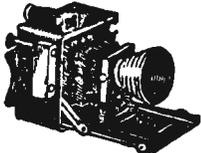




THE PRINT

*The Official Publication of the Southern California Association of Fingerprint Officers
An Association for Scientific Investigation and Identification Since 1937*

March / April 2003 Volume 19 Issue 2



OFFICERS 2003

PRESIDENT

George Durgin
USPHS
(310) 831-6123 x 116
durgin@scafo.org

FIRST VICE PRESIDENT

Ed Palma
San Diego Police Dept.
(619) 531-2573
palma@scafo.org

SECOND VICE PRESIDENT

Dennis Uyeda
Calif. Dept. Of Justice
(916) 227-3314

SECRETARY

Susan Garcia
Los Angeles Sheriff's Dept.
(213) 989-2163
garcia@scafo.org

SERGEANT AT ARMS

Gina Russell-Durgin
Escondido Police Dept.
(760) 839-4770
russell@scafo.org

CHAIRMAN OF THE BOARD

Steve Tillmann
Los Angeles Sheriff's Dept.
(213) 989-2163
tillmann@scafo.org

DIRECTOR

Lisa DiMeo
Arcana Forensic Services
(619) 992-0690
dimeo@scafo.org

DIRECTOR

Elaine Sena-Brown
Santa Monica Police Dept.
(310) 458-8497
sena-brown@scafo.org

DIRECTOR

Craig Johnson
Los Angeles Sheriff's Dept.
(213) 989-2163
johnson@scafo.org

DIRECTOR

Tom Washington
San Diego Police Dept.
(619) 531-2838
washington@scafo.org

HISTORIAN

William F. Leo
Los Angeles Sheriff's Dept.
(213) 989-2163
leo@scafo.org

TREASURER

James Lawson
NCIS- San Diego
(619) 556-1390
lawson@scafo.org

PARLIAMENTARIAN

Clark Fogg
Beverly Hills Police Dept.
(310) 285-2116
fogg@scafo.org

EDITOR

Alan McRoberts
McRoberts Forensic Investigations
(909) 693-9082
mcroberts@scafo.org

WWW.SCAFO.ORG

The Charles W. Wolford Award Howard A. Speaks -- 2002 Recipient

In 1947, Howard Speaks joined the Los Angeles Sheriff's Department as a Deputy Sheriff. Since that time, he has honored the profession of law enforcement, and specifically the field of fingerprints, with more than a half century of devoted service. In the late 1950s, he pioneered the use of ninhydrin within the Los Angeles Sheriff's Department. He made a major contribution to his own department, and, in the early 1960s, he shared his experience and knowledge with others. He authored several articles about fingerprints. These articles appeared in the Fingerprint and Identification Magazine. He spoke at the May 1969 SCAFO meeting in Bakersfield and again at the April 1970 meeting in the City of Commerce. In 1975, he retired as a Senior Deputy, but he continued his service to the administration of justice as a private fingerprint consultant until the after the beginning of the new millennium. During this time, Mr. Speaks continued to better our profession by working as a teacher of fingerprints to thousands of high school and college students. For many fingerprint examiners, Mr. Speaks was their first and foremost fingerprint instructor. Mr. Speaks also devoted countless hours as a volunteer at the Los Angeles Police Department latent print section and assisted in the filing of fingerprint cards.

Annually, a member of the Southern California Association of Fingerprint Officers may be recognized with an award from the association for outstanding efforts in promoting our science and/or association. This award, established in 1986, has been awarded seven times. SCAFO is pleased to announce that the 2002 recipient is Howard A. Speaks.



Howard A. Speaks

[Editor--In honor of Mr. Speaks' valuable service to the fingerprint community, this issue features four of his articles that appeared in the Finger Print and Identification Magazine. In the tradition of that fine magazine, the author's picture accompanies this article. His participation in the 45-year-old El Segundo homicide case (see page 2) is yet another example of his efforts and devotion to our profession. Thank you, Howard, for a lifetime of sharing your passion and devotion to our profession.]

A 45-Year-Old Fingerprint Leads to Arrest in El Segundo Police Killings

(This article is reprinted from the January 30, 2003, issue of the Los Angeles Times.)

By **RICHARD WINTON AND MITCHELL LANDSBERG**

Times Staff Writers

It was a routine traffic stop on a quiet summer night. Two El Segundo police officers had pulled over a man on Rosecrans Avenue, then a quiet, semirural road fringed with woods, fields and a vast Standard Oil refinery. The year was 1957.

Six shots rang out, mortally wounding the young officers, one of whom managed to gasp a dying request into his patrol car radio: "Send ... ambulance." The killer drove a few blocks in a stolen 1949 Ford, then slipped away on foot into the predawn darkness, never to be found.

At least, that was how it seemed until Wednesday, when authorities knocked on the door of a retired, 68-year-old businessman in Columbia, S.C., and arrested him on charges of murdering Officers Milton Curtis and Richard Phillips more than 45 years ago. He also was charged with robbing four teenagers at gunpoint and raping one of them, on a lover's lane in Hawthorne a short time before the shootings.

The suspect, Gerald Fiten Mason, was described as a pillar of his community who had enjoyed a round of golf the day before his arrest, and apparently had no idea of the net that was about to encircle him.

"He said he was very stunned," said Los Angeles County Sheriff's Det. Kevin Lowe, who was among the arresting officers. "We explained to his wife why we were there and what the charges were. She was also very shocked at what we had to say. She lived with this man for over 40 years and apparently never knew that part of him, that hidden past."

At a news conference in El Segundo, Los Angeles County Dist. Atty. Steve Cooley expressed the satisfaction of law enforcement officers at apparently cracking the case after so many years: "The message is, when it comes to killing a police officer, we don't forgive. We don't forget. We don't give up."

In fact, investigators had largely given up after an intense but frustrating manhunt in the years immediately after the crime. Evidence was scanty; leads led nowhere; suspects were arrested and freed.

Detectives had one prize — a vivid fingerprint left on the dusty door of the Ford. But without a finger to match it with, the print was no more useful than the dust in which it was etched.

Then, in the last two years, two developments — one a fluke, the other a forensic leap forward — brought the case back to life.

In September 2002, El Segundo police received a tip about a possible suspect. Police investigators, with help from the Los Angeles County Sheriff's Department, checked out the tip, which turned out to be another dead-end. But the old case piqued the interest of two sheriff's detectives, Lowe and Dan McElderry, neither of whom was born until two years after the El Segundo killings.

In February 2002, the Sheriff's Department became linked to a national FBI fingerprint database. McElderry and Lowe ran the print. It had a match: Mason's.

It turned out that Mason had been convicted in South Carolina in 1956 of burglary, said Sheriff's Capt. Frank Merriman. He had been routinely fingerprinted, and his prints eventually found their way into the FBI database. Those were the prints, authorities said, that match the one on the Ford.

With that link, it was a relatively easy matter to track down Mason, a retired gas station owner who lived in a three-bedroom brick home in an affluent subdivision of Columbia, the state capital. Detectives began trailing him as they assembled their case. They interviewed three of the four teenagers who were robbed the night of the killings, and found the forensic expert, now 88, who took the fingerprint off the Ford.

On Tuesday, Merriman said, they watched Mason play golf — a regular pastime, neighbors said. On Wednesday morning, they pounced.

The arrest was announced at a news conference outside El Segundo police headquarters, a few blocks from the crime scene, in front of a memorial wall that contains plaques of the department's fallen officers, including Curtis and Phillips.

"This is the oldest homicide I am aware we've ever solved," Merriman said. "And it's especially important because it's the murder of police officers."

Mason was booked into a Richland County jail in Columbia pending extradition proceedings. Earl Johnson, an intake officer who was present when Mason was brought in, described him as polite, docile and mellow.

“He looked slightly confused,” Johnson said.

Mason’s attorney, Chris Mills, said it was too early for him to discuss the case. “This is the first the family has heard about this,” he said. “We’ll take a look at the charges and take a look at what’s appropriate, but we’re still assessing documents and the situation.”

Cooley said Mason faces a maximum possible sentence of life without parole. Prosecutors cannot seek capital punishment because the death penalty statute in effect in 1957 was overturned and later replaced. The arrest reflects a growing interest among Los Angeles-area police agencies in using new technology to pursue old cases. Though large police departments have long made a habit of reviewing “cold cases,” both the Los Angeles County Sheriff’s Department and the Los Angeles Police Department have created special units in the past few years to pursue them full time.

Since 2000, the Sheriff’s Department has dedicated a five-member team of detectives to reviewing 2,000 of the 3,000 unsolved homicides dating back to 1980. Thus far, they have solved 29 cases.

The LAPD, which started its unit in November 2001, is looking at more than 8,000 cold-case killings dating back four decades. Thousands of those cases include fingerprints, some of which have been run through state and national fingerprint databases, Det. Rick Jackson said. DNA evidence also has given a boost to some cases, especially those involving sexual assaults. Detectives said it is not expected to play a role in Mason’s case because the physical evidence of rape was not kept.

In many ways, it was a different world.

The crime spree in which Mason is charged began on a dirt road near Van Ness Avenue and El Segundo Boulevard in Hawthorne. It was a spot — difficult to imagine now, with four lanes of traffic whizzing by factories and a golf course — that had a reputation as a quiet lover’s lane. Four teenagers — two boys, ages 16 and 17, two girls, age 15 — told authorities that they were parked there when a man approached them, flashed a gun and demanded money.

The teenagers said the man tied up the boys and one girl, and sexually assaulted one girl. He ordered them to strip and left the boys wearing only shoes, the girls wearing underpants.

It was a short time later, about 1:20 a.m. on July 22, 1957, that the two officers — apparently unaware of the rape and robbery — pulled over the car stolen from the teenagers when the driver allegedly ran a red light at Rosecrans and Sepulveda Boulevard.

Curtis, 25, and Phillips, 28, were regulars on the midnight-to-8 a.m. shift, recalled a retired colleague, John Booterbaugh. At the time, he said, the day shift was quiet

in El Segundo, a blue-collar town filled with the families of veterans who had moved to Southern California after World War II. At night, he said, “You could shoot a cannon down Main Street and not hit anybody.”

Homicides of any kind were rare; a double homicide of police officers was almost unimaginable.

“Everyone in El Segundo was shocked at the time,” Booterbaugh said. “We worked this case night and day for two years.”

Phillips, a laid-back Oklahoman who was a Korean War veteran, had managed to fire three shots before he died, and one early clue came from a woman who said a man matching the description of the killer had come to her door, complaining of an injured shoulder and asking for a glass of water.

Eventually, Booterbaugh said, police decided that “the guy must have been dead.”

Curtis left behind a widow and two young children; Phillips, a widow and three children. Phillips’ son, who asked not to be named, said Wednesday he was shocked but grateful that the case had apparently been solved.

“This many years later, we had resigned ourselves to the fact that the guy got away with it,” he said in a telephone interview. “Whether it’s justice for the family or for police officers, I was glad they were able to stick with it. Hopefully, people in the future won’t have to wait 45 years to have a person who changes a family’s life forever brought to justice.”

In the Lost Creek Patio Homes subdivision in Columbia, Mason’s neighbors were also shocked by the turn of events.

“I just could not even eat. I am just nauseated. That’s how much I think of the couple,” said Betty Wiggins, who has been living next door to Mason and his wife, Betty, for nine years. The couple has two daughters and three grandchildren, neighbors said.

Wiggins said she noticed police at the Masons about 9:30 a.m. and thought that something might have happened to the couple. When she called the house, Wiggins said, a detective answered the phone.

Margie Weed, who lives two doors down from Mason’s brick house on the corner, said she was “absolutely devastated.”

“I call him the mayor of our street,” she said of the suspect. “I just pray that it’ll go away, that it’s a mistake, but I know when they come this far, they pretty much know what they’re doing.”

Times staff writers Errin Haines and Andrew Blankstein contributed to this report.

The Use of Ninhydrin in the Development Of Latent Finger Prints

(This article is reprinted from the March 1964 issue of Finger Print and Identification Magazine, pp 11 - 13, 23.)

By **HOWARD A. SPEAKS**

Senior Deputy

Technical Services Division

Los Angeles County Sheriff's Department

Los Angeles, California

Ninhydrin is a word much used in identification circles since the middle 1950's. "Triketohydrindene Hydrate" and certain amino acids react to produce a purple colored product. All persons expel their excess amino acids (protein) through their perspiration. The small amount of amino acids found in perspiration is the basis upon which the ninhydrin method works.

Since the first use of ninhydrin in the development of latent finger prints, the results obtained indicate a bright future for this reagent in the police laboratory. Results have been so favorable that, as early as 1959, the Los Angeles County Sheriff's Department started using ninhydrin for the development of latents on paper on a full time basis, with one deputy assigned to that duty.

In this rather short span of time, twenty-one police departments, as well as other law enforcement agencies, have availed themselves of the services of the Los Angeles County Sheriff in their quest of latent finger prints on paper.

Fortunately for the identification man, ninhydrin will produce good latent finger prints on paper that might not appear if that paper were processed with other chemical methods which are available. Silver nitrate and iodine fuming methods have a definite use in processing paper for latent prints, and both should be used when the circumstances surrounding a particular case indicate their use. The order in which other chemical methods are used is very important. Iodine fumes can be used before ninhydrin, but silver nitrate must be applied after the ninhydrin process.

At present, ninhydrin has found its greatest potential in the field of forgery and burglary where checks have been taken. The person passing a forged or stolen check to a bank or large department store will not wear gloves, because he may be required to sign the check at that time. A burglar will usually not wear gloves when he is rummaging through papers at a crime scene, because the gloves cause difficulty in handling papers. These two reasons are among the greatest contributors to the success of the ninhydrin process.

From looking at past cases, it is obvious that a check passes through several hands before it reaches the laboratory to be checked for latent finger prints. This excessive handling would normally ruin any chances of finding identifiable latents. Although many finger prints are destroyed by the overlay of other prints, in many instances the strange latents may be isolated on the paper tested.

Three Suspects Identified

A recent case in the Los Angeles County Sheriff's jurisdiction was solved against what would seem to be insurmountable odds on the part of the finger print officer. Over two thousand checks, in blank form, were taken from a large office. During one week-end, eleven of these checks were cashed at large markets and chain stores. By actual count, these checks went through the hands of ten people other than the criminals. From these eleven checks, three suspects were identified as the thief who took the checks, the forger and the passer. These three were identified on only six of the eleven checks.

Reaction time to the ninhydrin process at this point has caused more questions than it has provided answers. The numerous factors which affect reaction time, such as: the grade of paper; the pressure used to touch the paper; the amount of perspiration emitted by the criminal; his diet; and many other factors seem to make the reaction time variable in each case. The only positive statement that can be made, regarding reaction time, is that the latent finger prints will begin to show in about two or three minutes, or may take as long as two to three months.

This span of time may cause considerable confusion on the part of the investigating officer, and the ninhydrin process should be explained to him in as much detail as possible.

Heat will cause the processed prints to react much faster in some cases, but is not necessary to produce the reaction. The reaction will come whether or not heat is applied. The heat merely expedites reaction. It is believed by some experts that heat has an adverse effect on processed latent finger prints. At this time, none of these adverse effects have been observed by this writer.

Delayed Development Noted

In June, 1963, several checks were processed for latents and at the time of the preliminary hearing in mid-June, the latents were not considered to be of court quality. The superior court trial was continued on two occasions and did not actually begin till mid-September. During the time the case was awaiting trial, the latents had developed to the extent that court testimony was given without hesitation.

Just when these latent finger prints became identifiable from a testimony standpoint is not known. It is believed that the time from the initial processing to a point where the quality was good enough for identification was at least two months.

It is interesting to note that while the latent of this defendant took this long to develop to identifiable quality, another defendant was identified on this same check in a matter of two or three minutes. Many cases are in the files of the Los Angeles County Sheriff's Department where latent finger prints did not develop to their maximum quality for over two months.

Contamination, as previously mentioned, does not preclude the possibility of making an identification, but as little contamination as possible certainly is desirable. Any paper to be processed for latent prints should, as soon as possible, be placed in some type of container which will protect it. Clear plastic envelopes have been found to be very effective. Eight and one-half by three and one-half inch plastic envelopes are ideal for checks, since they provide a clear view of the processed print and at the same time allow the investigator to handle the check without further contamination.

The solution used in the ninhydrin process varies in strength from one investigative agency to another. The percentage referred to in the early writings on ninhydrin is 0.4%, or four tenths of one percent. The weaker solutions take much longer time to develop good latents, while stronger solutions take less time and do not seem to harm the latent. A 1.5% of 1, 2, 3, triketohydrindene hydrate in acetone or ethyl alcohol has at this time produced the best and fastest reaction time.

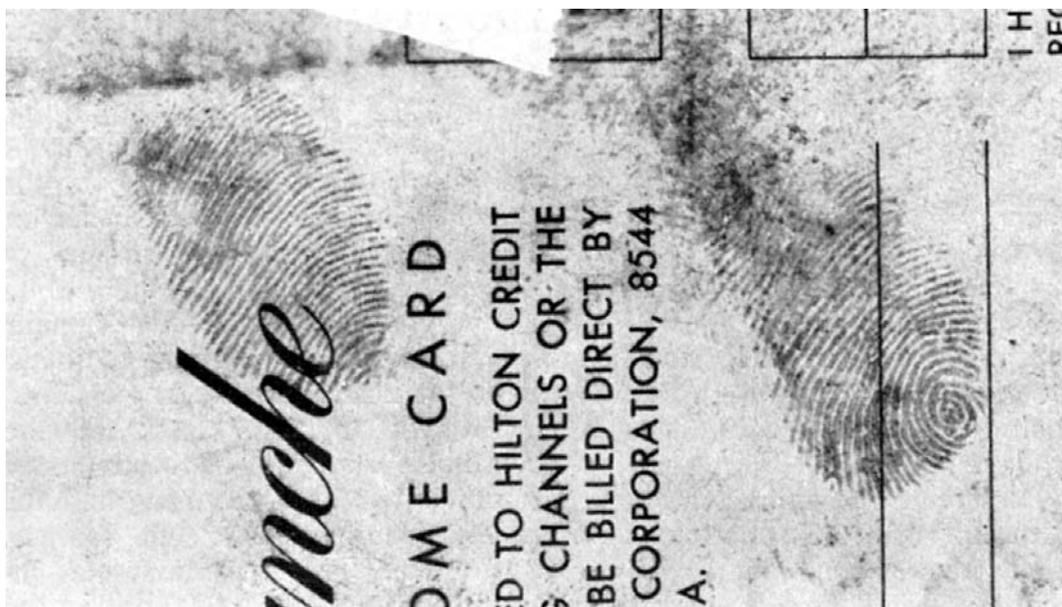
The solution can be mixed on the basis of using 1.5 grams of triketohydrindene hydrate in 100 cc of ethyl alcohol or acetone. As far as is known, the liquid reagent has no effect on the latent finger print and is used only to dissolve the chemical powder. Other liquid reagents can be used, but the ethyl alcohol and acetone are used because of their ability to evaporate quickly.

Writing or typing, depending on the quality of the ink, may run or smear. For this reason, it is advisable that evidence which contains writing or typing be photographed before it is subjected to ninhydrin. Strength of the solution, quality of ink either in the paper or on the paper, and other variable factors make this an area for further experimentation.

Spray-On Methods Favored

There are multiple methods for the application of ninhydrin. The small dental type spray, a larger vibrator type spray, or dipping the article to be processed into the solution, have all been satisfactory. The larger type spray will cause a considerable amount of the solution to evaporate in the air, but should be used where several papers are to be processed. Dipping is successful where the retention of the writing is not important. For the average case with a very few pieces to be processed, a small dental type spray is recommended.

In the past, paper has been virtually ignored for all practical purposes in the discovery of latent finger prints. Any type paper, whether porous or smooth, is suitable for processing with ninhydrin. Possibly the modern-day burglar or check passer has overlooked the probability of leaving his finger prints on paper. Let's keep it that way.



These latents were developed on a Carte Blanche charge card. Nine of these cards were processed, resulting in the suspect's identification.

satisfactory for that purpose. A thin, flexible rubber glove makes it possible to separate sheets of paper with little effort.

Up to now, it was generally believed that no latent prints would be left when rubber gloves were worn, and that no latents could be developed on the soft pliable rubber used to manufacture such gloves. The relatively new method of development of latents with ninhydrin has changed this outlook. Rubber gloves, while aiding the burglar, also provide a very good surface for developing latent finger prints.

Ninhydrin Prints from Rubber Gloves

(This article is reprinted from the September 1966 issue of Finger Print and Identification Magazine, pp 3 - 5.)

By **HOWARD A. SPEAKS**

Senior Deputy

Technical Services Division

Los Angeles County Sheriff's Department

Los Angeles, California

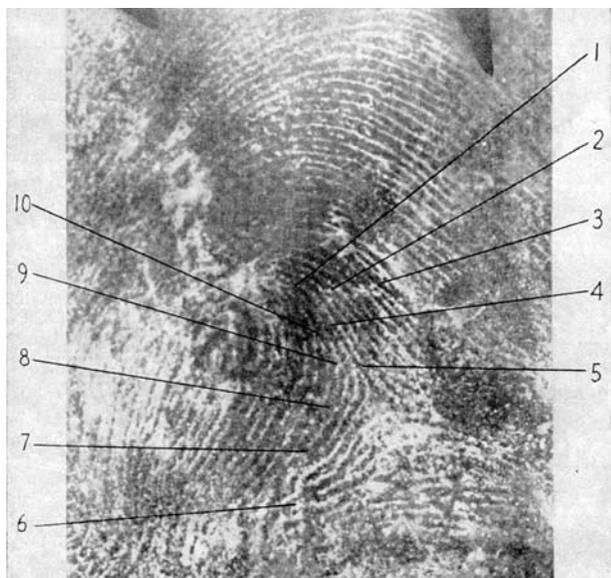
A burglar wearing gloves may create one of the most disappointing situations which can be encountered by the latent finger print officer. Until a short time ago, at least, the foregoing statement was true. Now it is possible, however, to obtain identifiable latent finger prints from the inside of rubber gloves.

The heavy type glove is clumsy to work with while plying a criminal trade. For that reason the criminal often selects a glove which will give him a more natural sense of touch. Rubber gloves have proven to be very

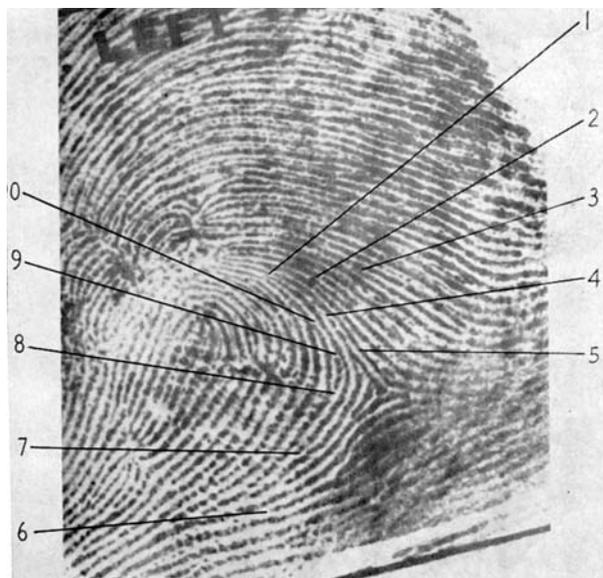
Hands Perspire Freely

The lack of air circulation and normal body heat will cause the fingers to perspire freely in the gloves. The small amount of amino acid in the perspiration will react to the ninhydrin solution and produce a finger print pattern.

Recently, in the Los Angeles area, a burglar was identified by finger prints even though he was wearing rubber gloves during the entire period while he was at the crime scene. An extra office light burning at night was the downfall of the burglar. A cruising radio patrol car crew noticed the extra light and decided to investigate. The burglar, somehow alerted to the arrival of the officers, ripped off his rubber gloves and fled. The alert officers saved the gloves for further investigation.



The enlargement of the latent impression developed on the inside of the glove, though understandably lacking in detail, is clearly identifiable.



This is the inked comparison print which enabled the Los Angeles County Sheriff's Department to identify the gloved night burglar.

In the laboratory the gloves were carefully turned inside out to expose the portion of the gloves which had been in contact with the fingers. The gloves were dipped in the ninhydrin solution and allowed to dry. In a very short time friction ridges became apparent.

The procedure for making the finger print exhibit for court presentation was slightly different from that used under normal circumstances. The glove finger was mounted on a piece of clear glass and placed directly in the enlarger.

The exposure time through the glove was slightly longer than normal, but the quality of the photograph thus obtained more than offset the inconvenience this method may have caused. The positive finger print pattern on the glove, when used as a negative, gave a reversal print. Such reversed image will create no problem for the qualified finger print technician. A positive print can be made easily when desired.

The tip portion of the latent on the glove revealed many ridge characteristics which do not appear in the routine inked impression. This, of course, is caused by the fact that the glove follows the contour of the finger, while when taking inked impressions, only the flat underside of the finger is rolled.

In describing the use of ninhydrin in his previous article, Mr. Speaks recommended:

“The solution used in the ninhydrin process varies in strength from one investigative agency to another. The percentage referred to in the early writings on ninhydrin is 0.4%, or four tenths of one percent. The weaker solutions take much longer time to develop good latents, while stronger solutions take less time and do not seem to harm the latent. A 1.5% of 1, 2, 3, triketohydrindene hydrate [the technical name for ninhydrin] in acetone or ethyl alcohol has at this time produced the best and fastest reaction time.

“The solution can be mixed on the basis of using 1.5 grams of triketohydrindene hydrate in 100 cc of ethyl alcohol or acetone.”

Ninhydrin Development of Latent Prints

(This article is reprinted from the August 1970 issue of Finger Print and Identification Magazine, pp 14 - 17.)

By **HOWARD A. SPEAKS**

Senior Deputy

Scientific Services Bureau

Los Angeles County Sheriff's Department

Los Angeles, California

The presentation which follows was a talk given by Mr. Speaks before the Southern California Association of Fingerprint Officers at its monthly meeting on April 3 in Commerce, California. It is published here, with permission of the author, in hopes that it will convince some of the ninhydrin skeptics of the value of this solution in developing latents. Mr. Speaks has had a great deal of experience with the ninhydrin process, and twice before, in March, 1964, and September, 1966, has discussed it in this magazine - Editor. [T. Dickerson Cooke, Finger Print and Identification Magazine.]

I am very happy to have been asked to speak to you for a few minutes this evening. I make a few appearances before various groups to speak on finger print identification, and I am sure that if you have ever made any of these appearances, you know what I mean when I say that by the time I leave the speakers' platform I don't really know if anyone understood a word I said. That is the reason I am really happy to be here for I know when I am through, if I am able to express just how I feel about ninhydrin, you will know what ninhydrin can do to make your life as a finger print man much happier.

You weren't expecting a formula for true happiness, were you?

You are probably familiar with the story of how the Swiss scientist, quite by accident, discovered the tremendous capability of ninhydrin; how he dropped his notes into the ninhydrin solution he was using; how he reached into the solution, retrieved his notes, and then set them up on shelf to dry. Some time later when he looked at his notes, he discovered finger prints on them. This was the moment when a great thing happened for finger print men.

Now, as President Nixon says, "I want to make one thing very clear."

At no time do I want you to think that I am in any way downgrading silver nitrate or iodine fuming. Both will work if the substance which they react to is present. Because of a diet a person might not have enough

salt in his perspiration to react to silver nitrate. On the other hand, a person might have just washed his hands and has not as yet contaminated them with any material which would react to iodine fumes, and he too might not leave any latent prints which could be developed with iodine fumes.

I am not taking anything away from either process. I am simply pointing out two instances where they would not be successful. I can also point out situations where ninhydrin will not work, but there will not be as many.

Why We Leave Latents

We know from experience that when we are nervous we perspire. Usually the more nervous we are, the more we perspire. We can assume that most criminals in the act of committing a crime are nervous and will perspire quite freely. This one fact is the reason ninhydrin is so valuable from the standpoint of finger print identification. If it were not for the sweat pores on our fingers, most of us would not be here tonight. We have a number of known facts which sound something like this:

1. Everyone perspires.
2. The palmar surfaces of the hands are a major source of this perspiration.
3. Finger print patterns are a result of the grouping of the sweat pores.
4. Everyone has an excess amount of amino acid or protein available in his system.
5. Our excess protein leaves our bodies through our perspiration.

Now, if all these facts are true, what must we do to take advantage of this situation? The answer is quite simple: Find a way to cause these small deposits of protein to become visible. This is exactly what ninhydrin does. It acts as an aniline dye and colors these tiny deposits of protein purple so we can see them.

At present and with very few exception ninhydrin has proven to be MOST successful on paper. As far as raising prints is concerned, the type of paper really doesn't matter. Ten years ago if someone wanted a brown paper bag processed for prints, the situation was almost laughable. The same held true for a match book or for a bundle paper in narcotic cases. You might be surprised to

know that I have testified in three cases where I raised and identified prints on the inside of narcotic bundle papers. The brown paper bag for some strange reason turns out to be one of the very best surfaces for latent finger prints.

This brings to mind a bank robbery where the robber orders the teller to put all the money in the paper bag, or where he hands the teller a deposit slip on which he has written his note of demand, or the check passer at the market when he hands a check to the manager for approval and then hands it to the checker for cashing.

Prints Inside Rubber Gloves

I could stand here for hours and relate tales of the amazing feats accomplished with ninhydrin, but there is just one that I do want to tell you. About two years ago a small police department brought me a pair of rubber gloves and asked if I could do any good with them so far as prints were concerned. From previous experience I knew I could—if the circumstances were right.

This particular burglar had done time in state prison on two occasions after he had been convicted by finger print evidence. (Some people never learn.) He was so conscious of finger prints that he had purchased new rubber gloves for this job, and he had put them on before he arrived at the location of the crime. After he had finished his burglary and was ready to leave, he peeled the gloves off and threw them just inside the door on his way out. He went up on the desert, on the other side of Lancaster, where he dug a hole in the sand, emptied the jewelry into his pockets, put the empty boxes in the hole, burned the boxes, and covered the hole with sand.

Changes His Plea in Court

He was very surprised, to say the least, when two days later the detectives came to his home and arrested him for burglary. He finally told the detectives that they couldn't have his prints because he had worn rubber gloves. When the case got to Superior Court and he saw the finger print exhibit and heard the finger print witness called to the stand, he copped out. I have testified in three other cases where I have had identifications on the inside of rubber gloves.

First, I must explain that I am not a chemist and know very little about supersaturated mixtures. I could spend a lot of time explaining the things I don't know. If you have read certain articles about ninhydrin in which it is said that some people work on the theory that if a little

works good, a lot should work better, I must confess that I must be the person referred to since I use a lot and the person who wrote the articles came to my office to ask questions before he wrote them. The early writings about ninhydrin suggested a .5% (one-half of one percent) solution. There can be some climatic effects which might cause the solution to be higher or lower, but generally speaking the places I have contacted which use ninhydrin use in the neighborhood of a 3.0% solution, or they use the pressure type can which is sold at the usual police agencies. I might add that at present I am getting more identifiable latents on jobs than the places which use the weaker solutions.

The comparison of inked prints against chemically processed latents is no more difficult than any other comparison, generally speaking. The exception is in those instances where there is not much perspiration present on the paper tested. Since we are dealing with the perspiration directly as it comes from the pores, the resulting print will sometimes appear as a series of small dots. When you carefully think this situation through, you suddenly realize that this is the most accurate representation possible of the pore structure.

Experience Eases Comparison

Dusted latents and inked impressions are all contaminated to some extent, that is, they contain powder or ink. The ridges appear as lines because the powder or ink has been extended until it joins and connects the pores. Once you realize that this situation exists, it is no more difficult to compare processed prints than any other. As you become more experienced in comparing ninhydrin prints, it is much easier to see them as they would look if they were inked.

Ninhydrin is applied either by spraying, painting, or by dipping. The spraying is usually done with a small dental type spray, or on large objects a paint sprayer can be used. Any sprayer is acceptable which will break the solution up into small particles, almost a mist. The flit-gun type sprayer is not usually acceptable since it will deposit large globs of the solution in very small areas, and might cause a print to be ruined.

Personally, I have never used the paint brush method since I can only think of a latent finger print as a very delicate thing indeed, and it just seems to me that the brush would be too harsh. Some people say it is successful, and I can't argue with success.

Dips Most of His Evidence

The majority of all jobs which come to me for processing are dipped. This seems to work the fastest, it is easy to do, and no preparation for large spraying areas is necessary.

Immediately after the paper has been sprayed or dipped, it should be placed in a well ventilated area for a few minutes and be allowed to dry. Heat will speed the development of ninhydrin somewhat, but is not necessary to start the process working.

Very little is known about the stability of the processed prints. Some prints have been known to start fading in as little as two months, while others are still visible and identifiable after five or more years. At the same time, no positive statement can be made regarding how long it will take a print to appear. I have statements from forensic chemists in our crime laboratory and from pathologists in the coroner's office which indicate to me that there are 26 basic types of amino acids and hundreds of types of combinations of amino acids. From my own experience I think each of these types reacts at its own special time. The best statement regarding reaction time is that a print will start to appear in about two minutes, or ten minutes, or tomorrow, or maybe next month.

In closing, I would like to say that if you haven't used ninhydrin, you should. I'm glad I use ninhydrin, and I wish everyone did.



**Upcoming
SCAFO Meeting**

April 7, 2003

Program: *AFIS hit on Latent Print from
1957 Murder of two El Segundo Police Officers*

Past Presidents' Night - Dinner Meeting:
94th Aero Squadron
16320 Raymer Avenue
Van Nuys

Dinner reservations:
Steven Tillmann (213) 989-42163
tillmann@scafo.org

*Regular meeting announcement
with directions to be mailed.*

Expert Finds Many Details in Small Area of Arch Pattern

(This article is reprinted from the August 1971 issue of Finger Print and Identification Magazine, pp 12 - 15. No byline appears with this article because the article was presented by the magazine's editor, T. Dickerson Cooke, as a recap of information provided by the submitter. This format was frequently used by the magazine's editor.)

To constant readers of this magazine the name Howard A. Speaks will be familiar. Three articles under his byline have appeared in previous issues. Mr. Speaks is a senior deputy in the technical services division of the Los Angeles County Sheriff's Department, Los Angeles, California. In a recent letter he enclosed three fascinating finger print enlargements which provide some rich food for thought.

In his covering letter he said:

"I am sending you what I think is a very interesting finger print. Enlargement A is interesting because it has so many good points in an area that is actually less than a quarter of an inch square."

For those readers who may not be familiar with the use of the word "points" in referring to friction ridge patterns, what Mr. Speaks means is friction ridge characteristics—Galton details. In many identification bureaus the word "points" is employed synonymously with "ridge characteristics."

What appears to be a grid around the edge of the friction ridge area Mr. Speaks explained this way:

"The area which would appear to be a grid is, in reality, four of our photo identification scales with the white border trimmed off. By trimming the border I was able to form a square which served as a very good mask to leave the white border around the rest of the paper."

For the reader's information, the "grid" lines are 1/16 of an inch apart on the original scales, so the friction ridge area shown in enlargement A is actually less than 1/4" wide.

Counting the two ridge enclosures in the pattern as two characteristics each, Mr. Speaks came up with a count of 14 points in this small area of friction skin.

As he pointed out in his letter of transmittal, this particular pattern is interesting also, "... because it is an arch, and we so often need a much larger area of a plain arch to form our opinion."

For a third reason Mr. Speaks thinks the pattern is of unusual interest because:

"This is the type of print the expert is speaking of when

he tells the defense attorney, 'I would have to see the print to answer your question.' This is regarding those defense attorneys who keep subtracting one point each time they ask an expert if he would form his opinion on X number of points."

"I doubt if any expert would have any difficulty forming his opinion," Mr. Speaks added, "if he were to see the less than 1/8" area shown in enlargement B because there are six points marked off there. Points 8 and 12 I feel are unusual because the bottom leg of 12 is the top leg of 8, and the end of 10 is the actual start of 12."

In closing his letter Mr. Speaks referred to enlargement C in which the viewer can start at the arrow on the left edge and following the ridges as we have indicated, finally reaching point 4, "never lifting the pen from the paper and never crossing a white or valley area."

Mr. Speaks wrote:

"I have never tried this before so it may not be unusual, however, I feel that this is a lot of points (seven of them) to trace and not find the continuity broken."



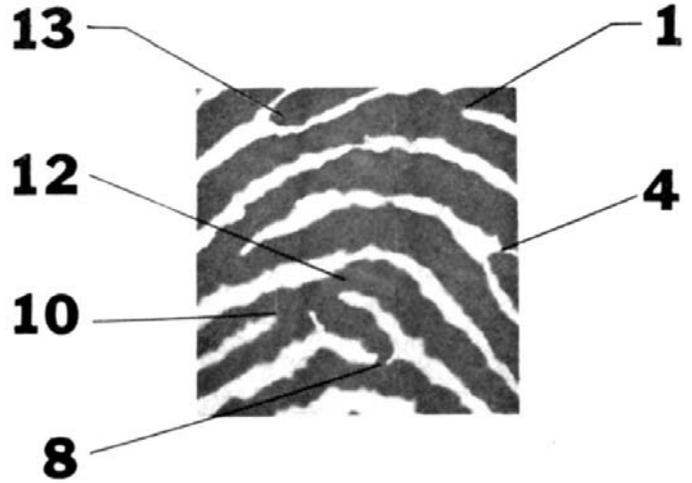
Slightly enlarged photograph of plain arch used in this study.

Will Study Idea Further

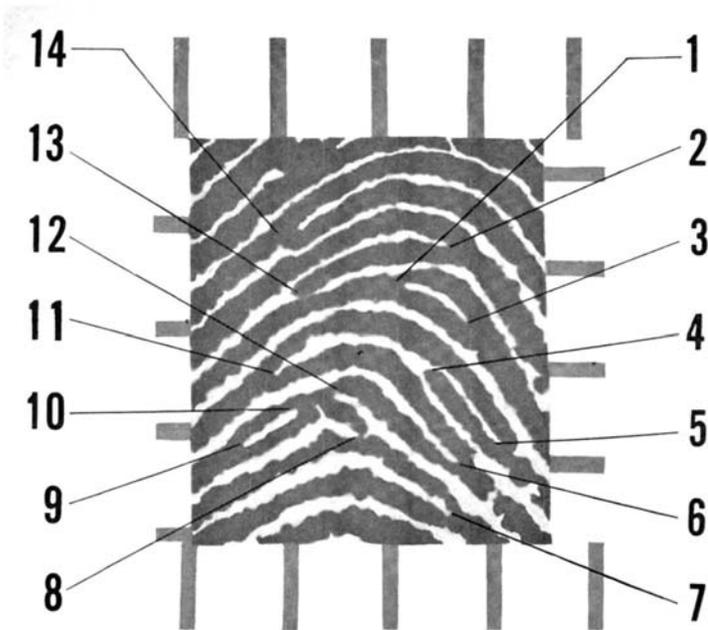
It would seem so to us, also, so we asked Mr. Speaks to delve into the matter further to see if he could come up with any definite conclusions as to the possible evidential value of this. In his reply he said that the workload at the sheriff's department had precluded him from doing much more checking, but that he was interested and would look into it as time permitted.

"I don't find many occasions, except in plain arches, where this particular situation occurs," he wrote. "I mean by that, with more than two or three points. I have found that in whorl patterns it seems to be a little more evident than in loops. Considering both whorls and loops, in the limited checking I have done, five or six points are the most I have found. Checking plain arches, I have found one print which had eleven points before the continuity was broken."

He was looking forward, he said, to his results after checking additional patterns. If what he finds has any practical application in finger print comparisons, we shall report them as soon as possible after receiving them from him.

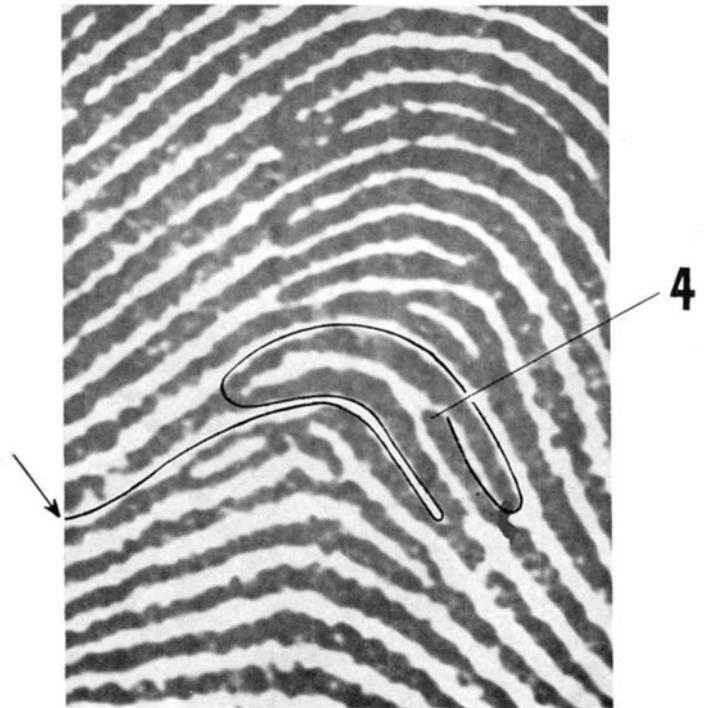


Enlargement B.
This is an enlargement of a 1/8 inch square of the center of the arch, with six characteristics pointed out. If one wished to do so, he could also indicate point 11 which we have not done.



Enlargement A.

This is an enlargement of the central portion of the arch. As can be seen, there are 14 ridge characteristics in the area which was less than 1/4 inch square in its original size.



Enlargement C.

By starting at the arrow along the left edge of this photograph, the viewer can trace until he reaches point 4 and pass seven characteristics without crossing even one furrow or "valley area."

Dr. Henry Faulds - Beith Commemorative Society

Henry Faulds was born in the small Scottish town of Beith on June 1, 1843. He was educated at the Beith Academy. His parents' market produce warehouse in Beith fell on hard times and, at age 13, Henry went to work in Glasgow as a clerk. At 21, he decided to study at Glasgow University, where he took classes in mathematics, logic, and the classics. Four years later he studied medicine at Anderson College. He later became a Church of Scotland missionary to India and, in 1874, he became the United Free Presbyterian Church's first medical missionary to Japan. In 1875, he established Tsukiji Hospital and was offered the post of physician to the Imperial House, which he rejected because it would have meant giving up his work with the poor. During this period he developed a system of raised script to allow blind people to read, a precursor of Braille.

During the 1870s, Dr. Faulds was studying ancient pottery, when he found a fingerprint. Fascinated by it, this led to his scientific study. He removed his own prints with chemicals and discovered that they grew back in the same pattern. He amassed a collection of fingerprints, but a breakthrough came when Tokyo police arrested a man for burglary. Dr. Faulds proved that the suspect could not have been the thief. When the police subsequently arrested another suspect, Dr. Faulds established that it was the second suspect's fingerprints that had been left at the scene of the crime. In 1880, Dr. Faulds published his research in *Nature Magazine*, an article in which he predicted the forensic application of fingerprints and even forecasted that fingerprints would one day be transmitted by photo-telegraphy. When Dr. Faulds appealed to the aging Charles Darwin for help in promoting research, Darwin passed Dr. Faulds' findings to his nephew, Sir Francis Galton. Sir Francis Galton and his colleague, Sir Edward Henry, would later claim these findings as their own, quietly forgetting to credit Dr. Faulds' pioneering work. As is the case in many great ideas, the credit for the genesis of fingerprinting goes, in truth, to a number of people. Unfortunately, history often consigns the idea to only one or two names because it is the story that is so often repeated, or, for political reasons, it is the one that is best liked. Sadly for Henry Faulds, for political reasons, his was the name that was least liked in the "official" history of fingerprinting. Dr. Faulds died an embittered, largely forgotten man in 1930. Colin Beavan (New York) recently published a fascinating book appropriately called *Fingerprints*. This excellent and very readable book puts the record straight and ensures that Dr. Faulds' role as a prominent pioneer of fingerprinting is properly acknowledged.

Dr. Faulds is still revered in Japan. A memorial has been erected there in Dr. Faulds' honor, but he has been largely forgotten in his birthplace. This is a wrong which deserves to be put right. Therefore, the Dr. Henry Faulds-Beith Commemorative Society held its first meeting on November 24, 2002, in an effort to gain support to erect a fitting memorial to this forgotten Scot who left his mark on crime-fighting.

The work of the committee is still at an early stage, but we have the support of Brian Wilson, MP, Minister of State; Allan Wilson, MSP, Deputy Minister in the Scottish Executive; James Jennings, OBE JP, Freeman of North Ayrshire; Dr. Robert Stewart, great-nephew of Henry Faulds; and Dr. Colin Beavan, author of *Fingerprints*.

Those who know of Dr. Faulds and his pioneering work in fingerprints are invited to become subscribers to this memorial by making a donation. Subscribers will have their names recorded on the official brochure that will be published at the inauguration of the memorial, and they will become inextricably linked to putting right an oversight which has blighted the fascinating world of fingerprints for too long.

If anyone would like more information, wishes to help in this vital project, or has suggestions about the type of memorial, I would be delighted to hear from you.

Donald L. Reid, Secretary
Dr. Henry Faulds-Beith Commemorative Society
7 Manuel Avenue
Beith KA15 1BJ
Scotland
Telephone 01505-503801
donaldleesreid@hotmail.com
www.henryfaulds.org

[Editor- In 1985, Jim Mock, SCAFO's first editor (and creator of THE PRINT), conducted a Super Glue Workshop and raised a substantial contribution to support the purchase of a monument for Dr. Henry Fauld's gravesite. Current SCAFO members should consider carrying on that fine tradition of supporting the recognition of our fingerprint forefathers and assist this effort which has been initiated to recognize Dr. Fauld's birthplace.]

PASS THE SALT & PEPPER, PLEASE

(Ode to the benefits of association)

I just didn't get it. For almost 17 years now I have tried to be a perfectionist where it comes to NEC AFIS operation.

No direct entries for me! Tracing allows for clarification of every single bifurcation and ending ridge. I didn't miss anything. Sure, it took me 15 to 20 minutes to scan, enhance, reverse, print, trace, flip the paper and re-trace. And another 3 minutes to enter the tracing. But I wasn't missing a thing.

Or so I thought.

Then, at the last SCAFO Seminar I heard something insane: Dusty Clark (WIN Instructor) suggested that I drop that antiquated M.O. and do the direct entry method. Nothing new there. He said I should DELETE ALL and only enter those nice clear points - never mind the flaky smudged stuff. That was new, and radical.

I had a picture of having to draw the print on screen - a sort of 'connect the dot' nightmare.

However, even though I'm 70 years old, I'm not afraid to try something new, so I tried the Dusty method. Lo and behold it worked! Instead of the laborious rebuilding of a print erased by deleting everything, I was pleasantly surprised to find that all I had to do was mark the minutia. That opened the zone only in the location of that point. All of the false minutia created by poor recording surface, pressure distortion, "double taps", incipient and broken ridges remained "zoned out". This part was a snap.

The boring part came when I found that I had to manually count the ridges numerous times for each point. It didn't take long for me to figure out that a successful search is possible without utilizing the entire latent fingerprint. Those points which define individualization - a sufficient group of points, in sequence, etc. - are also sufficient for a search.

Now I scan, delete all, set the core/axis, light up the group of individualizing points, count the ridges, and ship it. This entire operation takes 10 to 12 minutes - a saving of 10 to 12 minutes per search.

And best of all: my hit rate has increased from 15-18% to 20-25% or more.

Try it - you'll like it.

Tom Jones

MINUTES OF FEBRUARY MEETING

DATE: February 8, 2003

LOCATION: Sheraton Four Points, Santa Monica

HOST: Elaine Sena-Brown

SECRETARY: Susan Garcia

SPECIAL GUESTS: Lt. Carol Shepard, Officer Sandra Terhune-Bickles (speakers), and retired Deputy Howard Speaks

PROGRAM: Dinner Meeting / Wolford Award Presentation / Santa Monica Pier Case

CALL TO ORDER: 2020 hours by President George Durgin

ATTENDANCE:

PAST PRESIDENTS: Alan McRoberts (1991), Clark Fogg (1994), Jim Lawson (1995), Bill Leo (1996), Robert Goss (2001) and Steve Tillmann (2002).

Executive Board: George Durgin, Ed Palma, Dennis Uyeda, Susan Garcia, Gina Russell-Durgin, Steve Tillmann, Elaine Sena-Brown, Lisa DiMeo, Bill Leo, Clark Fogg, James Lawson, and Alan McRoberts. (Absent: Tom Washington and Craig Johnson).

Members and guests present - 95.

GIFTS: Elaine Sena-Brown

OLD BUSINESS:

Second Readings:

Active:

Irma Hernandez, Celeste Madruga, Dana Marks, Lenora Pena-Sanchez, Cynthia Vasquez, Allan Villacorte, Serena Walsh, and Liza Zinn.

Motion to accept: Robert Goss

Second: Alan McRoberts

Swear Ins:

Eric Morales - San Bernadino Sheriff's

Maria Sepulveda - LAPD

Barbara Mensah - Associate Member

NEW BUSINESS:

First Readings for Active Membership:

Jim Accornero - City of Anaheim

Recommended by: Christina Moore

Carol Lekowski - Santa Monica Police Dept.

Recommended by: Elaine Sena-Brown

Trang Nguyen - Los Angeles Police Dept.

Recommended by: Melissa Popovic

Destinie Wade - Bakersfield Police Dept.

Recommended by Sherrie Hill

(No associate members introduced)

CHARLES WOLFORD AWARD and

LIFE MEMBER AWARD: presented to Howard Speaks for his achievements in the field of Latent Print Identification. Howard has been a member of SCAFO since 1975 and active in the field of Latent Prints since 1947.

Howard's work includes a 1957 murder case where two El Segundo Police Officers were killed. As a result of his work, a suspect was arrested in January of 2003. This case is currently being resolved in the Court system. An overview of this case will be presented at the April SCAFO dinner.

PROGRAM : Presentation of the July 4, 2000, Santa Monica Pier Incident, where three officers were shot and several hostages were taken by a multiple homicide suspect. Lt. Carol Shepard and Officer Sandra Terhune-Bickler, spoke on the challenges of negotiations, maintaining the scene, and other aspects of handling the complex situation.

ANNOUNCEMENTS:

Next meeting: Past Presidents' Night, April 5, at 94th Aero Squadron in Van Nuys, hosted by Steve Tillmann.

Past President Robert Goss asked that a moment of silence be observed for our military personnel currently serving our nation at this time of impending conflict.

ATTENDANCE DRAWING: \$50.00 won by Maria Navarro.

DOOR PRIZES: were won by 16 members in attendance.

MOTION TO ADJOURN: Jim Lawson
Second: Steve Tillmann

MEETING ADJOURNED: 2100 hours

MINUTES OF JANUARY EXECUTIVE BOARD MEETING

DATE: January 18, 2003

LOCATION: Danny's Kosher Pickle, Covina

HOST: Steve Tillmann

SECRETARY: Susan Garcia

PROGRAM: Executive Board Meeting

CALL TO ORDER: 0920 hours by Chairman Steve Tillmann

ATTENDANCE:

2003 Executive Board: George Durgin, Dennis Uyeda, Susan Garcia, Gina Russell-Durgin, Steve Tillmann, Tom Washington, Craig Johnson, Elaine Sena-Brown, Lisa DiMeo, Bill Leo, James Lawson, and Alan McRoberts. (Absent: Ed Palma and Clark Fogg.)

OLD BUSINESS:

(First approved two years ago) The purchasing of audio equipment, microphone(s), speakers, and amplifier.

Motion to accept and purchase: Alan McRoberts
Second: Dennis Uyeda

Equipment not to exceed \$3,000. Types and prices of equipment to be researched and purchased by Steve Tillmann. Purchased equipment to be stored by Lisa DiMeo.

NEW BUSINESS:

Treasurer's Report - Financial Statement for 2002: Jim Lawson

Editors's Report - Expenses for 2002: Alan McRoberts

Discussion put forth on possibility of emailing The Print. Decision made to continue sending a hard copy.

CHARLES WOLFORD AWARD: To be presented to Life Member Howard Speaks for 2002. Unanimous agreement by board to suspend normal operation of the bylaws for this nomination.

Motion put forth: Bill Leo
Second : George Durgin

SCAFO Merchandise - Continue to sell the existing mugs and obtain a current count of stock on hand from Tom Washington before re-ordering.

Challenge Coin to be developed with SCAFO logo. Susan Garcia will make a presentation in a future issue of The Print calling on members to make suggestions for design.

New sports shirts with logo to be looked into. (Currently, no existing stock on shirts).

Data base of members to be maintained by both treasurer and secretary. Separate data base to be set up for Associate / Student members.

ASSOCIATE MEMBERS: Students need to submit proof of current enrollment in the field of Forensic Science (with 12 or more semester units) or volunteer status with a Law Enforcement agency. Directors will be responsible for following up on applications.

[A notice should be sent out to local instructors (Diana Castro, Janice Cavanaugh, and Ed Palma) explaining this requirement.] Membership funds will not be collected until records are supplied.

Discussion on creation of SCAFO identification card put forth by Steve Tillmann. Voted down by a majority of the board.

Discussion on creation and administration of a Latent Print Examiner Certification test by SCAFO. Proposal to be written and followed up by Bill Leo. Agreement of Board to meet one hour early at April meeting to continue discussion.

Discussion on whether to continue or discontinue the attendance drawings. Decision made to continue attendance drawing and verify that all dues paying members are represented in the drawing tags.

2003/2004 Meetings: (dates subject to change)

February 8 - hosted by Elaine Sena-Brown

April 6 - hosted by Steve Tillmann (Past Presidents' Night)

June 7 - hosted by Gina & George Durgin

August 2 - hosted by Tom Washington

October 3 & 4 - Training Seminar

December 6 - hosted by Ed Palma (Installation of 2004 Executive Board)

February 2004 - hosted by Lisa DiMeo

DISCUSSIONS:

President George Durgin appoints Bill Leo to 2003 Workshop / Seminar Chairman.

Keeping the training seminar at the same location as 2002 (Embassy Suites).

Additional executive board meeting for 2003 (possibly July 26, hosted by the Durgins at their home).

Donation to SCAFO's permanent history collection: 1930's issue of Fingerprint Identification Magazine, by Tony Clark-Stewart. Accepted by Historian Bill Leo.

MOTION TO ADJOURN: Dennis Uyeda
SECOND: George Durgin

MEETING ADJOURNED AT 1315 HOURS

President's Message

Our first meeting this year, February 8, was terrific and humbling. Elaine Sena-Brown hosted our meeting at the Four Points Sheraton in Santa Monica. We had fantastic attendance, we even had to add another table. Unfortunately, before I had a chance to start the meeting I was negligent and had our President's 1937 Wolford gavel stolen, which will be discussed later.

Having to use a spoon for my gavel, I was able to call our meeting to order and after dinner we had a great presentation. Lt. Carol Shepard and Officer Sandra Terhune-Bickler of Santa Monica P.D. gave us a PowerPoint presentation of a hostage situation involving a triple homicide suspect at the Santa Monica Pier on July 4, 2000.

The presentation provided terrific insight into the behind the scenes detail in negotiations and teamwork. Thank you to Santa Monica P.D. for being a gracious host for our meeting.

Although I was embarrassed because of losing the President's gavel, I was honored to join many other Presidents who have had the same fate. It is the inherent duty of every SCAFO President to protect the President's gavel. Because our past presidents watch over our gavel so closely to protect it when it has been abandoned, I know it is safe until I deserve to receive it back.

A little understanding of the significance of the President's gavel is in order: In 1937, 40 fingerprint officers met in Beverly Hills as part of their informal meeting and decided to make it formal and created SCAFO. Bob Rogers of the Los Angeles Sheriff's Department was elected the first President of SCAFO. In 1939, Charles Wolford provided a gavel, which is preserved for history with a brass plate to remember its donation to SCAFO. Charles Wolford was a Captain for Santa Ana P.D., was one of the original forty officers who met (membership #31), and was SCAFO's third President.

So here I am, the 66th SCAFO President, embarrassed and humbled to have lost the first SCAFO gavel. Once I am worthy enough in the eyes of our past presidents to receive the President's gavel back, I assure all of you that I will do my duty to protect our history, ensure our future, and look forward to watching over the gavel as a future president becomes negligent.

So what can you do help SCAFO and preserve our future? There is plenty you can do right now. Our Training Seminar is scheduled for October 3-4, 2003. Bill Leo (Past President and current Historian) has stepped up again to coordinate our Training Conference. Each year we learn so much and improve each time we have a conference that it is getting difficult to improve on. This is where you can help! Speakers, suggestions, and Seminar Committee members are needed. Contact Bill Leo or me.

You can also help with our upcoming meetings. Feel free to contact our hosts: April, Steve Tillmann; June, Gina Russell-Durgin; August, Tom Washington; and December, Ed Palma. It is through our membership that we will excel. Be active and involved. I hope to see all of you at April's Past Presidents' meeting and maybe I will be allowed and trusted to take care of the President's gavel?

*Fraternally yours,
George Durgin, President*

[Editor-An anonymous informant advises that the gavel will be returned when you present to the association a worthy display case as you have indicated the historic gavel deserves. It would be fitting for the display case to be unveiled at the Past Presidents' Night meeting. However, the word is: Don't be cheap!]

"Every man owes a part of his time and money to the business or industry in which he is engaged. No man has a moral right to withhold his support from an organization that is striving to improve conditions within his sphere."

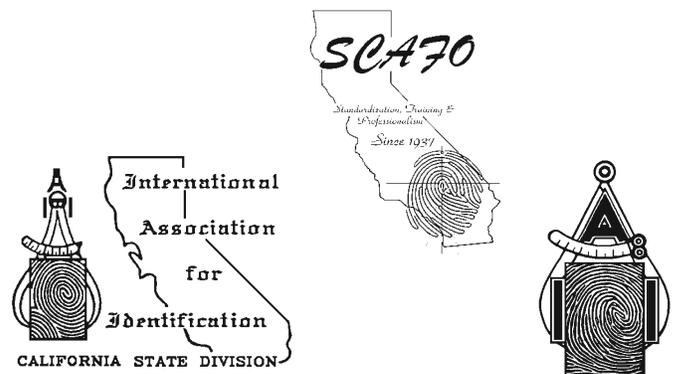
- President Theodore Roosevelt, 1908

For subscription or membership information, or address corrections contact:

S.C.A.F.O. Susan Garcia, Secretary
2020 West Beverly Blvd.
Los Angeles, CA 92591
(213) 989-2163
\$20.00 yearly subscription (attendance required for membership)
\$30.00 yearly for International Subscriptions

C.S.D.I.A.I. Ricardo Tomboc, Treasurer
710 North "D" Street
San Bernardino, CA 92401
(909) 384-5701
\$25.00 yearly membership

I.A.I. Joe Polski, Chief Operations Officer
2535 Pilot Knob Road, Suite 117
Mendota Heights, MN 55120-1120
(651) 681-8566 iaisecty@theiai.org
\$60.00 yearly membership



First Class Mail

Return Service Requested

FIRST-CLASS MAIL
U.S. POSTAGE
PAID
TEMECULA, CA
PERMIT NO. 139

S.C.A.F.O.
2020 West Beverly Blvd.
Los Angeles, CA 90057-2404

In This Issue

- pg.
- 1 Charles Wolford Award Presented to Howard Speaks
 - 2 A 45-Year-Old Fingerprint Leads to Arrest in El Segundo Police Killings
 - 4 The Use of Ninhydrin in the Development of Latent Finger Prints
 - 6 Ninhydrin Prints from Rubber Gloves
 - 7 Ninhydrin Development of Latent Prints
 - 10 Expert Finds Many Details in Small Area of Arch Pattern
 - 12 Dr. Henry Faulds - Beith Commemorative Society
 - 13 Pass the Salt & Pepper, Please
 - 13 February Meeting Minutes
 - 14 January Board Meeting Minutes
 - 15 President's Message

SCAFO Members
get "yourname@scafo.org"
See instructions on the
website's email page.

-- Upcoming Events/Schools/Seminars--

- | | |
|-------------------|--|
| April 6, 2003 | <i>S.C.A.F.O. Meeting (Past Presidents' Night)</i>
Steve Tillmann
Los Angeles Sheriff's Department |
| May 4-8, 2003 | C.S.D.I.A.I. 87 th Annual Training Seminar
Palm Sprints, CA
Marvin Spreyne |
| June 7, 2003 | <i>S.C.A.F.O. Meeting</i>
Gina & George Durgin
Escondido Police Department / USPHS |
| July 6-11, 2003 | International Association for Identification
Ottawa, ON, Canada |
| August 2, 2003 | <i>S.C.A.F.O. Meeting</i>
Tom Washington
San Diego Police Department |
| October 3-4, 2003 | <i>S.C.A.F.O. Annual Training Seminar</i>
Bill Leo
Los Angeles Sheriff's Department |
| December 6, 2003 | <i>S.C.A.F.O. Meeting</i>
Ed Palma
San Diego Police Department |
| February , 2004 | <i>S.C.A.F.O. Meeting</i>
Lisa DiMeo
Arcana Forensic Services |

Southern California Association of Fingerprint Officers
An Association for Scientific Investigation and Identification Since 1937