke. A fine wire mesh screen was passed through the smoke from a burning piece of zinc metal. The screen was then inserted in the electron microscope

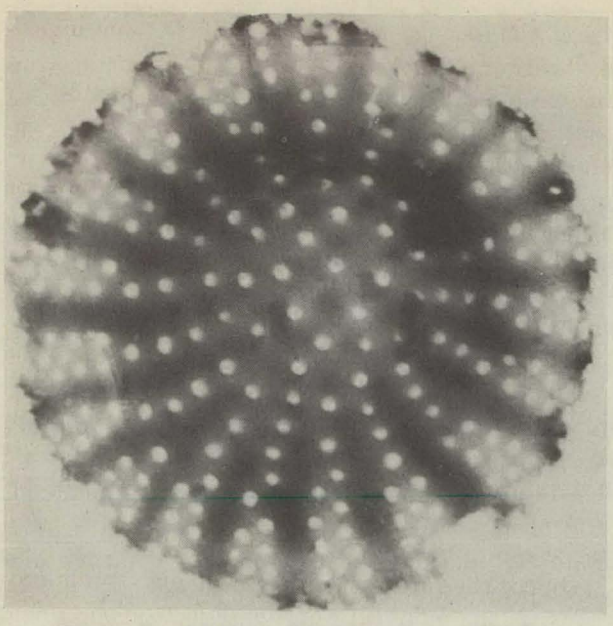


Figure 2.—*Diatom. Magnification—12,000.*

Figure 3.—*Zinc oxide smoke—Magnification—24,000.*

and the particles collected on the edges of the wires were photographed.

The Pittsburgh Police Department recently handled a case in which a newborn baby was found in a railroad station luggage locker. The infant was wrapped in a towel which had a yellowish-white deposit on it. In an effort to trace its origin, the towel was submitted to the FBI Laboratory for an analysis of the foreign deposit. In the electron microscope this deposit produced the images seen in figures 4 and 5. These images were readily identified as being those of spores, by which fungus reproduces. Although this examination did not aid in the tracing of the towel, it was successful in determining the nature of the foreign deposit.

Diffraction Camera

The electron microscope, besides being a microscope, serves as an important analytical tool in that it can also be used as a diffraction camera. All crystalline materials will bend or diffract X-rays or electrons at very distinct angles depending only on the molecular make-up of the crystalline mate-

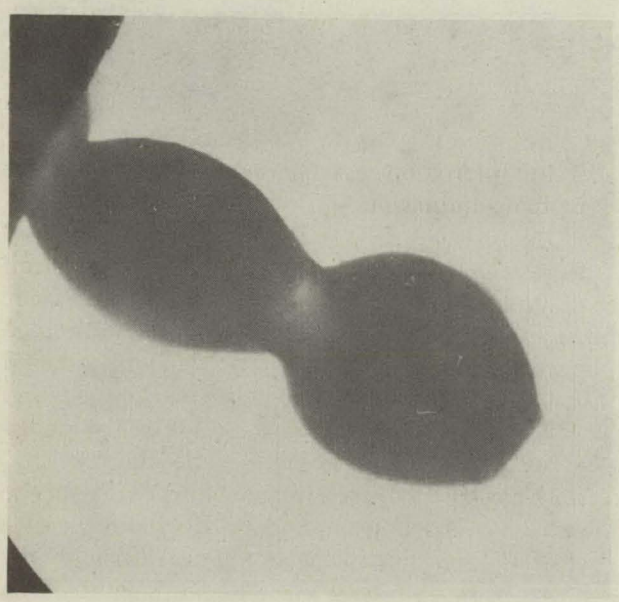


Figure 4.—*Plant spores—Magnification—8,000.*

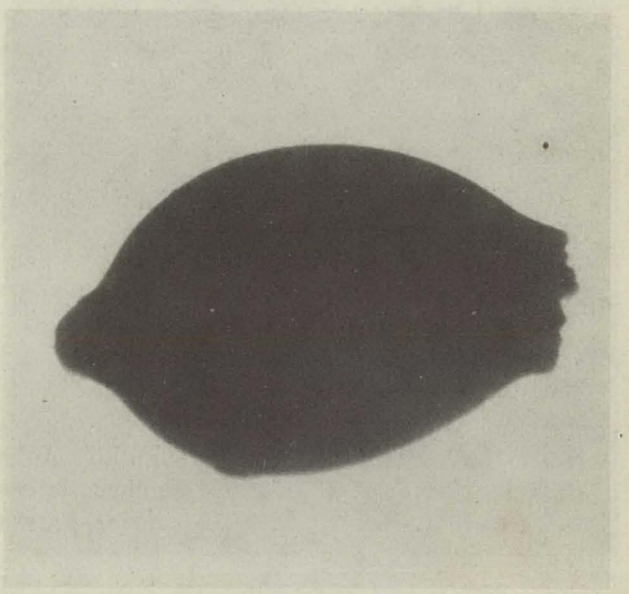


Figure 5.—*Plant spore—Magnification—14,000.*

rial. When a crystalline powder is bombarded by a beam of electrons, the beam will be diffracted or scattered by the powder and will leave the sample in a series of cones which intersect the fluorescent screen or photographic film as a series of circles or rings. (See figs. 6 and 7.) These diffraction rings are a measurement of the arrangement of the atoms in the sample. No two compounds will give the same series of rings unless they are the same compound. The pattern obtained, therefore, is actually a fingerprint of the compound.

The American Society for Testing Materials has available a card file which has the diffraction data of several hundreds of compounds tabulated. By measuring the diameter and intensity of the various diffraction rings and consulting this file, one can identify the composition of an unknown crystalline compound.

The diffraction unit of the electron microscope has been used successfully in numerous cases of varying types. Recently a service station in Greenville, S. C., was burglarized. The burglar made entry by way of an opening from which he removed a window. Later, a suspect was found to be carrying a pocketknife. A cursory examination of the knife revealed a small smear of a white, foreign substance thought to be putty. The knife was forwarded to the FBI Laboratory by the Greenville, S. C., Police Department in order that the foreign smear might be compared with putty from the service station window. An electron diffraction examination of the foreign deposit on the pocketknife revealed that it consisted essentially of calcium carbonate, as was true of the known putty sample as well.

The electron diffraction examination is nondestructive. This enables the laboratory to make a subsequent spectrographic examination of the foreign deposit to compare the trace of impure elements present with those present in the known putty sample.

It is pointed out that although a spectrographic analysis of a material requires a very small sample and will reveal all the metallic elements present, it will not tell how the elements were compounded. For example, if a sample of zinc silicate were examined in the spectrograph, the elements zinc and silicon would be revealed; however, it would not be known if the sample consisted of zinc metal and sand or zinc silicate. The molecule's fingerprint obtained from an electron diffraction examination of the same sample would tell that it was, in fact, zinc silicate. Electron diffraction, like electron microscopic examinations, requires an unbelievably small amount of sample.

As to the future of the electron microscope and its related electron diffraction unit, the possibilities are unlimited. A whole new field of scientific crime detection lies before us.

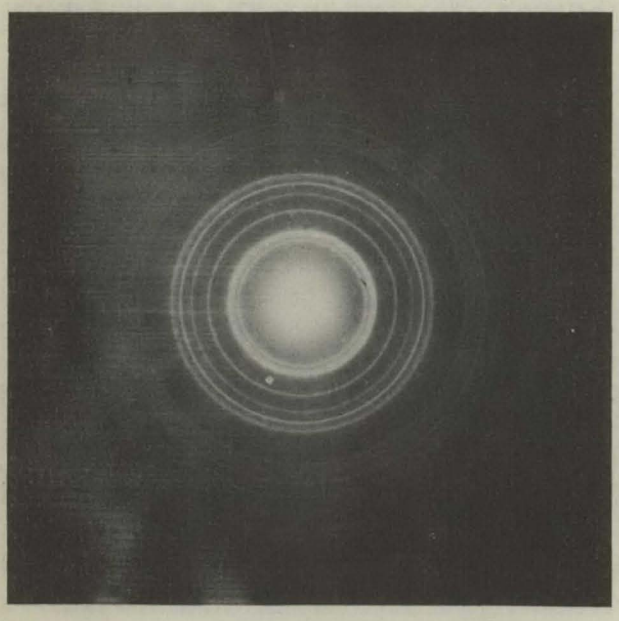


Figure 6.—*Zinc oxide—Diffraction pattern.*

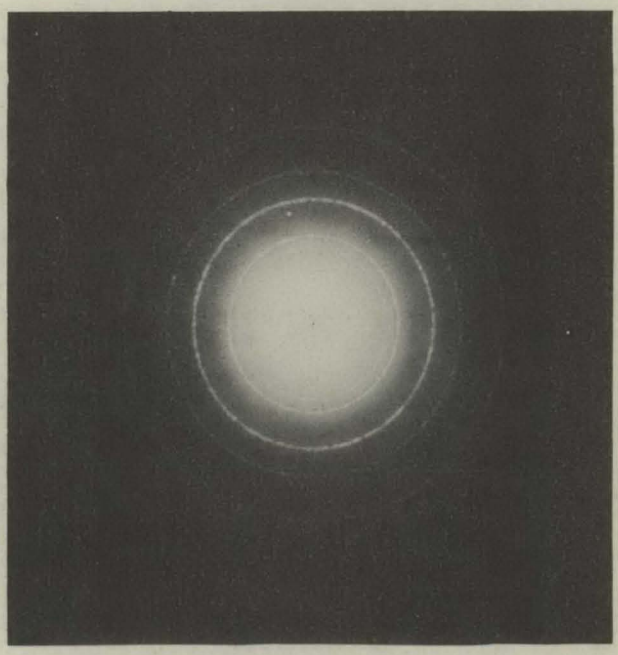
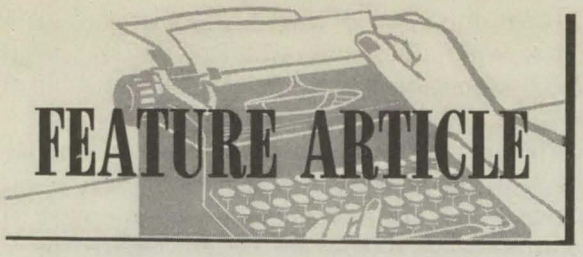


Figure 7.—*Magnesium oxide—Diffraction pattern.*



Psychological Factors in Atomic Warfare

by Col. James P. Cooney, *MC, Chief, Radiological Branch, Division of Military Application, U. S. Atomic Energy Commission*

I have the fullest respect for the phenomenon of radioactivity as a diabolical instrument of death and injury to man. But we are justified in taking a pretty hard-boiled attitude toward this subject, particularly from a military standpoint where, as with all other hazards, the physical danger must be evaluated in terms of objectives to be gained. Because we have no choice but to live with it, we must keep it in proper perspective.

Since the advent of the nuclear explosion in the so-called atom bomb, with its attendant ionizing radiations in massive amounts, unfortunate psychological reactions have developed in the minds of both the military and civilians. This reaction is one of intense fear. It is directed against forces which cannot be seen, felt, or otherwise sensed. I have observed the reactions of the military, who were not acquainted with the technical details, on two missions, Bikini and Eniwetok. The fear reaction of the uninitiated is appalling. It could well interfere with an important military mission in time of war and create disastrous chaos among uninitiated civilians.

Ionizing radiation is deleterious to living cells. But nature has been constantly bombarding the populations of the world with ionizing radiation since life began—by constant exposure to cosmic radiations and to radiations emanating from natural radioactive elements—such as radon.

Radiation injury must be considered, not by itself, but in connection with the total situation, i. e., weighed in relation to the objectives in view, both in regard to their importance under the circumstances and their probability of attainment. Unless we can thus integrate it with our whole philosophy of national defense, the atom bomb can prove a liability rather than an asset.

With the publicity emanating from the atom bomb, the term "Roentgen" has become a household word. A roentgen is a term of physical measurement such as the "centimeter" or the "gram." The large step from such a physical measurement to expected biological behavior in humans is based upon experimentation on lower animals, empirical observation, and clinical investigations. Not only are there many blank spaces in our experiences but many superstitions and misconceptions have been introduced. An idea has evolved in many minds that any and all roentgen exposure will cause immediate and mysterious injury or death. This is fallacious, but probably because it is morbidly exciting it is widely believed.

The problem of radiation injury cannot be easily simplified. In fact, oversimplification of this danger may cause a situation such as we are combatting at this time. It seems desirable to explore radiation hazards more fully in relation to other hazards which are considered more common and acceptable.

The permissible dose is 0.2 or 0.1 r. per day, or 0.3 r. per week according to your authority. It should not be called a "tolerance dose," for no amount of radiation should be tolerated without good reason. We may, however, name a dose so small that a person might be exposed to it every day of his life and suffer no observable injury nor shortening of his life span.

For a radiation technician or for industrial workers who are exposed to this hazard daily in their life's work, the maintenance of exposures at or below this level is a very desirable thing. Day-by-day contact with radiation or radioactive materials demands that a low limit of exposure be adhered to in order to avoid chronic complications later.

Similar occupational hazards exist in all branches of production—noxious gases and dust in coal mining, steel making, and the chemical industry. A miner, subjected to small amounts of dust containing silica, eventually will develop silicosia, frequently complicated by tuberculosis, which may culminate in death. For this reason, methods of

counting and analyzing dust have been perfected, and forced ventilation systems have been established to minimize the danger. This does not mean that an individual who makes a 1-day visit to a mine and inhales 100 times the daily minimal allowance for miners will develop silicosis. A permissible limit has nothing in its definition which refers to acute exposure. Neither is the 0.1 r. per day limit related to acute exposure in radiation.

From medical experience we know that patients vary in the amount of total body dose of radiation they can take in a single acute exposure. Rule-giving bodies have not given this and the lethal dose for man the same attention that the permissible dose has had. From animal experimentation we believe that the median lethal dose is in the neighborhood of 450 r.

Going further down the scale, we may consider that 200 r. will tend to cause radiation sickness in 50 percent of human subjects when delivered as an acute dose of total body radiation. Some subjects may be quite sensitive to radiation and others quite resistant, so it is difficult to calculate the precise effects to be expected.

A gastrointestinal X-ray series done for diagnostic purposes may deliver 25 r. to a subject. Such examinations expose a large proportion of the body, but are done with no thought of the possibility of radiation injury. It is not unusual to subject a patient to multiple X-ray of the skull, spine, long bones, gastrointestinal tract, kidneys, sinuses, etc., in a relatively short space of time, thus subjecting him to a dose of radiation which may well approach 100 r. These procedures are not done without purpose and the benefit from the information gained outweighs all fear as to the possible injury from radiation. Full body radiation in doses of the order of 25 r. to 100 r. has been given patients for treatment of various conditions. Again these exposures are prescribed for a purpose which outweighs the fear of radiation injury.

War is fought in the knowledge that men will be killed. Campaigns are planned with expectation of losing so many thousand men. If these are "acceptable hazards," then it obviously is not wise to treat radiation hazards on a different basis. If acceptance of radiation hazard will lessen the other military hazards, then radiation hazard should be accepted. This can only be done, however, if the attitude of the man exposed is psychologically similar toward the two types of hazard. What is dominant for actual percentage survival is the resultant of all the actual hazards. But for battle discipline and military effectiveness the dominant measure is not the hazard itself but the soldiers' estimation of the hazard.

Men at war suffer many hazards, acute and chronic, beside bullets. Malaria, venereal disease, exposure to cold and wet, starvation, etc. Some of these, e. g., V. D., are underevaluated by the doughboy. Others, e. g., filariasis, are grossly overevaluated. At present radiation is perhaps most overevaluated of all, partly due to our great care in Operations Crossroads, which was conducted at the civilian level of safety to personnel. Unless we had openly proclaimed immediate danger of war, we could not tolerate the military level of safety which we actually adopted earlier in training programs where we used live grenades and live ammunition in machine guns.

But psychological training for the military level of acceptable radiation hazard is possible and should be prosecuted, even in the absence of operational training.

We hear much about sterility as a result of exposure to ionizing radiation. It must be borne in mind that sterility results only from a large dose of acute radiation, or from smaller doses over a long period of time—a matter of years. Sterility also results from other accepted hazards encountered in war—venereal disease is one of the foremost causes of sterility. We are aware of hundreds of cases of paralysis of the lower part of the body resulting from spinal fractures, gunshot wounds of the cord, etc., during the last war who are not only sterile but impotent.

Leukemia may be another late result in casualties from radiation, but amoebic dysentery and schistosomiasis carry a great delayed hazard, and so does the effect of beri-beri, which was so prevalent among our prisoners of war.

I have knowledge of a death at Bikini caused by drinking wood alcohol. There were other deaths due to various types of accidents. At Sandstone we had a death due to drowning; one due to a truck accident; and one due to a fracture of the skull encountered in a fight. A sailor sustained a fracture of the cervical spine with severance of the cord by diving into shallow water. He will be paralyzed, sterile, and impotent as long as he lives. None of the above tragic deaths received national news publicity. However, had we had a single death due to radiation, I am sure it would have

received front-page rating throughout the country. Is this reaction toward radiation good for us to give to the parents of soldiers whom we ask to defend our country?

During August of 1946 I interviewed and examined a large number of Japanese who had recovered from radiation sickness. They appeared perfectly normal and were handicapped in no way toward pursuing their way of living. Such is not the case with thousands of our soldiers who participated in "conventional" warfare in World War II. They are handicapped by loss of limbs and eyes. Neither is it true of many of the Japanese who received no radiation injury but received severe burns and traumatic injury as a result of the bombing. From 5 to 15 percent of the deaths at Hiroshima and Nagasaki were caused by radiation. Why emphasize the 15 percent and forget the 85 percent?

The atomic bomb was developed as a blast weapon of war and strategically is so used. The radiation effect was never considered to be the prime component of its effectiveness. The destruction attendant to the blast, heat, and secondary fires was paramount. In Japan no significant "poisoning" of the ground by fission products or induced activity from neutron capture was observed, and yet many believe that the bomb is primarily a weapon which destroys by mysterious radioactivity.

I have appeared before local defense agencies in many of our cities. In preparing for defense against an atomic bomb attack, they think only of radiation. Invariably they ask, "Where will we get Geiger Counters?" Geiger Counters are not their only problem—fire-fighting equipment and well organized rescue squads are many times more important.

"But we have been told that we will not be able to go into a bombed city and rescue the injured." Hiroshima and Nagasaki disproved this. The residual radiation from an air burst atomic bomb is insignificant. The significant prompt radiation occurs in a matter of microseconds and does not extend beyond a 2,000-yard distance. Immediately after such a detonation it is perfectly safe to enter a bombed area and rescue the thousands whose injuries will be such that they will not be able to walk. Unless evacuation of these injured is effected thousands will burn to death in secondary fires. Such was the case at Hiroshima and Nagasaki.

In an under-water or ground burst certainly the radiation hazards will be increased many fold, but the blast and fire hazards will be proportionately decreased, and in my opinion, the total number of casualties would be less.

If we are to live with this piece of ordnance or if we ever have to use it again in the defense of our way of living, we must acquire a practical attitude, not only toward its efficiency or limitations as a bomb, but also toward the possible effects and limitations of this so-called mysterious radiation. We must recognize that the casualties caused by the blast and burns from this weapon will be many times greater than the deaths caused by radiation. We must also dispel the erroneous idea that the rescue work of the injured will be impossible due to residual radiation.

It is of the utmost importance that we recognize that the radiation hazards are additional hazards. They only add to the complexity and perhaps to the severity of the other hazards of total warfare. We cannot afford to concentrate on this phase of atomic warfare to the detriment of other defensive preparations.

ALL IN A DAY

The scope of the policeman's work is unlimited. It extends from catching murderers to running errands of mercy. Oftentimes, the errands of mercy are more than a little complicated.

Only recently the Nation's press carried a brief but heart-warming story of an incident occurring in Louisiana.

A 2½-year-old boy was seriously ill with a rare kidney disease. The juice of watermelons had been used with some success in fighting such a disease and a radio appeal was made for melons.

It is no easy task to find watermelons in January, even in Louisiana, but a trooper at State police headquarters heard the appeal. He remembered seeing some melons a few days earlier at a fruit stand between New Orleans and Baton Rouge, and went to work. Routing the proprietor of the stand out of bed at 2 o'clock in the morning, he obtained five melons which relays of State police rushed to New Orleans. Thus doctors were enabled to give the juice to the sick child without delay.

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Teamwork—Technique—Timing

Chief of Police Harold Crossett of Harlingen, Tex., sat at his desk on a quiet Sunday morning reviewing the departmental reports of the preceding Saturday night. The office silence was shattered suddenly by the insistent ringing of the telephone.

Chief Crossett lifted the receiver.

"This is the police department at Kingsville," came the answering voice. "We just flushed an unidentified man as he was burglarizing a garage here. He got away in the chase and boarded a fast Missouri Pacific freight train passing through town headed for Harlingen. Do you think you could arrange to shake that train down when it arrives in Harlingen? It's due there in about 30 minutes."

Contacts made by Chief Crossett

Assuring his caller that he would do everything possible, Chief Crossett acted. In rapid succession he contacted Capt. Marvin Gordon of the Texas Highway Patrol, Deputy Sheriff Joe Alvarez, and Constable Jake Childress. He requested these officers to report to his office at once and to bring all available men with them. In the meantime he sounded an emergency alarm for all members of the Harlingen Police Department.

Chief Crossett's next move was to check with D. T. Barkesdale, trainmaster for the Missouri Pacific Railroad at Harlingen. Advised of the problem confronting the officers, Barkesdale promptly made available all of the railroad's facilities to assist in the apprehension.

As the first move the Missouri Pacific agent at Raymondville, the only station between Kingsville and Harlingen, was alerted and instructed to do nothing to arouse the suspicions of the fleeing burglar as the train passed through his town. Secondly, he was instructed by Barkesdale to issue orders to the conductor, as the train passed his station, to proceed nonstop to a point north of Harlingen on the main line where the train was to be halted to await a search by the assembled officers.

Chief Crossett, covered by Trainmaster D. T. Barkesdale, searches the suspect.

The transient descends from the gondola on orders of Chief Crossett who is atop the adjoining car.

Questioning the burglar. Left to right: Chief Crossett, Constable Jake Childress, Benson, and Highway Patrol Captain, Marvin Gordon.

Officers survey their catch. The burglar is prone in the foreground; the transient lies at a distance.

Within a matter of minutes 14 officers had assembled at police headquarters in response to Chief Crossett's emergency call for assistance. There were in the group four members of the Texas Highway Patrol led by Capt. Marvin Gordon, two county-highway patrolmen, Constable Jake Childress, and seven members of the Harlingen Police Department headed by Chief Crossett. In addition, Trainmaster Barkesdale volunteered his services.

Crossett quickly explained the task confronting the group. The train was an exceptionally long freight which would extend down the railroad right-of-way for over a mile. At the only suitable point where it could be stopped for searching, the tracks were flanked closely on one side by a busy highway. In the event of gunfire, passing motorists would be endangered.

Officers divided in three squads

Quickly, Chief Crossett divided the available officers into three squads and placed an officer in charge of each group. The plan called for two groups to start at each end of the train and work toward the center. The third squad, composed of the largest number of officers was assigned to start at the center of the train and there divide into two groups. These men were to work in opposite directions until they met the officers who had started from the front and rear of the train.

The officers, hurrying to the designated area, had barely taken up their positions when the train came into view.

Chief Crossett, in the meantime, had reached a point where the highway crossed the railroad tracks and afforded access to the right-of-way. As the train passed before him, the officer noted a man wearing a cap and leather jacket raise his head from a gondola car and survey the countryside. Wheeling his car about, Chief Crossett raced alongside of the train as it ground to a stop and pulled up abreast of the freight car in which he had seen the man.

Crossett, leaping from his car, found that his quarry had climbed out of the hiding place and was standing between two freight cars, a .45 caliber automatic pistol gripped in one hand.

Chief Crossett trained his submachine gun on the fugitive, calling on the man to come from between the cars and surrender.

Refusing to comply, the fugitive dodged behind the steel boxcar. Watching underneath the car, Chief Crossett observed the subject apparently surveying his chances of escaping across the open country on the other side of the train. Noting the number of officers on both sides of him along the right-of-way, the subject evidently elected to take his chances on shooting it out with Crossett who, at the time, was alone on the other side of the car.

At this point the Chief noted that a large number of passing motorists had parked their cars,

forming a solid line of automobiles along the highway immediately adjacent to the railroad tracks. Having their safety in mind in the event any shooting occurred, Chief Crossett ordered the motorists to move from the scene.

The subject, in the meantime, had climbed back up between the cars, evidently intending to take Crossett by surprise. Peering around the corner of the gondola, however, he found himself looking down the muzzle of a machine gun only a few feet away. It was a strong enough persuader to make the fugitive change his plans. When Crossett gave him the alternative of surrendering or being fired on with the machine gun, the erstwhile burglar threw his automatic to the ground. A pair of hands and arms emerged slowly from between the two cars and the fugitive jumped to the ground where he was covered by Chief Crossett and Trainmaster Barkesdale who had come to the latter's assistance.

Ordering the fugitive to lie face down on the ground with his arms outstretched before him Crossett, covered by Barkesdale, made a thorough search and handcuffed the fugitive.

Upon learning that another man was still in the gondola, Chief Crossett climbed up the end of the car and ordered out a second, and badly frightened, individual. Questioning developed, however, that this man was merely a transient availing himself of a free ride at the expense of the railroad.

Capture arouses spectators' imagination

The dramatic capture caught the imagination of the stream of spectators on the road and drew varied comments. One amusing remark was overheard when two rather elderly ladies, halting their car, saw the two men lying face downward on the ground with their arms outstretched.

"Sarah! Just look at that. Those officers have already killed two men and now they are looking for more!"

The two "dead" men were very much alive, however, and the fugitive identified himself and admitted that he was the individual sought by Kingsville officers for the attempted burglary.

With their quarry thoroughly searched and in safe custody, the officers found time to relax and converse with the crowd of onlookers.

One of these individuals, a personal friend of Chief Crossett, came forward to offer his congratulations on the apprehension and to confess that he had almost made a serious mistake a few minutes earlier. He had read in the local papers during the preceding week that the FBI was conducting a training school for the members of the Harlingen Police Department and his first reaction on seeing the armed officers searching the train was that they were executing some maneuver as a part of their training. With this thought in mind, he called out to his 6-year-old boy in the car, "Sonny, get your air rifle and go help Chief Crossett."

A few seconds later when the fugitive emerged from between the two freight cars with an automatic pistol in his hand, the man realized that there was nothing artificial in the act and made a hasty dive for his small son who was quickly removed from the scene.

Chief Crossett's most treasured souvenirs of the occasion are a series of actual photographs taken by a local professional photographer, Gene Smith, who happened to be passing at the time of the apprehension with his camera in the car.

These pictures, used in this article, are unique. Seldom do circumstances permit the filming of an actual apprehension, and when they do, rarely so completely or graphically.

Chief Crossett is commended

All of the officers participating in the chase enthusically commended Chief Harold Crossett for the outstanding manner in which he organized, planned, and executed the search and capture of the fugitive within the extremely limited time available between the phone call from Kingsville and the arrival of the train in Harlingen. It was the concensus of all participants that the successful apprehension was a typical example of the excellent cooperation which consistently prevails among all peace officers and law enforcement agencies in the vicinity.

Chief Crossett, a graduate of the thirty-first session of the FBI National Academy in 1946, has been a constant and strong advocate of the advantage of police training. He regularly affords all members of his department a thorough course of in-service training each year with the assistance of the FBI and outstanding members of the law enforcement profession in his area. These programs are carefully planned by Chief Crossett and he actively participates in the instruction afforded to his men.

Operation Unknown

Six thousand and eighty-one American pilots, seamen, and soldiers who sacrificed their lives for their country during the last war, and in doing so lost their identity, have been reclaimed from the legions of the missing through fingerprints. For this group the cloak of anonymity has yielded to the indelible marks of identification which trap the criminal, give succor to the amnesia victim, and name the unknown.

There is maintained in the FBI's Identification Division in Washington, D. C., a War Casualty File. Currently, this contains more than 234,000 fingerprint cards of armed forces personnel. The fingerprints in it were taken when the servicemen entered on active duty. The cards were first placed in the huge non-criminal file of some 92,000,000 fingerprint records. But as owners were listed as dead, missing in action, or missing believed dead, their cards were transferred to the new War Casualty File. Whenever the fingerprint card of an unknown member of the armed service personnel was received, experts of many years' experience carefully searched the files for the one which would be the key to the unknown's identity.

The task was not and is not simple. Sheer magnitude of numbers is complicated further by individual factors in each case. These require extraordinary patience and perseverance.

In many instances the prints submitted are only of one or two fingers. Fingers were missing from bodies in some instances; in others decomposition prevented the taking of impressions of all fingers. In one case only one finger impression was submitted to the FBI. A fingerprint expert undertook to search this one print through the fingerprint files although it necessitated searching through 512 possible primary fingerprint classifications, or approximately one-half of the 234,000 fingerprint cards in the War Casualty File. Several weeks of diligent search established the identity of the unknown.

In a second case in which only one finger impression was submitted to the Bureau, a technician classified the print as a loop fingerprint pattern referenced to a whorl fingerprint pattern with 1,024 possible primary fingerprint classifications. This meant searching through virtually the entire War Casualty File. Several weeks later, midway through the huge file, a fingerprint expert identified the unknown war victim through fingerprints taken when the soldier entered the Army.

The following cases illustrate the contribution of the War Casualty Division in the FBI files, and reveal some of the difficulties which confront the Bureau's technicians. In deference to their families, names of the identified dead are omitted.

The body of an American soldier, believed to have met death on December 1, 1944, was found in a field north of a road between Ederen and Puffendorf, Germany. Inasmuch as the 84th Division and attached units had been active in that sector, it was thought that the soldier might have been a member of that group.

A general description of the deceased was unavailable as the body was badly mutilated and decomposed. In order to secure finger impressions it was necessary to remove the skin from the number three and four fingers of the left hand. They were submitted to the Federal Bureau of Investigation in April 1947, where they were identified as the fingerprints of a soldier who had enlisted in the Army of the United States on November 17, 1937.

On another occasion Army authorities submitted the fingerprints of an unknown American airman killed in a plane crash in the vicinity of Vienna, Austria, and reburied in a military cemetery in France. A search through the FBI's War Casualty File revealed the airman's identity.

An American soldier, killed in action on Saipan Island in July 1944, was buried as Unknown X–20 in Army Cemetery No. 1. Almost a year later a burial form containing the impressions of three fingers of the deceased was transmitted to the FBI. A photostatic copy of the burial form was prepared to be periodically checked against the fingerprints of war dead and missing as they were subsequently received in the FBI's War Casualty Unit. In February 1948, almost 4 years after his

death, the unknown soldier was positively identified by his fingerprints as a man who had enlisted at Albany, N. Y.

Another American, killed in action in the Yonabaru Airfield area on Okinawa in May 1945, was unidentified at the time of his burial. He was designated as Unknown X–33, and a burial form containing the impressions of four fingers was transmitted to the FBI. A diligent but unfruitful search followed, but a photostatic copy of the burial form was retained for periodic checks. In January 1948, Unknown X–33 was identified by fingerprints as an American soldier who had enlisted in 1941 in San Francisco.

One extremely interesting case involved a human arm and hand which were found in a shark. The limb was recovered by fishermen who had caught the great fish. Inasmuch as ridges were still faintly discernible on the unknown victim's hand, fingerprints were taken and forwarded to the FBI. Technicians identified the unknown as a member of the United States Navy, lost at sea when his ship was sunk.

In April 1945, a burial form was received from the Department of Army concerning the death of a soldier whose identity was unknown. The deceased had been a prisoner in Germany, apparently, for he was wearing a German prisoner-of-war identification tag. The burial form contained a one-finger impression which was badly scarred but search of the files established an identification with that of a man inducted into the Army in November 1943.

In another instance the Department of the Army transmitted to the FBI finger impressions taken from the body of an unknown soldier believed to have been a member of the 17th Tank Battalion in the European Theater of Operations. The body was badly mutilated but it was possible to obtain the prints of four fingers. These were found to be identical with those of a soldier who had entered the Army at Detroit, Mich.

During an attack near Siegen, Germany, in March 1945, an American soldier was killed. Later, British troops disinterred the unknown, badly decomposed body and fingerprints were taken. These were forwarded to the FBI and a positive identification was established.

The fingerprints of an unidentified American killed in July 1944, in the course of heavy fighting near Saint Lô, France, were identified in FBI files as those of a soldier who had enlisted at Fort Bragg, N. C., in 1941.

In the early part of 1943 an Army Air Force pilot was shot down near Pfaffenhofen, Germany, and buried by German civilians near the wreckage of his plane. When the body was disinterred 2 years later, fingerprints were taken and sent to the FBI. The pilot was identified.

A United States vessel was sunk by enemy action off the coast of Newfoundland in February 1943. The body of an unidentified crew member was found and buried in Newfoundland. Three years later the body was exhumed. Fingerprints were taken and identified by FBI fingerprint experts.

Still another case reflects the possibility of securing prints long after death. An Army Air Force pilot, shot down near Champigneul, France, was buried by French civilians at Cognac. Two years later the body was disinterred by the Army and reburied in an Army cemetery. Fingerprints of the deceased were sent to the FBI, where the experts matched the prints with those of a man in file.

There is no end to the work of identification. As long as even a fragment of a fingerprint remains, there is hope that the army of the unknown will yield up its victims.

CALIFORNIA AUTO THEFT BULLETIN SERVICE

The California Highway Patrol under Commissioner Clifford E. Peterson, Sacramento, Calif., has inaugurated a Nation-wide auto-theft bulletin service to facilitate the recovery of stolen automobiles that find their way into other States.

These bulletins will be compiled from reports sent to the patrol headquarters from all California enforcement agencies. They will include the license number, engine or identification number and a description of each car reported stolen.

Special report forms are being made available to all departments for the reporting of both stolen and recovered automobiles.

This service is expected to increase the recovery of stolen cars and discourage auto thieves from transporting stolen cars to other States for resale.

The patrol earnestly solicits the cooperation of all States in using these bulletins to make periodic checks for possible registration of stolen cars.

Defensive[1] Tactics

I. PERTINENT POLICE TECHNIQUES

1. Come-along holds

A "come-along" hold is considered a "restraining" or "controlling" hold rather than a "subduing" hold, and must be applied quickly before your adversary realizes what is happening, or after he has been subdued by some other means. This type of hold is primarily devised to assure maintaining the custody of the person being arrested, and at the same time afford the officer a maximum of protection, in situations where it is necessary to lead the person involved a short distance.

(*a*) *Belt and arm—with "knee kick" take down.*—Grasp adversary's right arm directly above the elbow with your right hand and his belt and trousers at the middle of his back (or the seat of his pants) with your left hand. Twist and lift upward with your left hand and push him forward (fig. 159). If adversary resists, take

[1] This is the fifteenth in a series of articles which will be continued in a subsequent issue. In studying the various methods employed you should constantly refer to the January 1948 Bulletin which sets forth general instructions and safety precautions.

Figure 159.

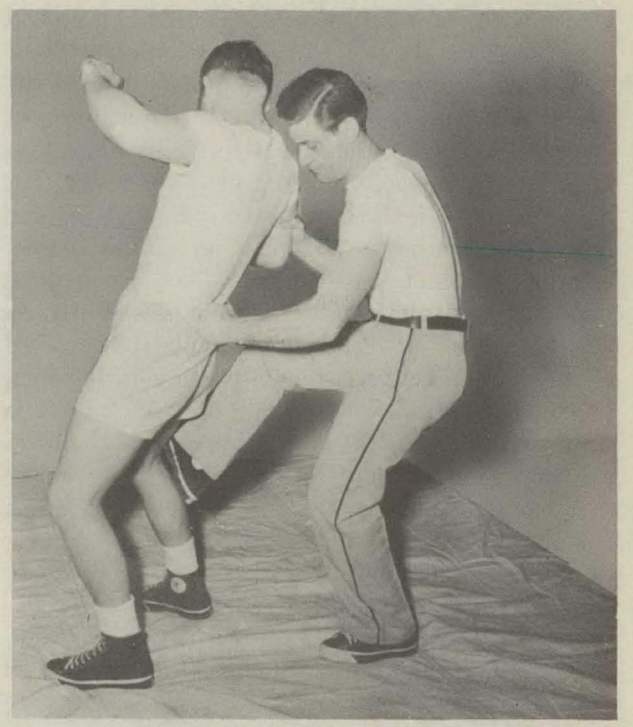


Figure 160.

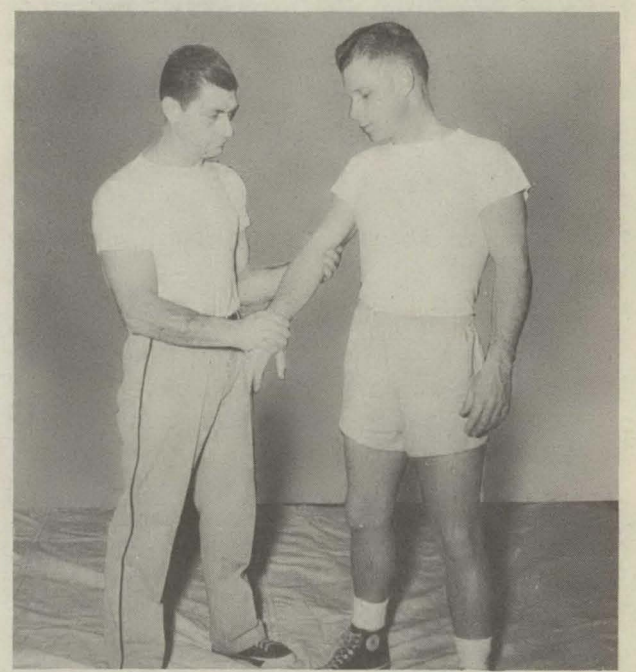


Figure 161.

him to the floor with a "knee kick" take down (fig. 160). (Also see G–7 (d), fig. 134.)

(*b*) *Arm and wrist—with "bent wrist," "bent arm," or "bar hammer lock."*—Grasp adversary's right wrist with your right hand (thumb on the inside of the wrist and fingers across the back of his hand) and his right arm directly above the elbow with your left hand (fig. 161), and push him forward. If adversary resists, apply a "bent wrist" hold by forcing his hand back toward his forearm as you raise his hand until his forearm is parallel to the floor. Pull his elbow tight to your body (fig. 162). Then pass your left arm between adversary's arm and body and place your left hand over the back of his hand. (The fingers of your left hand are slipped under those of your right hand and your left thumb is placed against the inside of adversary's wrist.) Adversary's elbow must be held securely between your left arm and body, directly below your arm pit. Pain is inflicted by forcing the hand back toward the forearm and by twisting it toward you (fig. 163).

Alternate follow-ups are the "bent arm" (figs. 164 and 165—See G–5 (b) for detailed explanation), and the "bar hammer lock"—See G–2 (c) for description and illustration.

(*c*) *Platform.*—Form a platform with your left hand, palm up, and grasp the back of adversary's right hand as you step forward with your left foot. His wrist is bent immediately upon contact

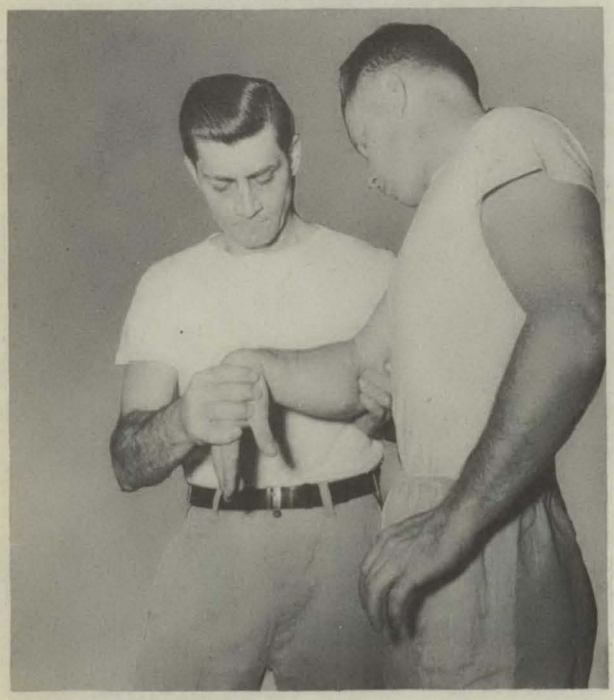


Figure 162.

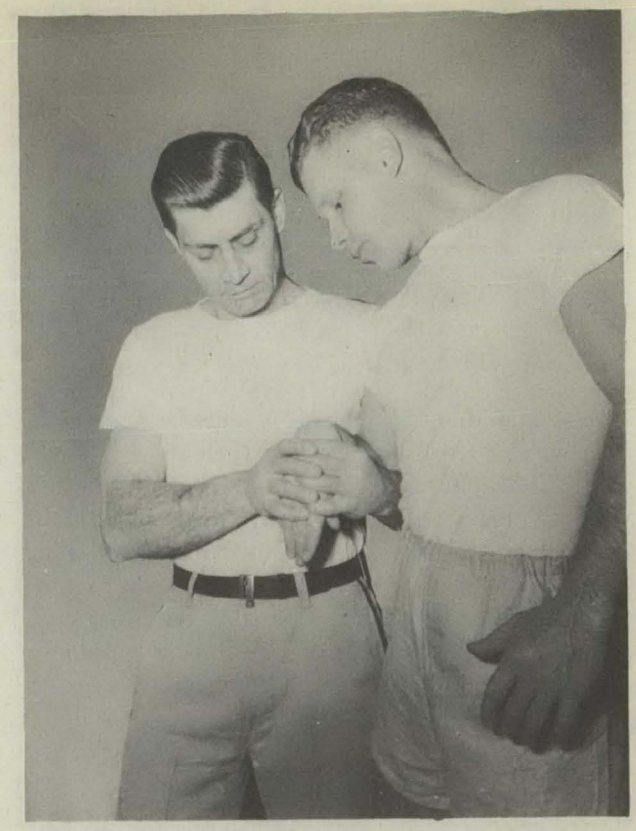


Figure 163.

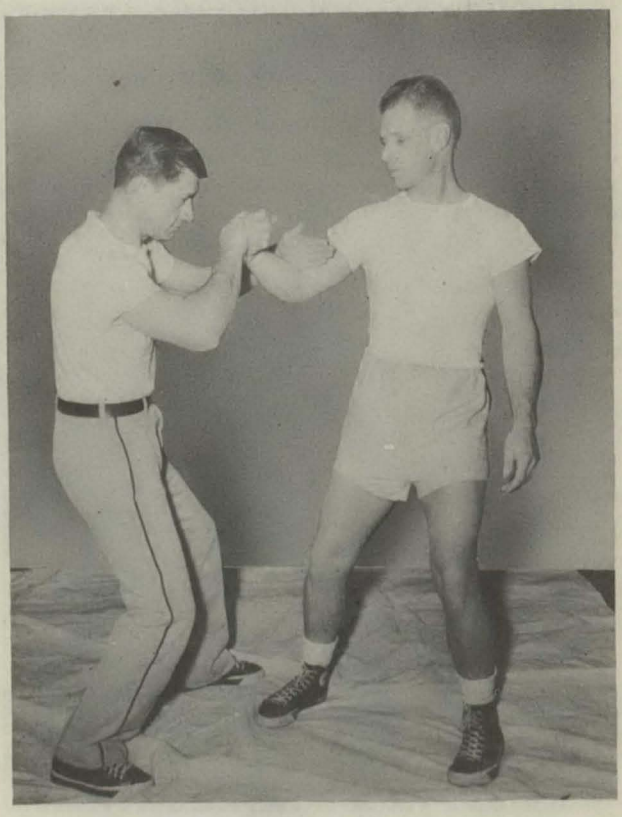


Figure 164.

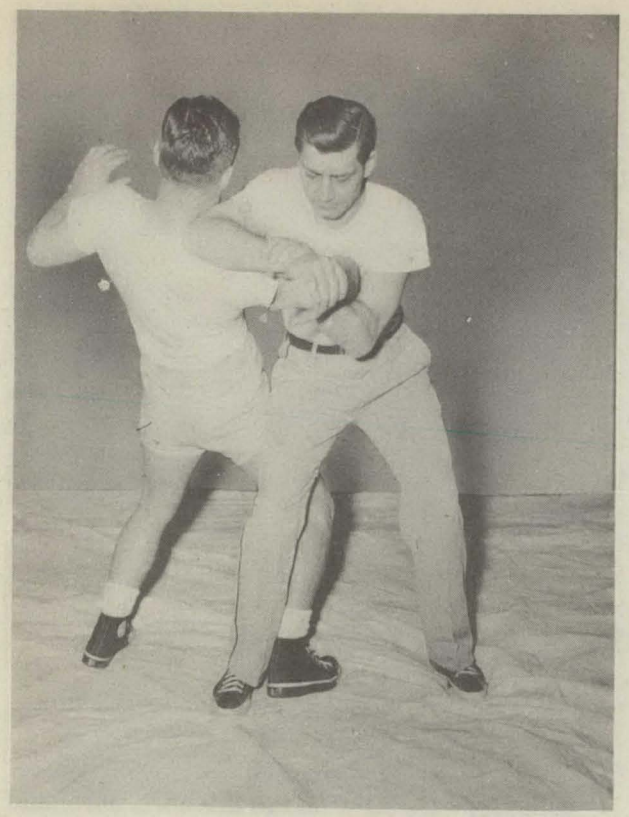


Figure 165.

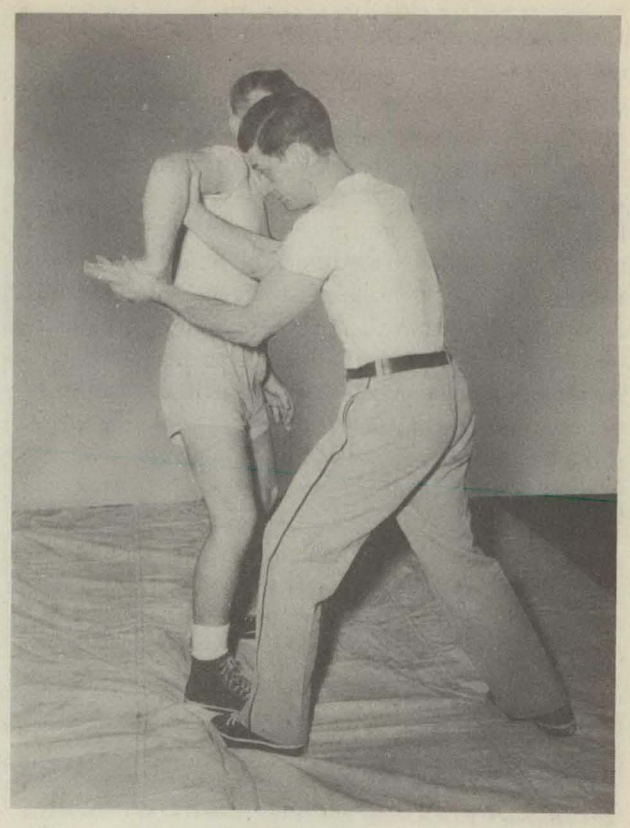


Figure 167.

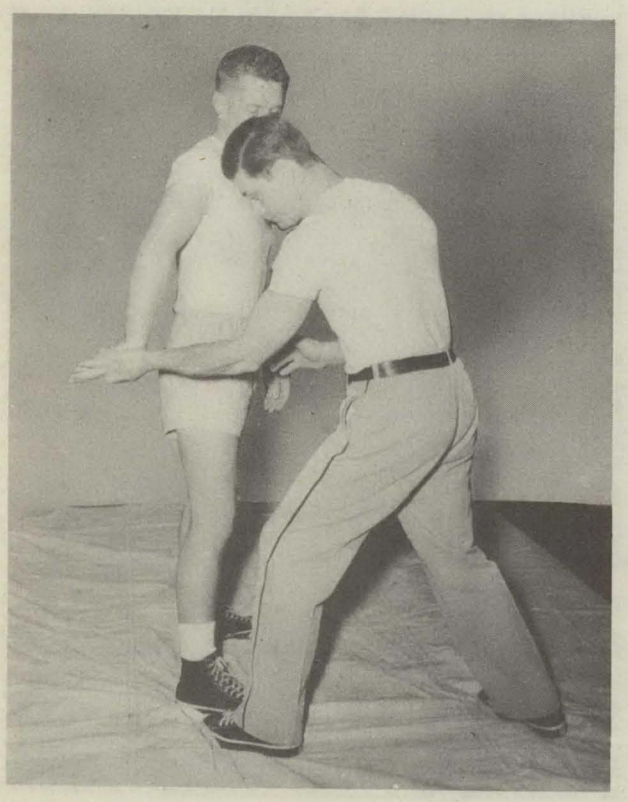


Figure 166.

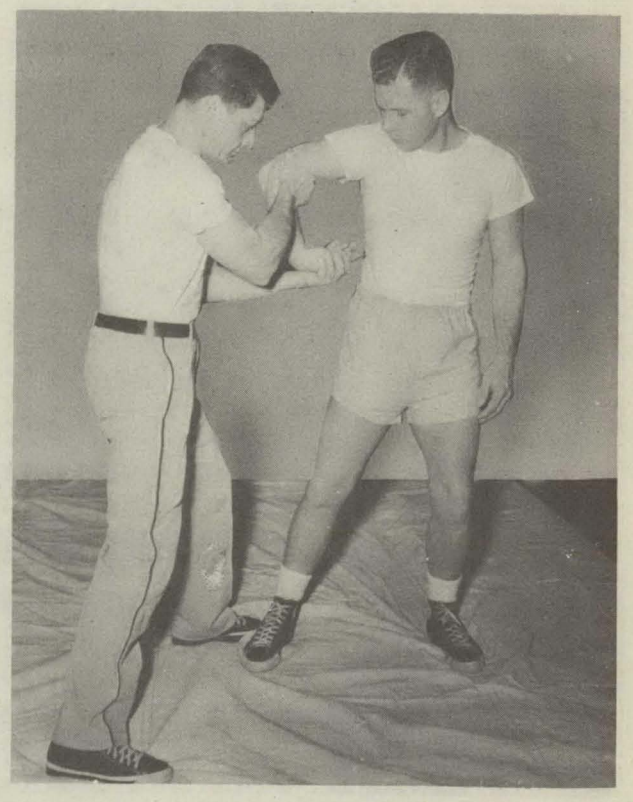


Figure 168.

and his arm is pushed backward (fig. 166). Immediately strike and grasp the inside of his elbow with your right hand (fig. 167), and execute a rear pivot on your left foot as you turn his hand toward his body and jerk him forward (fig. 168). Adversary's elbow is then forced between your left arm and body and is held securely while pain is inflicted by forcing his hand back toward his forearm and by twisting it toward you (fig. 169). (You can improve the grip of your left hand by holding adversary's hand temporarily with your right hand while you grasp his thumb and forefinger. The palm of your hand should be across the back of adversary's hand and not over his fingers.)

(Defensive tactics will be continued in an ensuing issue of the Law Enforcement Bulletin.)

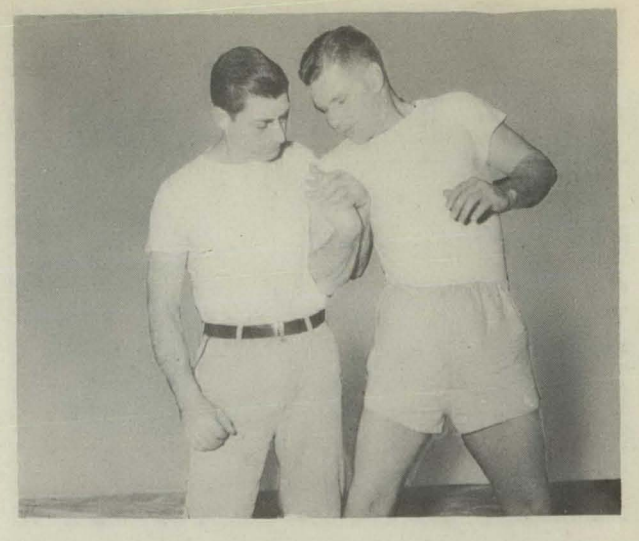


Figure 169.

"PHOTOGENIC" MEASURING TAPE

An important feature of the measuring tape devised by Detective James J. DeCicco and utilized by the Police Department, Maplewood, N. J., is the fact that the measurements will appear in a photograph.

The numbers are large enough so that one can tell the length or width of any particular object at a glance without reference to independent notes. A photograph is also a permanent record of the measurement.

The tape is 50 feet long and 3¼ inches wide. It is the type used for marking tennis courts and can be purchased at Army and Navy stores under the name, "Miles Parachute Tape." The tape is white with blocked numbers in black, marking off 1-foot lengths.

Patrolman James Dowd and Detective DeCicco Demonstrate.

POLICE PERSONALITIES

"Young Man of the Year"

Sgt. Joe H. Roberts, Police Department, Knoxville, Tenn., was selected by a committee of businessmen from 11 finalists entered by various civic organizations as "Young Man of the Year for 1948." This award is given annually by the Knoxville Junior Chamber of Commerce to the man under 35 years of age, deemed to have contributed the most outstanding service.

Sergeant Roberts received the distinctive honor of the title on January 17, 1949, for numerous reasons.

Joe Roberts joined the Knoxville Police Department on May 7, 1938, and was assigned to a patrol beat. In the fall of that year he was reassigned to the newly formed Centralized Traffic Division.

Sergeant Roberts was chosen to attend the thirty-second session of the FBI National Academy in Washington, D. C., in 1946, and at the present time is assigned directly to the office of the chief of police. He serves as liaison officer for the department and all city schools to discuss safety problems with teachers, principals, and school children.

One of his many duties is the supervision of the 43 safety patrols, originally formed by former City Judge Robert P. Williams. The patrols are comprised of 450 boys in the Knoxville City schools. Joe has daily sessions with the patrols. Problems, both personal and those pertaining to patrol duty, are discussed. Every 6 weeks he calls all of the members together, at which time a general forum is held. This is climaxed by motion pictures and other forms of entertainment appealing to the youths.

Once each year the safety patrols of Knoxville, Knox County, and adjacent east Tennessee counties meet in Knoxville through the cooperation and assistance of the automobile club. Sergeant Roberts is in charge of the entire group. A trophy is presented to the outstanding safety patrol. The selection is based upon school attendance, scholastic record, appearance, and general efficiency. As an added incentive, the outstanding boy from the city and county is chosen and recipients of the award are flown to Nashville, where they are taken to the Governor's Mansion, are introduced to the Tennessee Commissioner of Public Safety, go sight-seeing, and, through the courtesy of the commissioner, have the Tennessee Highway Patrol at their disposal.

In the fall of 1947, it was found that 250 windows had been smashed in one school alone during

Chief of Police Joe Kimsey (left) and Sergeant Roberts examine certificate Roberts received January 17, 1949, naming him "Young Man of the Year for 1948."

Former City Judge Robert P. Williams presents a trophy to the outstanding safety patrolman. From left to right, Elizabeth Sharp, Supervisor of Health, Knoxville City Schools; Robert P. Williams; Safety Patrolman; and Sergeant Roberts.

Sergeant Roberts working with his safety patrolmen.

the summer vacation. As a consequence, Sergeant Roberts decided to form the junior police of Knoxville. Soon the idea was an actuality. Divided into 17 groups, the junior police roster carries approximately 1,000 names. Sergeant Roberts meets every week with each of these groups to acquaint them with the functions of the police department. Not infrequently he is seen escorting a group of boys through the department, pointing out the well-kept records and files, demonstrating the use of fire-arms, the use of plaster casts, teaching crime prevention and detection.

Sergeant Roberts points with pride to the fact that in the fall of 1948 only 2 windows were reported broken as compared with the 250 of the previous year. These two he attributes to hefty clouts on the ball diamond—purely accidental.

Chief of Police Joe Kimsey enthusiastically endorses Sergeant Roberts' work. He states that Joe has been instrumental in reducing juvenile delinquency in Knoxville to a great extent.

Sergeant Roberts is called upon to deliver talks before chapels and assemblies in the Knoxville schools, at which time he shows films and give instruction in safety education. A member of the staff at the Boys' Club, he instructs in arts and crafts in the shop and escorts the boys on overnight hikes. As a member of the Knoxville Junior Chamber of Commerce, he has been active in Community Chest and Red Cross drives and serves as police representative on the Council of Community Agencies.

It is small wonder that the citizens of Knoxville, recognizing Sergeant Roberts' excellent work, honored him with the "Man of '48" award.

Major Gerhart Retires

Maj. Samuel Gearhart, one of the "rip-roaringest" law-enforcement officers to don a shield in past police history, retired from the position of superintendent of Lower Merion Township Police on February 1, 1949.

Probably no officer is better known in the State of Pennsylvania than Major Gearhart. A member of the United States Army Eighth Cavalry Unit from 1904 to 1909, Gearhart became a member of the Pennsylvania State Police and served in numerous localities throughout the Keystone State, progressing rapidly to corporal, sergeant, lieutenant, and captain. He was assigned many

Major Gearhart congratulates incoming superintendent, Maj. G. Andrew McLaughlin. Left to right: Lt. Clarence Robb, N. A.; Maj. G. Andrew McLaughlin, N. A.; Maj. Samuel Gearhart; L. V. Boardman, special agent in charge, Philadelphia FBI Office; captain of detectives, William Shaffer, N. A.

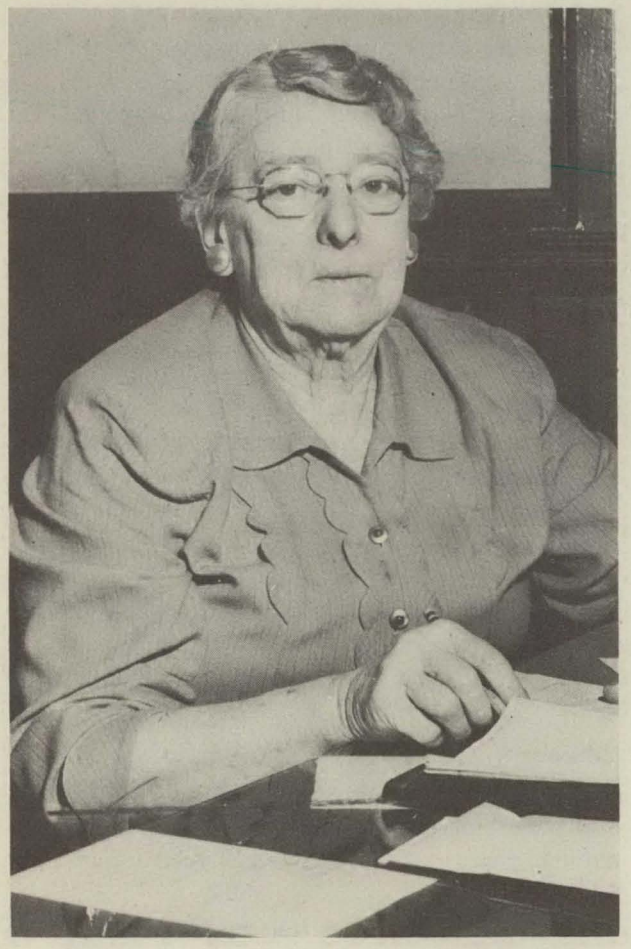
of the important investigations in which the PSP participated, receiving national publicity in his solving of the Blake Coughlin kidnaping.

In 1937, Major Gearhart was appointed superintendent of the Lower Merion Township Police Department, presently considered one of the best organized and equipped units in the country.

In commenting on his formula for efficient law enforcement, Gearhart observed, "Today law enforcement has progressed immeasurably from when I first entered the service. Today they have higher morale, better equipment, and unified public support. I have tried to run various units under my command with the one thought in mind that any new idea or method must be good for the organization and not only for the individual."

Major Gearhart intends to write a book on police work, remarking, "Today everybody is writing a book on police work. I think it is about time that a policeman wrote a book on police work."

32 Years a Policewoman



Mrs. Elizabeth Jeffs, Erie, Pa., celebrated her thirty-second anniversary as a law enforcement officer on December 28, 1948.

In Erie, active 73-year-old "Ma" Jeffs is believed to be the oldest policewoman in perhaps the entire Nation.

"Ma" Jeffs' duties include helping wayward girls; her hobby, she declares, is giving more help to the same girls.

After 32 years of outstanding service which included working with the majority of city, State, and Federal officers in the area at some time or other, and 32 years of talking sternly or sympathetically as the situation demanded, Policewoman Jeffs says of her many cases, "They were all interesting."

Sheriff in 1908, 1928, 1948

W. Y. Nash, elected sheriff of Craighead County, Ark., in the November general election, has had the unique experience of stepping out of politics and getting elected whenever he steps back in, which is every 20 years.

Elected to the office of sheriff in 1908, Mr. Nash served his term and not until 1928 did he offer his services as sheriff again. He was elected. In 1948, after another 20-year break, Mr. Nash ran for the same office again—and was elected. He has, in fact, never been defeated; his margin of votes in the last election was the greatest he has ever received.

Born at Lake City in 1875, the sheriff is a man in whom the people have the utmost confidence. Since 1902, when he was elected deputy sheriff, Bill Nash has had a reputation for strict law enforcement. His ability to deal effectively with law breakers has won him the office of sheriff whenever he sought it.

A man who believes in discipline of the law and in self-discipline, Sheriff Nash speaks with pride when he says, "I've never taken a drink of liquor nor used tobacco in any form in my life."

In his years as a law-enforcement officer (eight as sheriff, eight as deputy United States marshal, four as deputy and two as a policeman) Sheriff Nash has dealt with difficult situations and rough characters. He says, "* * * I never have fallen out with one of my prisoners, and I never hit one in all my 22 years as a peace officer."

In warning law breakers that he would pull no punches, Sheriff Nash said: "There were some good people who voted against me, there weren't any bootleggers who voted for me."

Firearms Training, Midvale, Utah

Immediately upon his graduation from the FBI National Academy in June 1948, Chief of Police Marcell Graham of Midvale, Utah, began making plans for broader police training within his own department and for interested law-enforcement agencies of neighboring communities.

Salt Lake County Sheriff George Beckstead and Chief Graham collaborated on plans for a firearms school for members of the two departments. Invitations were issued to nearby law-enforcement agencies. Approximately 50 officers responded. Nine representatives of the Utah Highway Patrol, one of the outstanding law-enforcement agencies in the Intermountain area, were included in this group.

The school began on November 3, 1948, and continued through November 12. Rain, snow, sleet, and bitterly cold weather failed to keep the officers from attending each day.

Instruction was given by FBI personnel with the assistance of Chief Graham. It covered the use of the revolver, Thompson and Reising submachine guns, shotguns, and tear gas gun. Safety precautions and the practical aspects of firearms use were stressed throughout the entire course. Intensive training was given in hip shooting. The number of scores in the high nineties on the Practical Pistol Course was a source of amazement and gratification to the instructors.

A local citizen donated the use of land for the excellent pistol range which Chief Graham and his men constructed. The land was given for as long as the department desires its use.

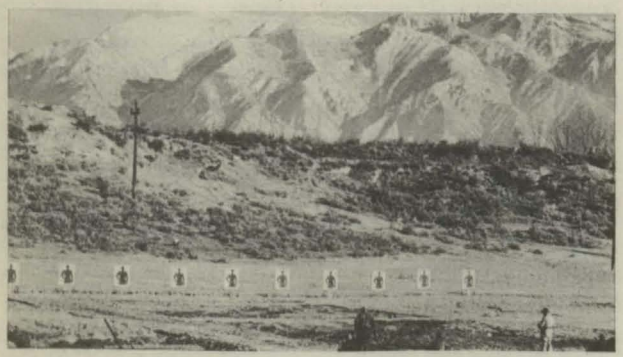
Ideally situated about 1 mile from Midvale City, the pistol range has a fine natural back stop. The picturesque Wasatch Mountains form its background.

Mayor Casper Nelson and the Midvale City Commissioners furnished fill dirt and gravel, and Chief Graham and his men furnished the labor to gravel the target line, firing lines at 7, 25, 50, and 60 yards and three parallel lanes running the full length of the range from the 60-yard line to the target line. Metal cups, making provisions for 10 silhouette targets, were spaced 8 feet apart and set in the ground.

Chief Graham is going forward with plans for starting a Junior Rifle Club. His purpose is to provide supervised rifle shooting and training for the youngsters of the community. The city commissioners have indicated to the chief that they would much prefer furnishing ammunition for this purpose to replacing street lights broken by enthusiastic but indiscriminate junior marksmen.

In addition to the firearms school, training included Report Writing, Defensive Tactics, and Arrests.

Chief Graham advises that he plans a continuous training program for his men, including regular physical training in their own gymnasium which is presently under construction.



General view of Midvale Police Department pistol range, Midvale, Utah.

Officers receiving instruction from Midvale Police Chief Marcell Graham.

MISCELLANEOUS

Pasadena Recruit Training

Twenty-five men and two women completed a 1-month Los Angeles County peace officer and departmental recruit training course under Lt. Ted H. Smith, training director of the local department, in cooperation with Special Agents of the FBI, to become the largest group of new officers taken into the Pasadena Police Department at one time.

The group took the regular 2-week Los Angeles County "Rookie" training, including basic courses in penal code, report writing, techniques of arrest, investigation of major crimes, firearms training, etc. This was supplemented by police department instructors who gave courses in city ordinances, local geography, vehicle code and department rules and regulations.

One unique phase of the training was the introductory course in orientation given by Assistant Chief Seares. This included a complete outline of the departmental organization, the salary ordinance, promotional requirements, pension plan and other items in connection with personnel problems of the new employee.

High lights of the course were the crime scene, the field trip, and the stopping and searching techniques course.

The course was climaxed by a formal graduation in the city council chambers where Don C. McMillan, city manager; Clarence H. Morris, chief of police of Pasadena; and Richard B. Hood, special agent in charge of the Los Angeles office of the FBI, addressed the group.

CRIME SCENE MAPS

Maps or diagrams of the scene of a crime are a most important adjunct to the Crime Scene Search.

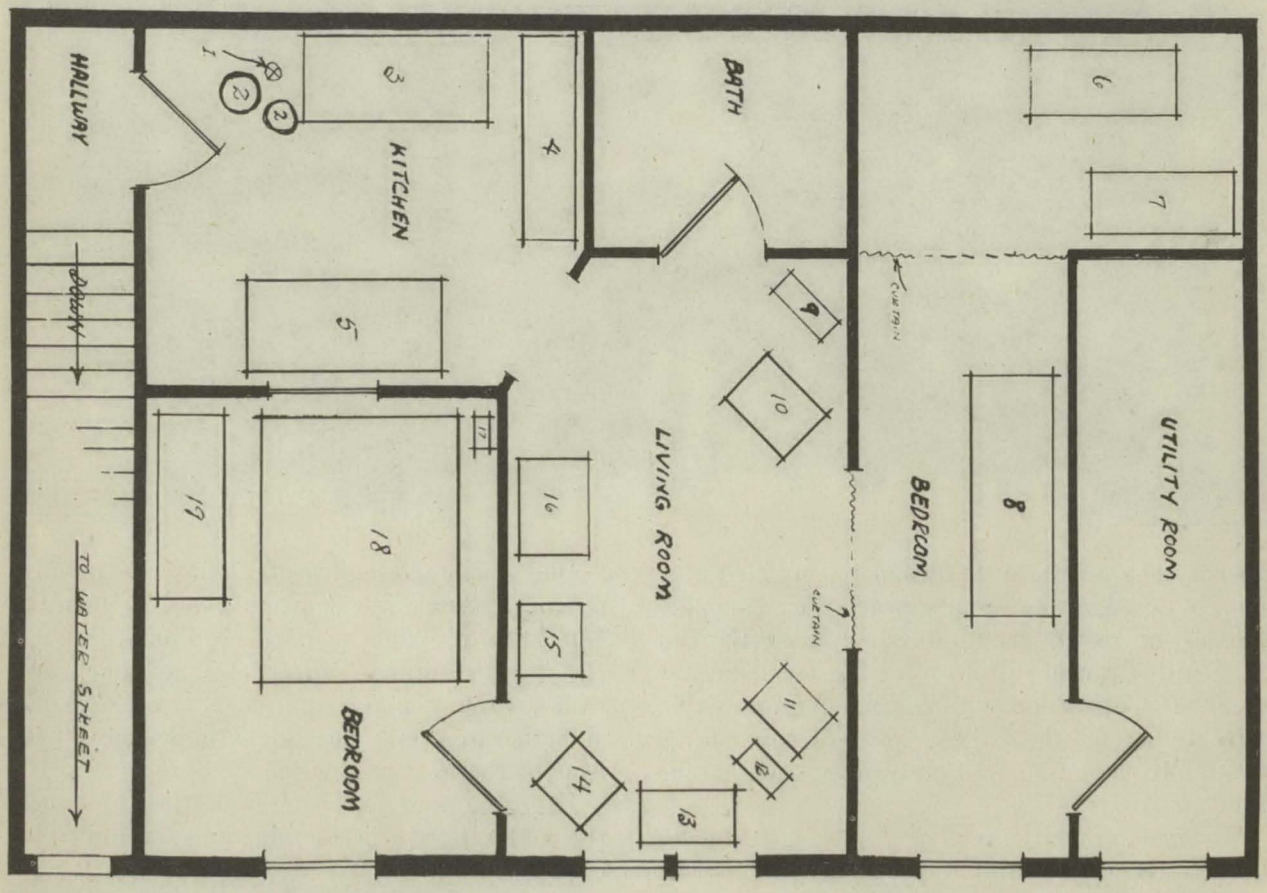
Two excellent examples of such diagrams are reproduced in this issue. They were prepared by Capt. Joseph Sullivan, in charge of the Detective Bureau, Binghamton, N. Y., during the course of investigation of a murder.

On February 10, 1948, one Marion Paquette Thompson was beaten to death. The body was found and the murder reported on February 13. Four hours afterward police identified Kenneth R. Nixon as the murderer. Nixon first began beating the victim at an apartment located at 265 Water Street, and subsequently continued the beating at 108 Prospect Street, where the victim's body was found 3 days later. The subject was apprehended by the New York State Police at Ithaca, N. Y., at 10:30 p. m. on February 13, 1948.

On March 9, 1948, Captain Sullivan transported items of evidence to the FBI Laboratory for examination.

On May 21, 1948, Nixon pleaded guilty to second-degree murder in County Court, Binghamton, N. Y., and was sentenced to 20 years to life.

The carefully drawn diagrams are self-explanatory. One reveals the apartment in which the subject first began beating the victim. The second drawing is of the apartment in which the body was found and of pertinent evidence.



(1) Tuft of hair; (2) cans; (3) sink; (4) cupboard; (5) kitchen table; (6) dresser; (7) dresser; (8) studio couch; (9) radio; (10) upholstered chair; (11) upholstered chair; (12) end table (broken); (13) table (telephone); (14) upholstered chair; (15) occasional chair (broken); (16) occasional table; (17) bedside stand; (18) bed; (19) dresser.

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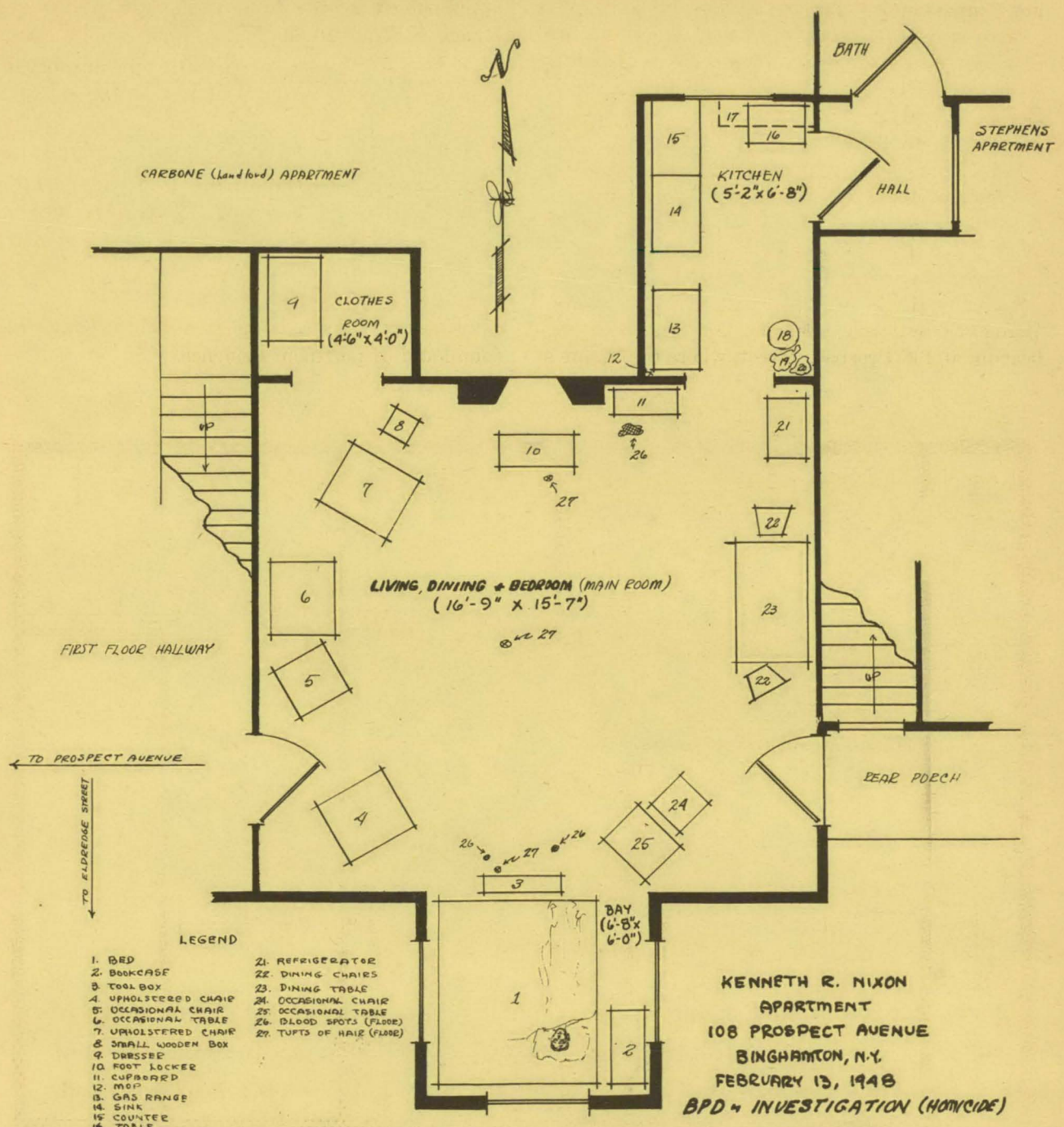


LEGEND

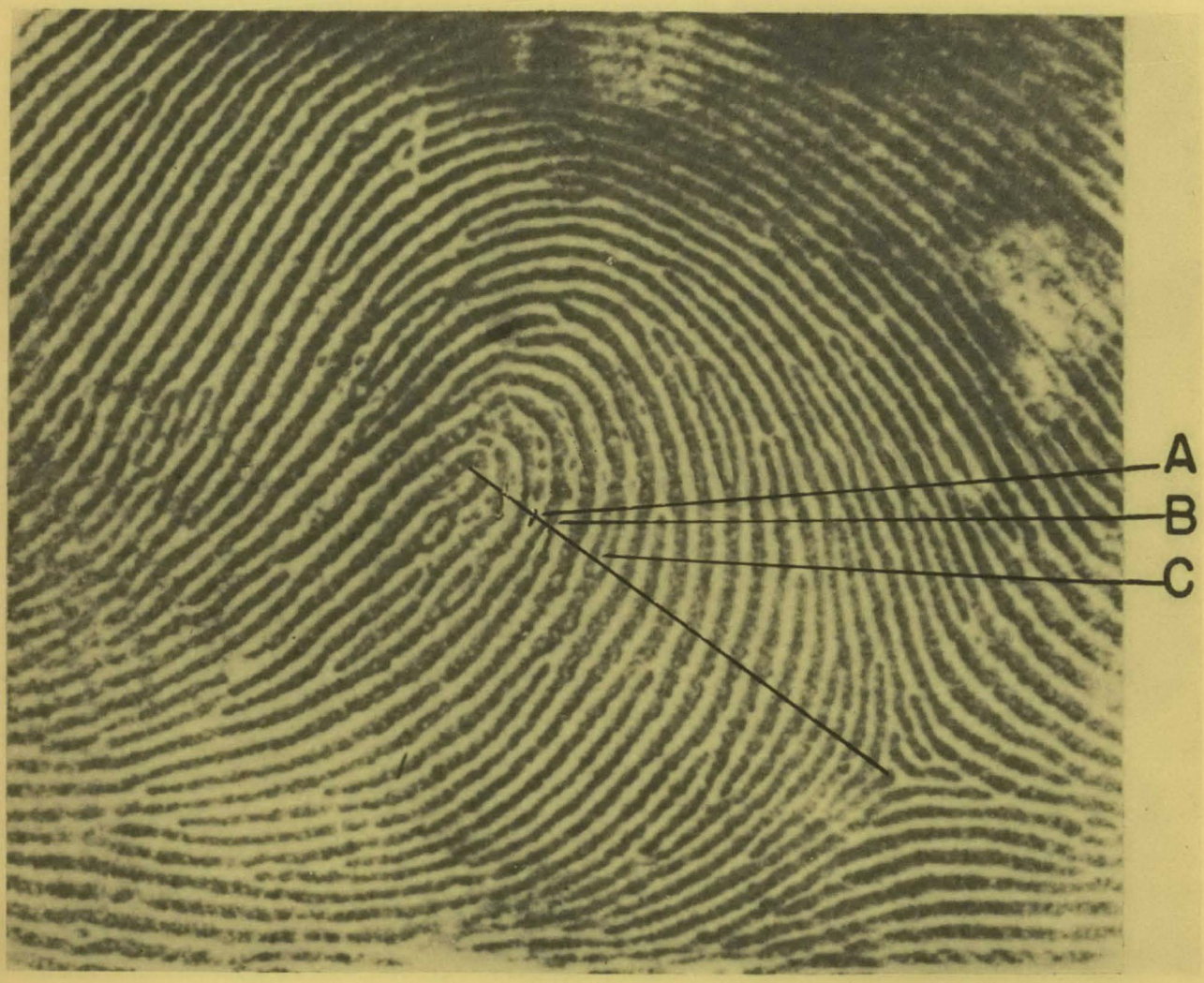
1. BED
2. BOOKCASE
3. TOOL BOX
4. UPHOLSTERED CHAIR
5. OCCASIONAL CHAIR
6. OCCASIONAL TABLE
7. UPHOLSTERED CHAIR
8. SMALL WOODEN BOX
9. DRESSER
10. FOOT LOCKER
11. CUPBOARD
12. MOP
13. GAS RANGE
14. SINK
15. COUNTER
16. TABLE
17. CUPBOARD
18. FIVE (5) GALLON CAN
19. LADY'S SLIP
20. PAPER BAG
21. REFRIGERATOR
22. DINING CHAIRS
23. DINING TABLE
24. OCCASIONAL CHAIR
25. OCCASIONAL TABLE
26. BLOOD SPOTS (FLOOR)
27. TUFTS OF HAIR (FLOOR)

KENNETH R. NIXON
APARTMENT
108 PROSPECT AVENUE
BINGHAMTON, N.Y.
FEBRUARY 13, 1948
BPD - INVESTIGATION (HOMICIDE)
SCALE 3/8" = 1'-0"

MAS

Interesting Pattern

FINGERPRINTS



The pattern reproduced this month is, of course, classified as a loop. It is interesting because three of the common problems in ridge coûnting are presented.

The dot at point A should not be counted, since it is not as thick or heavy as the surrounding ridges. There are two ridge counts at point B, since the line crosses at the point of bifurcation. At point C the line crosses both sides of an island and two ridge counts are obtained. In the Identification Division of the FBI this loop is given 21 ridge counts.