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# POLICE DUTIES AT CRIME SCENES\*

DON J. FINNEY†

## INVESTIGATION AT THE SCENE OF A CRIME AGAINST PROPERTY

### Investigation of Burglary

#### *Duties of First Officer*

(1) *Beat Officer*, who has discovered a burglary on his tour of duty, will assume the duties of the first officer at the scene.

(2) *Burglar Seen Entering*. Non-residence burglaries reported at night are usually reported by some party who saw the burglar enter or leave the building, or saw him in operation. The first officer at the scene would immediately contact such person and ascertain: (a) If the burglar was seen entering the building, is there a probability of his still being there? What was the point of entry? Has the witness been out of sight of the building since seeing the burglar enter? If there is evidence that the burglar is still in the building radio the station and request the necessary assistance. If no two-way radio is available, request the witness to telephone the station while you keep watch. (b) If the burglar has escaped, ascertain the direction of flight, means of escape, detailed personal description and description of the vehicle used. Give this information to the desk sergeant for additional broadcast.

(3) *Burglary Discovered Later*. If a burglary is reported at opening time by some employee, due precaution should be taken to see that all employees entering the place are warned not to touch or molest anything until the investigation is completed. If the crime is of a serious nature prevent the opening of the store to the public until such a time as the investigation has progressed sufficiently that their presence will not hamper the investigating officers, or destroy any evidence. If the report is received after the store is opened for business, ascertain the central point of attack and exclude all persons, employees, and customers from that area.

(4) *Safe Burglary*. If a safe burglary, there will be a desire on the part of the owner or manager to see if the cash is missing. To do so endangers valuable evidence. See that no one approaches the safe prior to the arrival of the investigator.

\* Concluded from previous issue.

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(5) *House Prowls.* If a residence burglary, request that all occupants, servants included, remain in one room until the investigation is completed. The occupants will interfere with the work of the investigator if permitted to follow him around.

*Duties of the Beat Officer*

(1) *If the First Officer* at the scene, perform the duties outlined above.

(2) *Contact First Officer.* If the first officer is present contact him and obtain an outline of the nature and status of the case. Make sure that the scene is properly protected.

(3) *Identify Criminal.* If anything is known of the perpetrator obtain a detailed description including place of residence, friends, enemies, hangouts, places frequented, means of transportation, and where he is likely to be found. If information is obtained telephone it immediately to the desk sergeant.

(4) *Determine Facts.* Determine as nearly as possible the hours between which the crime was committed, amount of loss and other information necessary for making a case card and telephone the desk sergeant, giving him all the details.

(5) *Suspicious Persons.* If a residence burglary, inquire regarding peddlers, agents, garbage haulers, trash haulers, meter readers, or any persons having called at the home for any purpose other than friendly visits. Check on parties who have visited the servants on the premises. Ascertain if they had an opportunity to look over the premises without the knowledge of the occupants.

(6) *Inquire of Neighbors* to determine if peddlers, agents, or others were in the neighborhood during the absence of the occupants of the premises where the crime occurred. Frequently burglars will gain entrance after knocking to see if anyone is at home. If such persons were seen, obtain a description and an account of the story they told as explanation for being there.

(7) *Investigate Servants* of the premises as to length of time employed, general character, and previous record. Determine if servants of neighborhood or their friends might be suspected in connection with the case. Such servants would have the opportunity to know of the absence of occupants, and may have given the necessary information to the perpetrator.

(8) *In Burglaries of Hotels* and apartment houses question the bell boys, porters, engineers, elevator operators, and clerks con-

cerning persons seen about the halls and corridors at unusual hours or under suspicious circumstances.

(9) *If a Non-Resident Burglary* question employees to determine if any suspicious persons were in the place prior to closing time on the previous day, or at any other time. Inquire regarding salesmen, building inspectors, prospective buyers, or others whose business appeared in any way out of the ordinary.

10. *Make Inquiries* among persons living in the vicinity to determine if suspicious cars or persons were seen, or unusual noises heard. Obtain descriptions. If noises were heard, determine as nearly as possible the exact time of their occurrence.

(11) *Check Watchman*. Make inquiries as to insurance protection, burglar alarm systems, watchman service and private police. If a watchman or private police is maintained ascertain the name of the firm or individual through whom the service was secured.

(12) *If a Safe Burglary*, or a crime of a serious nature, determine if it be advisable to notify the detective assigned to the case.

(13) *Anything Unusual*. In cases of large losses, determine if the presence of the large sum was unusual. Ascertain which persons had an opportunity to know of its existence. If the presence of such a large sum was unusual, the facts concerning persons having knowledge of it are very important.

(14) *Stolen Property*. Obtain an accurate and descriptive list of the loss, including serial numbers, names, initials, monograms, and other marks of identification.

(15) *Assist the Uniformed Investigator* in his work when needed. If a clue or any physical evidence is found note its character, location and position, but do not touch or molest it. Notify the investigator of its existence and location.

(16) *Do Not Leave* the scene until you are sure that all possible investigation has been made, except in case of urgent necessity.

(17) *Report to Your Commanding Officer* for instructions as soon as your work is completed. In his absence telephone the desk sergeant and inform him that your work is finished.

(18) *Do Not Remain* at the scene any longer than is necessary. Idleness and inactivity present a bad appearance to the public, and there may be other crimes occurring on your district.

#### *Duties of the Uniformed Investigator: Non-Resident Burglary*

(1) *Protect the Scene*. If no other officer is present at the time of your arrival, take necessary steps to protect the crime scene.

Give definite instructions that nothing is to be disturbed. Do not undertake to conduct the investigation until other officers arrive to assist you. If it be necessary for you to leave the crime scene to obtain your equipment from your car, see that some other officer is there to protect the scene during your absence. Never leave the scene unattended.

(2) *Determine the Facts.* If other officers are present at the time of your arrival, obtain from them a brief outline of the nature of the case. Ascertain the central point of attack and points of entrance and exit.

(3) *General Survey.* Make a general survey of the crime scene for the purpose of selecting a starting point, and determining what equipment will be needed in the investigation.

(4) *From the Central Point Work Outward.* The search should not be hurried, but should be thorough, searching for any trace of footprints, fingerprints, articles left at the scene, and any other evidence. Minute evidence is easily overlooked, and easily destroyed. Care should be taken that nothing is passed up.

(5) *Hair and Fibers.* Not infrequently a criminal will sustain slight injuries in the commission of a burglary, such as skinned hands or slight cuts. Search carefully for traces of blood, hair, fiber and stains. The location and position of such evidence will some time indicate which hand or arm they came from, and should be noted. Tissue can be identified as having come from certain portions of the body. Hair and fibers furnish excellent clues to identity.

(6) *In Clothing Store Burglaries* the perpetrator will frequently change clothes on the job, leaving articles of old clothing on the premises. These should be carefully preserved, using the method outlined in the handling of evidence.

(7) *Examine Underneath Counters* and other fixtures, searching for tools, gloves or other articles unintentionally left at the scene by the perpetrators.

(8) *Locate the Point of Entry* and examine for traces of tool-marks, heel-prints, fingerprints, blood, fibers, and tissue. If there is dust of an unusual character, such as powdered putty, powdery paint and the like, take samples for comparison.

(9) *Determine Exit.* Frequently entrance to a store will be gained through a high window or a sky light, and it will be found more convenient for the perpetrator to make his exit by unlocking

a door. Determine if such is the case and search the point of exit as well as the point of entry.

(10) *Exterior Examination:* (a) Determine method of entry. Determine the method employed in reaching the point of entry, whether by fire escape, ladder, adjoining roof, use of boxes to stand upon, accessibility from ground, rope ladder, or other means. If access was gained over an adjoining roof, determine the means of reaching the roof, whether through adjoining building, fire escape, ladder, rope, over top of car, and others. (b) Trace movements. Try to trace the criminals from the point of entry or exit to the point where a car or other vehicle was parked. Search for traces of footprints, tire-tracks, articles lost or dropped in flight. Search alleys, roadways, driveways, and vacant lots adjoining the premises for traces of vehicles. If the point where the vehicle was parked can be located attempt to trace it to a point where a turn was made in order to obtain a mark of the impression of all four wheels.

(11) *Safe Burglary:* (a) Make a critical survey of the condition of the safe and of the surrounding area, observing any tools present, the method used in opening the safe, the position and condition of the outer door, and if open, the condition of the inner door or compartment. This should be done before the safe is touched. Form a definite plan of procedure before beginning the actual examination and search. (b) Carefully examine the outer door and inner compartment for traces of tool-marks and fingerprints. If the doors bear marks that may be identified they should be removed and taken to the laboratory for final examination. (c) Collect, examine, and carefully preserve all parts of dial and locks that are broken from the safe. If tool marks appear on them preserve them in such a manner that the marks will not be changed in any way. Wrapping paper will usually properly protect them. (d) Plaster dust will usually be found scattered about the floor around the safe. Samples of this should be taken for comparison with dust found in the clothing of suspects. (e) Papers scattered about, and those in the safe, should be examined to determine if they have been handled by the perpetrators. Usually the papers will show dirty finger marks if they have been handled and will easily be detected. Handle them as little as possible and preserve them for examination in the laboratory. (f) Tools left at the scene of the crime should be very carefully preserved. Traces of fingerprints, paint, stains, hair, fibers, tissue, blood, and tool-marks on any object should be protected until they have been thoroughly examined. The im-

print of a hammer blow on the end of a chisel or punch may serve to identify that tool. (g) Considerable time will generally be consumed in the commission of a safe burglary, and the perpetrators will frequently smoke on the job. All matches, cigarette stubs, cigar stubs and ashes should be collected. (h) The method used in opening a safe, and the amount of damage done in the process, will give a clue to the perpetrators' knowledge of such jobs and their experience. Study them carefully, and, if advisable, call in a safe expert to assist in determining the extent of the criminals' knowledge of that particular type of safe.

(12) *Photographs to Be Taken* (All photographs should show a measuring instrument where the measurements are of value. All photographs should show proper means of identification): (a) General photographs, showing damage to premises, or any portion of them, damage to safe and the general scene as you first saw it. (b) Close up photographs showing the central point of attack, including tool marks and other marks of violence. (c) Photographs of all points of evidence in its original location and position. (d) Points of entrance and exit, from both inside and out, showing the method of reaching. (e) Photographs showing the instrument used in gaining access to the point of entry.

(13) *Measurements to Be Taken*: (a) Accurate location of all points of physical evidence. These should be located by actual measurements from some fixed point. (b) Size of the opening through which entrance was gained. (c) Height of the opening from the ground or adjoining roof. (d) Height of the opening from inside the floor or other footing. (e) Height and size of articles used in gaining access to the point of entry. (f) Size of safe and of safe door. (g) Length and breadth of tool marks. (h) Sufficient measurements to permit an accurate reproduction of the essential points in a sketch or a scale drawing. This should enable the location of the central point of attack and the more important articles in the building.

(14) *Casts to Be Made*: (a) Casts of all tool marks. (b) Casts of footprints. (c) Casts of tire marks or other vehicle marks.

(15) *Collect All Evidence* as you come to it, properly labeling and marking it in its proper sequence.

(16) *Make Notes as You Go*. Do not depend upon the memory for anything. Entry should be made in your notebook for every piece of evidence found, at the time it is found, listing its character, size, general description, when and where found, the relative loca-

tion to the center of the crime scene, how marked for identification, and how disposed of.

(17) *Hold Evidence.* Do not surrender evidence to anyone other than authorized persons. Evidence should be taken directly to the laboratory by the investigator himself. If this is done there will be no difficulty in establishing an unbroken line of possession from the time it was found until it is presented in court.

(18) *Stay on the Job* until you are sure there is nothing more to be done. Check back over your activities to see if there is anything you have missed in the investigation.

#### *Duties of the Uniformed Investigator: Residence Burglary*

(1) *Ascertain the Facts.* General instructions in the investigation at the scene of a non-residence burglary will be applicable to the investigation at the scene of a residence burglary. At the start see that the scene is properly protected, and ascertain the facts necessary to your investigation from the first officer at the scene.

(2) *Object of Attack.* Try to determine if the search was apparently for some definite object, such as the hiding place of money.

(3) *Type of Work.* Note carefully the amount of disorder and the extent to which the place was ransacked. Watch carefully for unusual characteristics or "trademarks."

(4) *Starting Point.* Select a definite starting point and work slowly and carefully, making notes as your examination progresses. The extent of the investigation will have to be determined from the facts, the extent of the search made by the perpetrator, the amount of disorder, etc.

(5) *Entry.* Locate the point of entry and make an examination as before outlined. Examine the screens, doors, or windows to ascertain the type of tool used to gain entrance.

(6) *The Exterior Examination* can be more thoroughly done, and probably with better results, than in the case of non-residence burglary. Starting at the point of entry trace the path of the criminal as far as possible, watching carefully for traces of footprints and articles that may have been lost or dropped in flight. Keep watch for tools that may have been used in effecting entrance.

(7) *Fibers.* If fences, hedges or other barriers are crossed examine them for traces of tissue, blood, and fibers.

(8) *Search* all shrubbery, outbuildings and other places where



any object might be hidden. Look for traces of the perpetrator having been concealed. Be on the lookout for loot that might have been hidden with a view of returning for it later. Look for purses discarded after being looted.

(9) *Tracks.* Search roadways, driveways, and alleys for traces of vehicles, tire tracks and footprints.

(10) *Photographs to Be Taken:* (a) If there is an unusual amount of disorder, or other unusual occurrence, photograph the crime scene, showing the important detail. (b) Photograph tool marks at the point of entry, and any other evidence showing its position in relation to the crime scene. (c) Take close-up photographs of the point of entry, showing, if possible, the method used in gaining entrance, and the size and shape of the opening. (d) Take photographs of any evidence of an unusual nature, or the character of which is likely to be subjected to changes in the course of time.

(11) *Measurements to Be Taken:* (a) The size of the opening through which entrance was gained, and especially so if only a portion of an aperture was opened, such as partly raising a window, breaking a panel from a door, etc. (b) If the case is of a serious nature, take sufficient measurements to permit an accurate reproduction in a scale drawing, locating the more important articles of furniture and evidence. (c) The size of all tool-marks. (d) The height from the ground of the opening through which entrance was gained. (e) The accurate location of the main points of evidence. (f) If footprints, tire-tracks, or other traces are found that are suspected of having a connection with the case, their distance from the point of entry should be ascertained.

### Recovered Stolen Cars and Cars Used in the Commission of Other Crimes

#### *Officer Discovering the Car*

(1) *Preserve Evidence.* When a car that is suspected of having been stolen, or of having been used in the commission of some crime, is located, it should not be touched until thoroughly investigated. Do not handle the car or any portion of it any more than is necessary to determine if there is sufficient reason for an investigation. If necessary to open the doors to inspect the inside of the car, do so carefully, taking as little chance of destroying evidence as possible.

(2) *Notify Headquarters.* Call the desk sergeant and request that the investigator be sent to meet you. If inadvisable to meet at the location of the car, designate some other meeting place, but sufficiently close to enable you to keep the car under surveillance while waiting.

(3) *Inform Investigator.* Upon arrival of the investigator, give him all available facts, whether the car is stolen or suspected of having been used in another crime, and if you have touched the car, inform him where and under what conditions.

(4) *Inquire.* As soon as the investigator has taken charge of checking the car make inquiries among residents and business houses to determine if anyone was seen to get out of the car, seen around it, or driving it. Determine as nearly as possible how long the car has been there, whether it has been moved since first parked at that location, and whether or not it is driven at frequent intervals.

(5) *Check* to ascertain if known car thieves or other reputed criminals live in the vicinity.

#### *The Uniformed Investigator*

(1) *Determine Facts.* Upon arrival, contact the officer who discovered the car and ascertain from him what is suspected and what is known.

(2) *Examine the Car* inside and out, rear vision mirror, dash compartment and any other places where latent prints are likely to be found. Removable parts that are found to contain latent prints should be removed and taken to the laboratory for examination.

(3) *Examine the Dash Compartment* and if found to contain any papers, rags or other materials that might have been handled by the thief or criminals, preserve them for examination at the laboratory

(4) *Check for Changes.* Examine the car to determine if any parts have been taken off or attempts made to take them, and if so, check for prints. Examine the spare tire to ascertain if there have been any tires changed. If the spare is flat and indicates that a tire has been changed, try to determine which tire and check it thoroughly for latent prints and other evidence. If the owner of the car arrives or can be contacted, ascertain from him if there have been any changes in the car and check them.

(5) *Check the Floor* inside the car and the upholstering for

hair and fibers, cigarette stubs, and other evidence. Clothing, gloves, hats, etc., are frequently left in cars. These should be carefully preserved until it is determined definitely whether they belong to the owner or to the thief.

(6) *If the Atmosphere Is Damp* or cold it may definitely affect the fingerprint developing powder. In such cases the car should be moved to a garage and allowed to temper before attempting to examine it for latent prints.

(7) *Examine Under the Dash* to ascertain if the switch was by-passed, or attempts made to do so, and if so, check for latents.

(8) *Hair and Fibers*. If any person is suspected in connection with the theft of the car, or its use in the commission of other crimes, particular attention should be given to the search for hair and fibers. They may serve as very helpful evidence.

(9) *Comparison Prints*. If latent prints are obtained and you cannot get in touch with the owner to obtain comparison prints leave word with the sergeant or the detective handling the case to have the owner's prints taken at the time he calls for the car.

### Investigation of Arson

#### *Duties of the First Officer at the Scene*

(1) *Notify Fire Department*. If you are merely sent to work traffic at a fire and you should discover any evidence that justifies a suspicion of arson, notify the fire chief or other officer in charge of the fire fighting unit, giving the details and the reasons for your suspicion.

(2) *Notify Headquarters*. Immediately notify your superior officer of your discovery and suspicions.

(3) *Cooperate with Fire Department*. Work with the members of the fire department and under the instructions of their commanding officer. Remember that these men are trained in determining the origin and cause of fires. Confer with them upon any investigation to be made.

(4) *Suspicious Persons*. Carefully observe any persons attempting to approach the fire zone. They may attempt to remove or destroy evidence. Persons approaching a fire or intruding upon the scene should be questioned and if their answers are unsatisfactory, they should be taken into custody.

(5) *Inquire* if anyone was seen to enter or leave the premises

immediately prior to the discovery of the fire. If so, obtain detailed personal description.

(6) *Uniformed Investigator.* Determine if the services of the uniformed investigator are needed, and if so, have him meet you there.

#### *Duties of the Beat Officer*

(1) *Cooperate with Fire Department.* The beat officer is usually the first officer at the scene of a fire. In such event he shall perform the duties outlined above. If members of the fire department are working on the case, confer with them and act on instructions from their commanding officer.

(2) *Occupants.* Determine which occupants of the premises were present at the time the first was discovered, and question them as to the details. If no members were present, determine the time they left, how long prior to discovery of the fire, and also the circumstances of their leaving.

(3) *Question* the party who reported the fire, ascertaining the time of the discovery, and the circumstances of its discovery.

(4) *Insurance.* Make inquiries as to the ownership of the building, amount of insurance carried, number of renters or tenants, ownership of contents of the building, number of companies in which insurance is carried, to whom paid, by whom paid, and the beneficiary. Ascertain if any of the occupants have suffered previous losses by fire.

(5) *Financial Standing.* Ascertain the circumstances of the occupants. If a business house inquire as to the financial status, value of property threatened or destroyed by the fire and whether there is a possibility of being over-insured. If a dwelling, ascertain whether or not the owner or renter is employed, if there are debts against the building or contents, and the relative amount of insurance carried as compared with the value and indebtedness.

(6) *Establish the Motive.* Determine if the motive was revenge, to collect insurance, or to cover up or conceal other crimes.

(7) *Assist.* If the uniformed investigator is called, give him an outline of the details of the case and status of the investigation. Work with the investigator and with other officers, as well as with members of the fire department.

#### *Duties of the Uniformed Investigator*

(1) *Facts.* Contact the officer who requested your assistance,

and obtain from him the facts of the case, the location of the evidence, the area or portion of the premises he wishes examined, and any other information you may need in conducting your investigation.

(2) *Cooperate with Fire Department.* Contact the commanding officer of the fire fighting unit present before starting your investigation. Confer with him as to the steps to be taken in the search for evidence.

(3) *Equipment.* Make a close survey of the premises to determine what equipment will be needed in the investigation.

(4) *Origin of Blaze.* With the assistance of members of the fire department, locate the origin of the blaze. Search for evidence of incendiarism, such as oil-soaked rags, kerosene, gasoline, wool, shavings, or other highly inflammable liquids or fibers.

(5) *External Examination.* Search all roadways, driveways, alleys and vacant lots for traces of tire-tracks, footprints, traces of wheels of bicycles or other vehicles. Be on the lookout for any article that might have been lost by the perpetrator, or anything apparently foreign to the premises.

(6) *Forcible Entry.* In cases where the building is only partially burned, search for traces or signs of forcible entry. Examine all doors and windows for signs of jimmy marks, broken locks, broken glass, holes cut in screens, broken door panels, or other indications of force.

(7) *Other Crimes.* Be particularly watchful for evidence of other crimes, such as murder and burglary. Frequently a building will be set on fire to cover evidence of a crime of a serious nature. Also, fires may be set accidentally in the commission of other crimes. If any evidence of other crimes is found, the investigation should proceed in much the same manner as would be employed in the investigation of the crime suspected.

(8) *Dead Bodies* taken from burned or burning buildings should be carefully examined for traces of violence. Search for evidence of gunshot wounds, blows, strangling, asphyxiation and other wounds or causes which might produce death or insensibility. If there is doubt as to the death being accidental or caused by the fire alone, a medical examiner should be called to assist in the examination. Unconsciousness may have been produced prior to the fire, causing traces of asphyxiation by smoke showing in the lungs. This should not be taken as conclusive evidence that death was accidental. Search diligently for signs of other injuries. If

there is a strong suspicion of foul play, a chemical analysis should be made of the vital organs.

(9) *Safes*, strong boxes, cash registers or other places where money or valuables are kept should be examined to determine if they had been opened or tampered with prior to the blaze. Ashes found in a place where currency is usually kept should be taken for examination. The currency may have been replaced with other paper. Examination of the ashes will determine if they are from currency. Charred papers of a legal nature can also be identified. Their examination may tend to prove or disprove a theory of arson to cover other crimes.

(10) *Tools* found on or around the premises should be preserved for comparison with any tool-marks found, even though the tool be burned. Burning will not materially change the tool.

(11) *Burned and Charred Clothing* suspected of having any connection with the crime should be preserved for examination.

(12) *Basements*. Particular attention should be given to basements in the investigation of arson. Debris in basements should be cleared away and thoroughly examined in the process. Fires are frequently started in basements, because of the length of time necessary for them to gain enough headway to be discovered, and because of the fact that it seems the most logical place to insure complete destruction of the building.

(13) *Murder*. If some person is discovered missing, or if murder is suspected, all portions of the premises should be searched, including furnaces, floors, closets, and attics. Ashes of clothing, wood, paper or anything else suspected of containing blood stains should be carefully preserved, and disturbed as little as possible in handling. It is possible to detect blood, even in materials which have been burned or washed.

(14) *Photographs*. Take general photographs of the scene, close-up and detail photographs of all points of evidence, of tool-marks, bodies, or other objects or articles which are of importance to the investigation.

#### INVESTIGATION AT THE SCENE OF AN ACCIDENT

The purpose of an accident investigation may be stated as follows: (1) To care for the injured; (2) To determine all factors involved in the accident, in order to (a) arrest and prosecute violators; (b) develop selective enforcement programs; (c) provide data for engineering studies intended to determine the hazards

of particular locations; and (3) To clear the streets of wrecked cars, debris and other obstructions.

#### Duties of the First Officer at the Scene

(1) *Care for Injured.* Ascertain if the injured parties are in need of immediate medical attention, and if so, arrange for same. Usually, especially in the case of serious injury, it will be found that some neighbor or witness has called an ambulance prior to your arrival. If such be the case, it is usually best to await the arrival of the ambulance before any attempt is made to move the injured parties. While waiting for the ambulance administer first aid when possible. If there is severe bleeding, make every effort to check it, and if necessary, use private cars to take the injured to the hospital. However, if there are broken or dislocated bones and no severe bleeding, it is best to await the arrival of the ambulance, although it may require a few minutes longer. Ambulance crews are experienced in handling such cases with least danger of complicating the injury. If the victim is unconscious and there are no relatives or other responsible parties present, it may become necessary for you to give instructions for removal to a hospital. In such cases merely instruct the drivers to take the injured to the nearest hospital. Never designate the hospital by name.

(2) *Safeguard Evidence.* Do not permit the cars involved in the accident to be moved until the investigation is completed. It will often be found that there are spectators present who, over-anxious to help the victims, will want to right an overturned car at once. This should not be done unless it is absolutely necessary in order to release an injured person pinned beneath.

(3) *Identify Persons Involved and Witnesses.* Obtain names and addresses of the drivers and occupants of the cars, of the injured parties, and of the witnesses.

(4) *Inform Beat Officer and Investigator.* Upon arrival of the beat officer and the investigator give them a brief outline of the information you have obtained.

(5) *Direct Traffic.* If necessary, assist in directing traffic. If not, report to your superior officer for instructions.

#### Duties of the Beat Officer

(1) *Quickly Obtain Facts.* If the first officer at the scene, perform the duties previously outlined. If not, obtain from the first officer all the information he has obtained.

(2) *Summon Additional Assistance.* If additional assistance is required in directing traffic around the scene or in handling the crowd, radio or telephone the station and request such assistance as is needed.

(3) *Identify Persons Involved and Witnesses.* Obtain names, addresses, and telephone numbers of all the witnesses and principles involved. Obtain the number of the driver's license in the case of each driver involved. Make a note of the make, type, and license number of the cars.

(4) *Question Persons Involved and Witnesses.* Question the witnesses, the drivers and the other occupants of the cars. Get from each a brief statement as to what he saw or heard; as to which car entered the intersection first; and as to what signals were given and what violations, if any, occurred. Ascertain from them the approximate speed of each car. One of the first things that should be learned from disinterested witnesses is whether or not they were looking at the cars at the time of the impact, or if attention was attracted by the impact. Very often it will be found that a witness whose attention was attracted by excessive speed or some other violation noticed a car just prior to the impact, and heard the impact, but did not actually see the collision. Such information is necessary. Also, the attention of a witness may be attracted by the impact and he will look around in time to see what happened as a result of the collision. Such a witness will be of value, as no one involved in the accident will probably be able to say definitely what transpired immediately following the impact. It is a well established fact that the sequence of events following a crash are so rapid that one cannot follow them accurately, if being tossed about in one of the cars involved. It is important to ascertain who was first at the scene of the accident, and to learn from him what remarks, if any, were made by the drivers or occupants of the cars.

(5) *Direct Traffic.* Work traffic, directing cars around the wreckage, and protecting such evidence as skid marks, blood spots, etc., as much as possible.

(6) *Assist Investigator.* Assist the uniformed investigator as much as possible. He will need help in managing his equipment and taking measurements. Keep crowds back while he is taking the pictures.

(7) *Direct Civilian Assistants.* Use civilian assistants when necessary. It will at times be advisable to rope off, or cut traffic



from an intersection where a serious accident has occurred. Civilians will be found very willing to assist in these matters, and should be used when needed. In cases of hit and run accidents it may be well to post a civilian at each intersection a block away from the accident and cut traffic entirely.

(8) *Drivers Must Report to Police Headquarters.* Notify all drivers involved of the necessity of making a report at the station.

(9) *Dispose of Wreckage.* See that cars involved are taken care of, and are removed as soon as possible after the investigation is completed. If the drivers or owners are present ascertain if they intend to have the cars removed at once, and if not, inform them you will do so. Call the station and have the pull-in sent to pick up the cars.

#### Duties of Uniformed Investigator

(1) *Care of Injured.* Ascertain if the injured parties have been taken care of, and obtain from the beat officer the information necessary in making the investigation.

(2) *Locate the Point of Impact.* Locate the point of impact and mark with chalk.

(3) *Examine Skid Marks.* Examine all skid marks, made prior to and as a result of the impact, and outline them with chalk, if advisable, in order to make them show up in a photograph. Note carefully the beginning and end of skid marks made prior to the impact, whether one, two, or all four wheels were skidding; if there was any "side slipping" or evidence of turning sideways in an attempt to avoid the impact. Was this turning movement in the same direction or opposite direction to that in which the other car was traveling?

(4) *Inspect the Cars for Damage.* Inspect the cars involved, noting any damage done. What portion of each was damaged? Determine the exact point of impact on the cars. Search for imprints of headlights, tires, etc., caused by the collision. What was the condition of the cars before the accident? What was the condition of brakes, of lights, of windshield visibility?

(5) *Take Photographs* (some of which will have been taken under 3 and 4): (a) A general view of the street or intersection, showing the point of impact and skid marks. (b) A general view showing the relative positions of cars in their original position. (c) Close-up photographs of the cars involved, showing the points of damage, or marks which might be used as evidence. (d) In all

photographs there should be some mark of identification. Show license plates if possible. If not possible to show the point of damage and the license number, the initials of the investigator, with the date, may be marked lightly on some portion of the car where it will show in the photograph. If a piece of chalk is dampened and marks made on the glass they will show in the photograph and will be very easily erased after the picture is taken. Photographs showing skid marks and relative positions and distances should show a measure of some kind where possible. In general views of the scene it is well to include in the picture a street marker, house number, or some easily identifiable building. Bill boards, signs on business houses, etc., will serve very well as identifying marks. They will serve as identification marks for you, and will identify the pictures as having been taken at a certain location. Photographs of blind intersections, or where there are obstructions which may have contributed to the accident, should be taken from the approximate height at which a driver would view them sitting in a car. Also, the camera should be level and its distance from the intersection or obstruction should be measured and noted. Locate a permanent object on the same side of the street as the view obstruction is located, and at such a distance from the intersection as would allow a driver approaching at a reasonable rate of speed to stop before entering the intersection. See that this object appears in at least one of the photographs. Be able to state definitely the distance down the intersecting street a driver could see when opposite the fixed object you have selected. (e) In cases of fatal accidents and in the case of more serious injuries, it is advisable to take pictures of bodies in their original positions if possible. "Action" pictures (bodies or cars being moved) will often prove valuable in case of trial.

(6) *Take Measurements* (some of which will have been taken under 3 and 4): (a) Length of all skid marks. (b) Distance of cars from the point of impact. (c) Distance from the point of impact to the closest corner of the intersection, measuring from the curb line extensions. Be able to state that the point of impact was, for instance, 25 feet west and 12 feet south of the northeast corner of the intersection. This will show very conclusively in which quadrant of the intersection the impact occurred. (d) Width of both streets at intersection. It will frequently be found that a street is of different widths on opposite sides of the intersection. In such cases both measurements should be obtained. If an offset inter-

section the exact measurement of the offset is important. (e) If there is evidence of side skidding the width of the skid marks should be measured. In this case, ascertain the make and size of the tire causing the skid mark. .

(7) *Clear Wreckage.* As soon as you have finished photographing and taking measurements notify the beat officer in order that he may have the cars removed.

(8) *Train Accidents.* In the investigation of an accident involving a motor vehicle and a train ascertain the speed of the train, and the speed of the car; also whether or not the driver stopped before reaching the tracks, if signal was working, if the crossing is "blind," if the train signalled, etc.

(9) *Pedestrian Accidents.* In accidents involving a pedestrian it is important to ascertain just where the pedestrian was walking, and in which direction. It frequently happens, especially after night, that the pedestrian was not seen until just prior to the impact; he may have been going in one direction, and on seeing the car turned and started the other way. This is an important factor, and should be ascertained if possible. In cases involving two or more pedestrians their actions may have been such that the driver could not possibly miss all of them. Did the pedestrians, or the driver, become confused and fail to act properly? It frequently occurs that when a pedestrian is struck he will fall at some distance from the point of impact, and the opinions of witnesses will vary as to the actual point of impact. Close examination will some times reveal slight marks on the pavement, caused by the soles of the shoes skidding as they were struck. These will serve to locate the point of impact. In many cases the more serious injury to a pedestrian is caused by the impact with the pavement, and not by the car. All this should be determined as far as it is possible to do so.

(10) *Irregularities in Public Spaces.* Determine if there are obstructions, holes, irregularities, or other things that might have contributed to the accident. If so, ascertain nature, condition and location, as well as height, depth, width, etc. Take a photograph, showing as much of the details as possible, or make a cast of the depression or irregularity. If at night ascertain if the obstruction was lighted. In all such cases there is the possibility that the city may be made a party to a suit, and all available information should be obtained, to be presented to the city attorney. Proper investigation in such cases will often save the city the expense

of a trial if the party is entitled to damages, and will win a suit if he is not.

(11) *Hit and Run Accidents.* Proceed as follows: (a) At scene of accident. Search carefully for any clue that will serve to identify the hit-and-run car. Search, if present, the *car left at the scene* for tire-marks, imprints of head lights and bumper, paint scratched from the hit-and-run car, etc. The height of a bumper mark from the ground will be of some assistance. Measure carefully all marks found. If *pedestrians are involved* their clothing should be searched for tire-marks, and particles of paint. The skin in the area struck or run over should be examined for tire-marks. If any portion of the body is passed over it will be found that the pattern of the tire will be plainly visible on the skin, even though protected by clothing. Search *the vicinity* for particles of paint, bits of metal, broken glass, and the like. Any article found may have come from the hit-and-run car, and should be carefully preserved. Broken glass from a headlight may be pieced together and the type determined, which will serve to identify the make of car from which it came. If the car was seen to turn a corner at a high rate of speed a very good impression of all four tires will usually be found at the turn. Tire-marks, if properly classified, may serve as positive identification.

(b) Inspection of suspected car. If a suspected hit-and-run car is located it should be searched carefully for the following items: hair, from human or animal, including hair from fur coats, etc.; fibers; tissue; blood; particles of paint unlike that on car itself; damaged parts, such as fenders, headlights, radiator; marks on bumper; imprint on paint of car from weave of cloth. Photographs should be taken of the articles in the position as found, and great care should be used in removing and preserving each. This search should include all parts of the car, underneath, back side of bumpers, inside portions of wheels, cracks of doors and hood, etc. Be thorough. Notes shall be made of the names of witnesses to the discovery of any of these articles.

(c) Fatal hit-and-run accidents. In fatal hit-and-run accidents the clothing of the victim should be preserved. A sample of hair from the head of the deceased should be obtained, and a sample of blood obtained for group comparison. Hair taken from the head should be pulled, not cut. All hair should be handled with the fingers. Never handle hair with any sort of instrument.

(12) *Inspect Car for Condition Prior to Accident.* Inspect the

car, involved in any accident, in order to determine its condition prior to the accident, with particular reference to brakes, headlights, tail light, steering, vision.

(13) *Arrests for Violations.* Determine violations and issue tickets to violators.

(14) *Notify Relatives of Victims.* If victims have been taken to the hospital go there and determine the extent of injury. If fatal or serious see that relative are notified. Notify headquarters as to the extent of injuries.

(15) *Write Report.* Write a complete report, giving details as to time, exact location, and other facts obtained. Notes should be taken during the course of investigation, and these notes referred to in writing the report.

(16) *Diagram.* Draw a diagram showing the location of the point of impact, the skid marks, routes of cars before and after impact, and relative position of the cars after they came to a stop. If advisable, the route of cars after the impact can be shown in a different color than the rest of the diagram.

(17) *Diagnosis.* State what, in your opinion, could have been done at that particular location to have avoided the accident and what might be done to prevent similar accidents in the future.

## CARE AND PRESERVATION OF EVIDENCE

### General

(1) *Court Presentation.* The success or failure of an investigation, and of the prosecution of a criminal will often hinge on the manner in which the evidence is handled. From the time the evidence is found until it reaches the court it is subjected to much handling, and often mishandling, with the result that it is somewhat changed by the time the route has been covered. Usually the slightest change will render the evidence incompetent.

(2) *Preservation for the Laboratory.* Proper handling of evidence is of the greatest importance from the point of view of the examiner. Mishandling may so change the substance that a complete and satisfactory examination is impossible. Portions which would be most valuable to the investigation may be lost, or so damaged as to be valueless.

(3) *Training Necessary.* The only solution of this problem is the training of investigators in the proper handling of evidence. Most officers realize the necessity of properly protecting the evi-

dence, but often they are not versed in the methods that should be employed. Various kinds of materials require different handling. For example, glass on which there are finger-prints could not be transported in the same manner used in carrying a document. Dust should not be handled in the same manner as a piece of metal.

(4) *Preservation.* When an article to be held as evidence is found, it should immediately be taken care of by placing it in the container that is to be used in its transportation. The container should be properly labeled with the initials of the officer, the date, hour and the identification mark which he has employed. Immediate entry should be made in his note book, giving the nature of the evidence, when and where found, the names of those present when found, the identifying mark used, the relative position to the scene of the crime, and its suspected relation to the crime.

### Specific

The following outline will explain how certain evidence should be handled, and from it may be devised means of properly preserving other kinds of evidence:

(1) *Hair.* Hair which is to be taken for examination or for comparison should be handled with the fingers exclusively. Instruments of any sort will damage the hair, bruise, mash, or split it; their use should be avoided. Should it ever become necessary to use any kind of forcep, two pieces of wood, such as toothpicks or matches, may be used. Occasions of this kind, however, will be rare. Injuries of any kind will be misleading to the examiner. Hair, which is found at the scene of a crime, should be picked up with the fingers and placed in clean white pieces of paper. The paper is then folded in the manner in which druggists wrap powders. Should the hair be too long to make a convenient package it should not be folded, but should be coiled loosely about the finger, removed carefully and placed in the paper in a coil. If this is done no pressure should be exerted against the folded paper as that may cause the hair to be mashed together and bruised. Care should be taken not to dislodge any dirt or other matter that might cling to it.

The paper used should be clean, and preferably white. If there is dust on the paper used, it may be mistaken for dust that has come from the hair, or particles may adhere to the hair, causing erroneous conclusions in the examination. In the absence of paper,

a glass vial may be used, but this is not desirable for the reason that it is usually necessary to use instruments to extract the hair from such containers. Also, any particles which are dislodged from the hair will probably be lost in the bottom of the vial, while if paper is used it can be spread out and its surface examined after the hair is removed.

Hair removed from the head of an individual for comparison should be pulled out by its roots with the fingers. The bulbous end of the root is often valuable in comparison. Never cut specimens of hair that are to be used for comparison.

(2) *Metals*. Metals are handled according to the size and number of pieces. In referring to metals, tools, which will be discussed later, are not included.

Small pieces of metal which are not considered filings or dust, and which are not too large for placing in small containers, should be packed in small boxes of cotton. Line the boxes with cotton, place the piece of metal in the center, and cover it with more cotton. It should be packed tightly enough so that it will not shake around in the box. If the pieces are small and the size of the box permits, two or more pieces may be packed in the same box, provided they are packed so as to prevent their coming in contact with one another. If cotton is not available, a piece of cloth or handkerchief may be used. If cloth is used, it should be wadded around the metal, not folded. Extreme care should be taken with pieces of metal to be used for comparison which have ragged edges or broken surfaces. The ragged edges will chip very easily, and should be properly protected.

Larger pieces of metals, such as iron bars which have been sawed out of windows, wire grills which have been cut or removed, rods used as a weapon, or pieces of metal used in any other way should be inspected carefully for traces of hair, tissue, fibers, blood, or dirt, and should be protected in such a manner that any substances adhering will not be dislodged. In such cases the surface bearing the evidence must not be allowed to come in contact with the wrapping or container in which it is carried. Suspend the rod or other metal in a box in such a manner that this portion will not touch. An iron may have hair or blood on one side. In this case it can be protected by wrapping several layers of cloth around the rod on each side of the stain, laying a piece of board over it and tying the board in place.

Pieces of metal bearing tool-marks should have that portion of

the surface, on which the tool marks appear, protected. Wrap several thicknesses of newspaper around that portion of the surface. If on the end was a paper or cloth and fasten it in place over the end.

(3) *Dust, Dirt, and Filings.* Minute particles, metal filings, dust and dirt should be collected in small glass vials. These must of necessity be clean and free from dust and dirt. Clear glass is preferred as it permits more thorough inspection prior to inserting the specimen. Wipe the vial with a piece of clean soft tissue paper before using it. The freer the specimen is from other substances the easier and more accurate will be any examination or comparison. Care should be taken that there is no dust already in the vial, as a few particles may be misleading to the examiner. Also, if the evidence specimen contains something not found in the comparison specimen it may be ruled out, or attacked in court as improper evidence. In the absence of glass vials a piece of clean white paper may be used, folding the specimen into it in the manner previously outlined.

(4) *Tissue.* Tissue, or specimens suspected of being tissue, should be handled with extreme care. If not entirely dry they will adhere to almost any surface, and difficulty will be experienced in extracting them without loss of some of the evidence. The full surface and thickness of the tissue is valuable in the examination; therefore, it should be delivered to the examiner exactly as it is found.

In most cases when tissue is found it is adhering to some other object. If this object is too large to remove, use a sharp knife and shave away, where possible, the portion of the surface to which the tissue adheres, disturbing it as little as possible. Be careful not to cut the tissue in the operation. As in the case of hair and other articles, tissue should be handled with the fingers when possible. In no instance should it be handled with any instrument that will bruise or mash it. A needle, at times, may be used in picking it up.

Tissue can best be transported on glass slides. Protect the tissue from dust and dirt as much as possible. Glass bottles or containers should not be used, as tissue will adhere to their walls and difficulty will be experienced in removing it from the vial.

Blood, hair and fibers which are found clinging to tissue must not be removed or disturbed, but the entire specimen should be preserved just as it is found.



(5) *Fingernail Scrapings.* Scrapings from under the fingernails have been known to contain almost any substance, from blood to dust. Fibers, tissue, grease and many other substances have been scraped from the fingernails, and have proved valuable evidence.

In scraping the fingernails the instrument used should be very clean, and one that will not bruise or break the small particles. The investigator must be able to testify positively that none of the specimen examined could have come from the instrument which was used in scraping away the particles.

Place a piece of clean white paper under the hand from which the scrapings are to be taken. Hold the hand close to the paper and scrape all loose matter from under the nail. Do not try to work hurriedly, and do not exert any more pressure than is necessary. As each finger is cleaned deposit the scrapings on the paper. When all the evidence has been collected fold the paper in the manner used by druggists in wrapping powders. Mark the package and make a note of the date and hour, and the names of the witnesses who were present. Keep the scrapings from each hand separated, in other words on individual pieces of paper, properly marked. When the scrapings are dry a vial may be used for transporting the evidence if more practicable. However, there will be some danger of losing part of the evidence in transferring it to the vial.

(6) *Firearms.* As previously suggested, any gun found at the scene of a crime should be examined for fingerprints, and in cases of automatic weapons the clips or magazines should also be examined for prints. Make a record of caliber, make, and serial number of such firearm, and keep notes as to the relative position in which the arm has been recovered. Also mark the firearm by scratching an initial or other distinctive label. If it is found necessary to remove loaded cartridges or fired cartridge cases from the weapon, mark each one so that the relative positions are known.

Cartridge cases which may be found either in the gun or elsewhere should be marked in the following manner: An initial or other distinctive mark should be scratched on the surface of the shell near the mouth or, in the case of paper shot shells, an inked mark should be made in the same relative position. Where fired cartridge cases are recovered on the floor or ground, notes should be taken of the exact location of each shell so found. All shells should be separately wrapped in paper for proper preservation.

In recovering fired bullets, which may have lodged in surrounding woodwork or other material, be very careful not to use

any instruments which will damage the surface. When recovered, mark each bullet by scratching an initial or other distinctive mark on the "nose" of the bullet; no mark should be placed on the base itself. No attempt should be made to wash or clean the bullet; it should be wrapped in cotton or other soft material in its original state. Complete notes should be kept regarding the place, relative location, date, and time of the recovery of any such bullets.

Any shot pellet or pellets recovered should be placed in small cardboard pill boxes, or in envelopes, or vials for preservation.

Where shot or powder patterns are evident, either on body or elsewhere, scaled photographs should be taken as near 1 to 1 as size of film will permit.

(7) *Liquids*. Ordinarily very little difficulty is experienced in handling liquids. It is only necessary that the container be clean and free from dust. Liquids are usually found in containers, and there is no necessity for changing them. In some instances, however, liquids that have been spilled or poured out will have to be collected. If the quantity is small some difficulty may be experienced. This will depend somewhat upon the nature of the liquid. If the quantity is so small that a sponge cannot be used and squeezed out a clean cloth may be used and the entire cloth placed in the container. First wash and dry the container to be used for such a purpose.

If evaporation will not diminish the value of the evidence, blotters or filter paper may be used. If blotters are used they should be clean white, because the dye of colored blotters may materially change the contents of the evidence. If it is desirable to preserve as much of the moisture as possible use a small container and seal it tightly. In collecting evidence with a cloth or blotter it should be blotted, not wiped.

It is advisable to collect as little dirt as possible with the liquid. In some cases it may be advisable to wash the hands, especially if perspiring, before handling it. If the hands are washed they should be rinsed thoroughly to remove the soap, which may affect the results of the tests subsequently made.

Unless you know what is in the liquid you are handling it may be well not to get it on the hands, especially if suspected of being poison. In such cases it is advisable to use filter papers and to handle it with tweezers.

(8) *Fibers*. While some fibers are not damaged by handling with tweezers or other instruments, others are, and for this reason,

unless you are familiar with fibers, it is desirable to handle all of them with the fingers as much as possible. Handle them as lightly and as little as possible. They may be transported in glass vials, or in white paper.

The dyes in some fibers are affected by different things, such as moisture, air, etc. They should be placed in vials that are perfectly dry, and in wet weather should be sealed in. Blood and other stains in fiber should be protected fully. Do not permit others to handle and inspect them through curiosity.

(9) *Clothing.* Carelessness in the handling of clothing which is suspected of belonging to the criminal may cause much of this evidence to be lost. Therefore, it is necessary to handle it with care, and to preserve it intact until it reaches the examiner.

Never inspect clothing at the scene. To do so causes it to be shaken, dislodging minute evidence, such as hair, fibers, dust, and other small particles. Place a large piece of clean paper, such as heavy wrapping paper, or preferably a large clean paper sack, as close to the clothing as possible, then gently lift it onto the paper. Fold the paper over it from all sides and secure it in place. In moving the bundle handle it right side up at all times, and do not throw it around. Carefully inspect the area which was directly under the clothing for traces of hair.

If it is necessary to search the pockets of the clothing, this should be done after it is placed on the paper in order that any particles which are dislodged will fall on the paper and will not be lost. If the necessity of searching the pockets is not urgent, it should be done after reaching the laboratory.

(10) *Documentary Evidence.* There is probably more mis-handling of documentary evidence than of any other kind. It seems to be generally considered that no harm is done by handling a document. This is entirely erroneous. Each time a document is handled its value as evidence is diminished.

Documentary evidence should never be folded. Even though it has been previously folded, once it is straightened out it should be preserved in a flat position. Each time it is folded and unfolded that portion which is in the fold is damaged. Also, it is necessary to handle a piece of paper considerably in folding and unfolding, which does its share of damage.

To properly preserve documentary evidence, it should be placed between two sheets of cellophane or celluloid. The sheets should be larger than the document and the edges should be sealed as soon

as possible. This will prevent the papers being rubbed in handling, keep out the air, and permit its being inspected without great damage.

Usually cellophane or other such material is not available at the time a document is found. In this event it may be successfully transported to the laboratory by placing it between two sheets of clean white paper and then in a book or magazine. This will hold it flat and it will be easy to handle.

It is common practice to permit anyone who desires to examine a document. This should never be done until it is properly protected. Moreover, it may contain valuable latent prints. Other officer should not request the officer who is in charge of the document to "let me see it." You can probably do no good by seeing it, and may do much harm.

(11) *Latent Fingerprints.* Great care must be exercised in searching for fingerprints lest they be destroyed by super-imposing your own prints over them or by rubbing against some surface which results in the print being obliterated or partially destroyed. It is important to search all smooth surfaces for finger-marks and latent prints, special care being used in the treatment of objects known to have been touched by the criminal, as well as those objects which he might have handled.

A water glass, a bottle, a box and some utensils may be picked up for a more careful examination by touching only the edges, tilting the object by pressure with the finger extended on an upper edge, such as the rim of a glass, the mouth of the bottle, etc., thus permitting the extended fingers of the other to be inserted under and against the lower edge, thus enabling the object to be raised by pressure applied at opposite edges of the diagonal. Caution must be taken to keep the fingers on the edges and not permit them to come in contact with the sides.

Many latent fingerprints have been rendered useless by the manner in which they were handled while being transported from the scene of the crime to the place where they are to be developed and examined. It is a common and a very poor practice to wrap articles suspected of containing fingerprints in paper. It is estimated that only four ounces of pressure is necessary to make a print, and probably less to eradicate it. The paper rubbing against the print will destroy one-half to three-fourths of the pattern. Again, the oils from the finger, which are in reality the fingerprint, will be absorbed by the paper, rendering development with powders more

difficult. After they have been in contact with paper they will react very much the same as prints that are several days old. The powder brushes away, leaving very little on the ridges.

Glass and other flat objects which are suspected of containing latent prints can be successfully transported from one point to another without damage to the prints. From an ordinary piece of tire patch or lifting tape cut several small pieces about one-half inch square. Examine the surface of the object to be transported and select spots where you are sure there are no prints, sticking four or five of the squares of rubber to the surface. Place the object in a heavy cardboard box, allowing it to rest on the piece of rubber. This will prevent the flat surface from touching the box, and will protect the prints. The box should be covered to keep out dust and air currents, which will tend to evaporate the moisture in the prints.

If no rubber tire patch is available, select a cardboard box which is a little smaller than the glass to be carried. Cut slits in the sides of the box about one inch above the bottom, and insert the corners of the glass in these slits, and tie a string around the box to prevent them from slipping out.

A gun should be picked up at the scene of a crime by inserting a pencil or a wooden stick in the barrel holding the gun in place by placing the index finger of the other hand against the outer "edge" of the butt, after first becoming assured that no accidental discharge can be occasioned thereby. A gun which is to be examined for latent prints may be easily transported a short distance in this manner. For longer distances it may be suspended in a box by three strings: one through the trigger guard, one through the barrel, and the third through the upper part of the frame. Use a wooden box and drive small nails on the inside at the desired points to which to secure the strings. The box should then be carried in such a manner that the gun will be suspended by one or two strings and steadied by the other. In other words carry the box on edge.

By giving a little thought to the matter a means can be devised to successfully transport any object suspected of containing latents.

In the development of latent fingerprints there are a number of things to be taken into consideration, particularly as regards fingerprints on glass and metal surfaces. Atmospheric conditions and the condition of the surface will play an important part in the success or failure of the developments.

On any surface, if the fingerprint to be developed is inside a building where there is much cooking, or where open gas fires are

used extensively, there is very likely to be found deposits of grease. Fingerprint powder applied to surfaces on which there is grease, will adhere to the entire surface, as well as to the ridges of the print, and completely eradicate the latent print. If there is any possibility of such being the case, test prints should be made and thoroughly tried out before attempting to powder the print. Similarly, surfaces on which there is moisture, as a result of dew, or damp weather, will have a like effect, and tests should be made before the powder is applied.

Glass and metals which are exposed to the elements, will, in cold weather, present some difficulty, even though no moisture is present. Powder applied to a cold glass or metal surface will adhere in lumps, and in many instances cannot be brushed away sufficiently to develop the print. The brushing requires so much pressure that if all the powder between the ridges is removed, the ridges themselves will also be destroyed.

In all the above mentioned cases the object on which the print appears should be moved, if possible, to a warm, dry place and allowed to remain for several hours before an attempt is made to develop the print. In some instances, where the coating of grease is heavy, the print will never dry sufficiently to permit of powdering. However, the portion between the ridges will be reduced to such an extent that a very good photograph may be obtained.

When fingerprints appear on painted surfaces those surfaces must be tested to determine if the paint is entirely dry before applying the powder. Particularly with enamels, some points never dry completely, and may cause the powder to adhere between the ridges as well as on them.

When prints appear on both sides of a piece of glass it is advisable that only one side be powdered at a time. If both sides are powdered the powder will show through the glass, giving a blurred appearance in the photograph. Develop and photograph the prints on one side, then wipe that side clean before working the other side.

Broken glass and other like objects, which can be conveniently removed, should be preserved until the prints are developed and the pictures finished in order to assure good photographs. In some cases it is advisable to preserve the object with the print intact, for presentation in court. If this is done, the print should be covered with cellophane to keep out the air and moisture.

If there is the least doubt as to the contrast which will be

obtained in the use of one color of powder, test prints should be made and developed with the different powders until the proper contrast is obtained. Test prints are easily made, and require only a little time.

Do not depend upon snap judgment or guess work to determine if a certain substance will "take" a fingerprint. The only sure way is to test it. If you have the remotest idea that the object might have been handled, and the prints cannot be developed with the equipment you have at hand, take the object to the laboratory to be tested further.